Crisis Mortality in Civil War Oxford, 1642–1646

Roger Gilboy

SUMMARY

This article presents the first in-depth analysis of death rates in Oxford during the first phase of the Civil War (1642–6), based on data from parish registers. It offers a parish-by-parish analysis of the severity of the mortality 'crisis', set in the context of the socio-economic structure and physical infrastructure. Additional notes in the registers from three parishes (St Martin's, St Michael's and St Ebbe's) facilitate a detailed examination of the way the character of the population changed after the onset of the war. Finally, the causes and devastating social consequences of mortality are examined.

It has been calculated that, as a percentage of the population, more people died during the Civil War (3.6 per cent) than did in the First World War (2.6 per cent) and the Second World War (0.6 per cent) combined,[1] and that a greater proportion of the total deaths were caused by disease rather than by combat.[2] During the 1640s crises in mortality were reported in many towns and areas of England,[3] but did Oxford suffer a similar experience? Using parish registers and churchwardens' accounts this article will demonstrate that the city did indeed have a crisis in mortality, and show its extant and impact, as well as the reaction to it.

PRE-CIVIL WAR OXFORD

Early to mid seventeenth-century Oxford comprised eight intramural parishes and four extramural parishes.[4] As with all towns, the distribution of wealth between parishes was uneven. Of the intramural parishes, the wealthiest were the central parishes of All Saints, St Aldate's, St Martin's, and St Mary the Virgin.[5] The poorer parishes of St Ebbe's and St Peter-le-Bailey skirted the city wall in the western half of the city and included slum and 'squab' (shed-like) housing built on the western and northern ditches abutting the city wall to meet the needs of the growing population of poor migrants to the city.[6] The inhabitants of the remaining intramural parishes of St Michael's at the Northgate and St Peter-in-the-East were of moderate wealth. The inhabitants of the extramural parishes of St Giles and St Mary Magdalen were also of moderate wealth, while the parishes of Holywell, and St Thomas were poor.

The standard of houses and other buildings clearly marked differences in wealth between parishes. The majority of the buildings of the wealthier central parishes were timber-framed structures with brick and rubble walls, and large stone chimneys; most had cellars, three to

[1] C. Carlton, 'The Impact of Fighting', in J. Morrill (ed.) *The Impact of the English Civil War* (1991), p. 20.

[2] Ibid.

[3] E.A. Wrigley and R.S. Schofield, *The Population History of England 1541–1871* (1993), p. 681; J. Dils, 'Epidemics, Mortality and the Civil War in Berkshire, 1642–6', in R.C. Richardson (ed.), *The English Civil Wars – Local Aspects* (1997), pp. 145–56.

[4] For the purpose of this research I have included the two extramural parishes immediately outside the city wall (St Giles and St Mary Magdalen). These parishes were connected to the city financially as they are included in tax assessments.

[5] The measurement of parish wealth is based on tax assessments: M.G. Hobson and H.E. Salter (eds.), *Oxford Council Acts 1626–1665*, OHS 95 (1933).

[6] I. Roy 'The City of Oxford, 1640–1660', in R.C. Richardson (ed.) *Town and Countryside during the English Revolution* (1992), p. 132.

four floors with attics, and slate covered roofs.[7] Wealth was expressed internally in the form of rooms with plaster ceilings, carved decorations, and wood panelled and decorated walls. The buildings for the poor generally consisted of simple wooden structures of one-up, one-down cottages and squab houses, which were crowded onto small plots of land, many on vacant and waste ground. Houses and tenements of a more substantial construction were often sub-divided in order to accommodate multiple families. However, even the better buildings were not necessarily as robust as they might have been. In February 1629, John Wythers was 'allowed to leave standing the post he set up to support his house at Carfax until the end of his lease'.[8]

The occupations of the inhabitants also reflected the wealth and social structure of the particular parish. An analysis of the parish registers for which the information was available for the years 1600–41 gives a sense of the demographic make-up of each parish (Table 1).

St Martin's parish, which included the main 'town' church, had a sizable number of shopkeepers, cooks, inn holders, leatherworkers and people in service, in roughly equal proportions, who together accounted for almost three in five of the given occupations. Other occupations included ministers, clerks, lawyer, and a prison keeper. St Mary the Virgin parish, which included the university church, was dominated by tailors and shopkeepers (accounting for nearly two thirds of the given occupations), with ministers, clerks, and doctor/surgeons making up a substantial part of the other occupations. Information for St Aldate's comes from a list of those living in the parish (rather than from the parish register) and is restricted to January 1644, but it nevertheless offers an insight into the make-up of the parish, with

Fig. 1. The 'Painted Room', Cornmarket Street in St Martin's parish. An example of the interior decoration found in some of the more substantial houses in Oxford. Photo by author.

[7] RCHME, *An Inventory of the Historical Monuments in the City of Oxford* (1939), pp. 162–82; *VCH Oxon.* 4, p. 89.

[8] Hobson and Salter (eds.), *Oxford Council Acts 1626–1665*, p. 18.

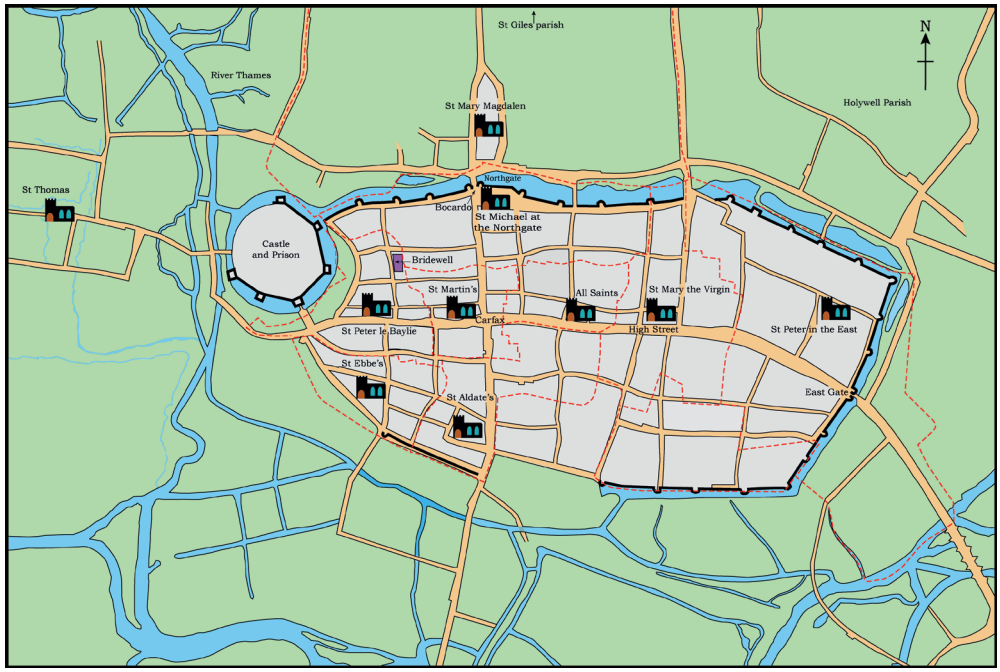

Fig. 2. Map of Oxford showing the churches and parishes of the city.

food and drink being the major occupational grouping, and brewers the largest trade given. There also appears to have been small pockets of activity in the clothing, leather, metal, and distribution sectors. The handful of occupations given for All Saints include an apothecary/druggist, doctor, printer, and servants.

Of the moderately wealthy parishes, in St Michael's the largest single occupation noted was that of tailor, followed by gentleman/woman, musician, glover, baker, brewer, cook, and gardener. St Mary Magdalen was dominated by those in the food and drink trades (butchers, cooks, bakers, gardeners), who accounted for one in four of the given workforce. In St Mary's the most numerically significant individual occupation was that of day labourer, with labourers accounting for one in ten of the workforce. There were also small, but significant, building, clothing, and leather industries. Of the 'other' occupations, the most significant were those of falconer and musician, together making up nearly a third of that group's total. Other occupations included an almanac maker, dancing man, schoolmaster, picture drawer, saltpeter man, and tobacco pipe maker.

In St Ebbe's, the poorest parish to give occupations, a sizable proportion of the parish's workforce relied on manual, casual and sporadic employment. Manual workers, such as day labourers and ale bearers, made up one in four of the working population. Nevertheless, the second largest occupation given was for tailors, a skilled occupation. The river obviously played a major part in the economy of the parish as almost half of the 'food and drink' grouping were brewers, bakers, and cooks, and nearly one in seven of the make up for the 'buildings' group was for woodworkers and masons – all of whom would have utilized the river for the supply of materials. The analysis also indicates that St Ebbe's population was fluid and itinerant, as almost half of the given occupations (50 out of 101) only have either one or two entries over the forty-two year period of the survey.

Early seventeenth-century Oxford, like other contemporary towns, faced constant problems with dirt, 'strangers' (unauthorized, often short-term, residents and traders), and disease.

Table 1. Occupational groupings, as a percentage, by parish 1600–41

	Building	**Clothing**	**Distribution**	**Food & Drink**	**Leather**	**Manual**	**Metal**	**Service**	**Textile**	**Woodwork**	**Other**	***Trades***	***Entries***
St Aldate's	2	14	9	26	9	2	9	14	0	3	12	*26*	*65*
St Ebbe's	11	9	2	17	7	26	3	8	0	5	12	*101*	*441*
St Martin's	4	5	12	15	16	2	8	15	0	0	23	*38*	*88*
St Mary the Virgin	5	12	26	3	5	7	0	0	0	0	42	*27*	*59*
St Michael's	8	14	1	12	10	7	5	9	1	0	33	*45*	*85*
St Mary Magdalen	9	9	4	25	8	14	3	7	1	3	17	*92*	*425*

OHC, Parish Register transcripts. No or insufficient occupational details for the parishes of All Saints, Holywell, St Aldate's, St Giles, St Peter-in-the-East, St Peter-le-Bailey and St Thomas. Groupings based on *VCH Oxon*. 4, p. 107. St Aldate's data taken from a list of inhabitants in the parish made on 23 January 1644: M. Toynbee and P. Young, *Strangers in Oxford* (1973), p. 13.

There was no organized cleansing of the city's streets, with the onus being placed upon the householder to keep the street in front of his property free from dirt. But the householder could not be relied upon to do so of his own volition, resulting in a complaint in June 1615 that:

> Forasmuch as the annoyance both to Citizens here at home and to Travellers . . . is very grievous and much complained of through the suffering of the streets before mens doors to lye foule and noysome by reason of ordure and much filth cast and swept out of their howses; and . . . no inhabitant uppon payne of xii^{d} to be forfeited to the use of the poore of this Cyttie should suffer the street before his doore to lye unswept or any ordure, filth or dunge to lye in the streets before his howse, but the same to carry or cause to be carried away out of the Cyttie every Satterday night.[9]

The state of the Northgate, the main entrance into the city, was a perennial problem for both the council and residents. In 1632 the council decided to employ an able person to keep the gate free from dirt.[10] However, by 1640 it was reported that the Northgate was a common sewer and also a receptacle of offal from the nearby slaughter houses to the extent that when it rained the gate flooded, and was blocked with dirt 'in many loads'.[11] Butchers who had shops running down the middle of Great Bayley Street (today's Queen Street) were expected to 'empty their blood and filth' into the street channels which had no means to flush the waste away.[12] Public dunghills littered the streets, usually against churches, public buildings and some gates.[13] In 1641–2, in an attempt to clean up both the ground and the air, the parish of St Martin's paid 1s. 9d. 'for taking up the pissing place and [procuring] lime'.[14] Although pigs were banned from being left to roam the city in 1593,[15] dogs still roamed freely, no doubt tempted by the offal littering some streets.[16] It was not only the streets that were overtaken with dirt: the rivers were just as bad, despite regular attempts at cleaning them.[17]

The poor, vagrants and itinerant workers roamed the streets of Oxford begging, and by 1563 had become a recognized problem, leading to a 'bridewell' or house of correction being set up at the town hall in 1598.[18] In 1603 the council decided to pay Robert Phillis, weaver, twenty pounds

> towards setting of the poore on worcke in spynning of lynnen and in carding and spynning of woollen . . . wherein specyall regard must bee had that the idle and loytring sort bee sett on worcke, and yf they refuse and doe their worcke amysse, that they bee punnyshed by whipping or otherwise as shalbe thought fytt.[19]

In 1617 the 'swarme and multitude of rogues, vagrant and idle persons' in the city were to be sent to the bridewell in Witney,[20] and in 1637 a weekly tax of £10 was imposed on inhabitants of Oxford to set 'the impotent poor to work'.[21] But, by-and-large, the itinerant

[9] H.E. Salter (ed.), *Oxford Council Acts 1583–1626*, OHS 87 (1928), pp. 243–4. Nine pence represented a day's wages for a labourer.
[10] Hobson and Salter (eds.), *Oxford Council Acts 1626–1665*, pp. 39–40.
[11] *VCH Oxon*. 4, p. 86.
[12] Ibid.
[13] Ibid.
[14] OHC, PAR207/4/F1/1, f. 182 (St Martin's churchwardens' accounts). The 'pissing place' was located at the north end of 'Pennyless Bench', a roofed structure on the eastern side of St. Martin's church: PAR207/4/F1/1. d 116 (1612).
[15] *VCH Oxon*. 4, p. 86.
[16] Many churchwardens' accounts note payment for chasing dogs out of the church, for example OHC, PAR208/4/F1/64 (St Mary Magdalen, 1640).
[17] Salter (ed.), *Oxford Council Acts 1583–1625*, p. 221; Hobson and Salter (eds.), *Oxford Council Acts 1626–1665*, pp. 45, 54–55, 66.
[18] *VCH Oxon*. 4, p. 344.
[19] Salter (ed.), *Oxford Council Acts 1583–1625*, p. 138.
[20] Ibid. p. 267.
[21] Hobson and Salter (eds.), *Oxford Council Acts 1626–1665*, p. 77.

poor, although plentiful, did not burden the individual parishes unduly in the pre-war times. Examination of the churchwardens' accounts of Oxford parishes reveals few entries relating to assistance for the poor from 1600 to the mid 1620s. From the mid 1620s until 1641, and the eve of the outbreak of Civil War, payments start to increase in frequency, but are still relatively minor in proportion to the annual expenditure of the parish. It was a city problem and so fell to the city council to find solutions.

Outbreaks of plague, typhus and smallpox were not uncommon in seventeenth-century England, with serious outbreaks occurring, on average, every ten years. Oxford had major outbreaks in 1603, 1606, 1610, 1620, 1625, 1635 and 1641.[22] The outbreak of 1603 lasted at least eight months, from August 1603 to March 1604. As the plague took hold in the summer of that year plans were made to house the victims in pest houses and cabins on Port Meadow, about two miles north of the city, and at Cheyney Lane, Headington, two miles south of city.[23] Others were locked up in their own homes.[24] As the year progressed a montly tax was to be collected by the churchwardens of each parish to cover the cost of 'shutting up' and monitoring those infected.[25] Mr Faulkner was compensated £3 6s. 8d. for his losses in hay and the selling of his beasts when his house in Broken Hayes was taken over for the sick and infected persons.[26] Subsequent outbreaks of disease were not as devastating until the infection of 1625. During that outbreak, when the king and parliament adjourned to Oxford because of the infection in Westminster,[27] watchmen roamed the streets looking for signs of infection and were stationed at all the gates into the city. Some of the glass windows in St Martin's were taken down to allow for more fresh air to circulate within the church, and gatherings discouraged.[28] Later outbreaks of disease were less severe.

THE PARISH REGISTERS

Of the twelve Oxford parishes examined, the registers for four have been excluded, that of St Aldate's because it is incomplete, those of Holywell, St Giles's, and St Thomas's because they do not survive. All but one of the city parishes are included, and two extra-mural parishes. The first analysis carried out on the parish registers was to estimate for the years 1640 to 1643 the population of each parish (where sufficient information was available) and the total for the city as a whole (Table 2).

The estimated parish population totals, clearly show that the 'squab' housing of the itinerant poor on and around the city ditch, stretching from the western to the northern gates and beyond, greatly increased the number of inhabitants in the parishes of St Michael's and St Peter-le-Bailey. This can be clearly seen by comparing these two parishes with St Ebbe's – which in terms of wealth was of equal standing with the parish of St Peter-le-Bailey. St Peter's was of a similar size to St Ebbe's but had a third more residents, whereas St Michael's (a third larger than St Ebbe's) has close on twice the number of residents. Of the wealthier central parishes, All Saints was by far the most populous, indicating that the parish was either overcrowded or at least had a relatively large population of servants living in a small area.[29] Of the extra-mural parishes, St Mary Magdalen was the most populous, which can be

[22] Salter (ed.), *Oxford Council Acts 1583–1626*, pp. 173–8, 193, 293, 331; Hobson and Salter (eds.), *Oxford Council Acts 1626–1665*, p. 101.

[23] J.F.D. Shrewsbury, *The History of Bubonic Plague in the British Isles* (1970), p. 282; C.W. Boase, *Oxford* (1890), p. 135.

[24] Ibid. p. 154.

[25] Salter (ed.), *Oxford Council Acts 1583–1626*, p. 154.

[26] Ibid. p. 158.

[27] *VCH Oxon*. 4, p. 78.

[28] Salter (ed.), *Oxford Council Acts 1583–1626*, pp. 331–2.

[29] Between 1600 and 1640 only twelve occupations are listed in the parish registers of All Saints, totaling twenty-nine entries. Of these thirteen (44 per cent) were for 'servants'.

Fig. 3. South view of bocardo over the north gate. The earthen road leading out of the city through the North Gate, which was so prone to flooding and fouling up with offal and dirt. St Michael's church tower stands in the background. Joseph Skelton after John Baptist Malchair, 1819. Author's collection.

explained by the fact that it was situated outside and adjacent to the north gate of the city, and straddled the main thoroughfare of St Giles into Oxford. The parish of St Thomas apparently had a large population, quite possibly as a result of its close proximity to the predominately poor areas and city ditches of St Michael's and St Peter-le-Bailey parishes, and because St Thomas was often the destination for sick and disabled people 'carried away' from other Oxford parishes.[30]

The estimated totals for 1643 represent an approximate indication of the increase in population of each parish, since it is near impossible to give true numbers, and should also to seen as being the maximum that each parish could absorb rather than being a static population. However, the increase in the total population of Oxford from 9,160 to 19,930 is substantial but does fit with other findings. The average percentage increase for Oxford is 225 per cent which fits with the near doubling of St Aldate's population,[31] and also with the contemporary observations of the establishment of a garrison with between 2,000 and 10,000 troops.[32]

When King Charles entered and established himself in Oxford at the end of October 1642 he arrived not just with his army, but also their wives and children,[33] his court and servants,

[30] Several entries in the churchwardens' accounts mention the 'carrying away' of people of all ages that were not residents of that particular parish so as not to be a charge on the parish.

[31] M. Toynbee and P. Young, *Strangers in Oxford* (1973), p. 13.

[32] *VCH Oxon*. 4, p. 81.

[33] Luke Eldridge, a Royalist soldier, had a daughter Margaret baptized 30 December 1642 in the parish of

Table 2. Estimated population size of each parish

	City Parishes (Alphabetically)			
Wealth		1640	1643	% increase
1	All Saints	770	1,640	213
2	St Aldates	*450*	860	191
11	St Ebbe's	660	1,130	172
3	St Martin's	390	1,180	303
3	St Mary the Virgin	460	1,640	356
6	St Michael's	1,190	3,130	263
5	St Peter in the East	950	1,820	181
11	St Peter le Bayley	1,000	1,290	129
		5,870	12,590 (6,720)	214
	Extra-Mural Parishes			
10	Holywell	*410*	920	225
7	St Giles	580	1,150	198
8	St Mary Magdalen	1230	3,090	251
9	St Thomas	1040	2,180	225
		3,290	7,340 (4,050)	225
	Oxford	9,160	19,930 (10,770)	218

Calculations were made by using the formulae – $\frac{av.pt}{av.CDR}$ xt, where av.pt is the average parish total for burials from 1630–9, and av.CDR is the average Crude Death Rate for 1630–39 (Wrigley and Schofield, *The Population History of England 1541–1871,* p. 532) multiplied by 1,000 to give estimated parish population rounded to the nearest 10. The parish population totals arrived at should be seen as an approximation rather than an exact total. Burials were used instead of the baptisms to determine the parish and city population totals because, overall, it would have given more accurate results. For example baptisms for St Mary the Virgin begin to tail off after 1642 to the extent that they would have been meaningless as useable information. The baptisms recorded for St Peter-in-the-East, St Mary Magdalen and St Michael's steadily increased until 1645 before returning to normal pre-war levels, and this would have caused inaccurate results too, as they would have shown a small but growing population during the Civil War, which is at odds with a sudden influx of people in late 1643 and early 1644. Also, because of gender: as the royal household and military were almost exclusively male, using baptism records, where possible, would have been more of a measure of the wives, servants and 'camp followers' that came with the king rather than the court and army itself. The same formula was initially used for the 1643 total but this gave excessive parish totals showing an average four-fold increase in inhabitants in each parish, which is at odds with Young and Toynbee's work on St Aldate's parish (*Strangers in Oxford*) where it can be seen that there was nearly a two-fold increase in the inhabitants living in the parish. So the totals arrived at were halved to bring them in line with the findings of Young and Toynbee. Also Fig. 5 and Fig. 6 indicated a two-fold increase in population for each parish. The excessive totals first arrived at for 1643 are almost certainly due to the burials of transient or non-resident people. Population totals for Holywell and St Thomas were arrived at by back-projection. The same formula was again used but for the years 1655–64 (Holywell) and 1670–9 (St Thomas) and then compared to St Mary Magdalen's for the corresponding years with adjustments made for an increase/decrease in population size when compared to the years 1640–9. The overall total of 9,160 fits in quite well with the population totals of *c.*5,000 in the 1580s and a total in excess of 10,000 with the university in 1667: *VCH Oxon. 4,* p. 76.

Table 3. Burial totals by parish and year, 1640–50

	1640	1641	1642	1643	1644	1645	1646	1647	1648	1649	1650
All Saints	20	22	17	107	43	31	16	7	9	25	18
St Ebbe's	17	24	19	66	22	16	10	16	12	16	7
St Martin's	10	22	11	88	43	26	14	5	7	17	6
St Mary the Virgin	12	25	25	127	72	27	30	7	3		
St Michael's	31	34	34	223	136	60	44	21	17	27	16
St Peter le Bayley	26	53	4	59	41	19	1				
St Mary Magdalen	32	48	49	210	117	86	56	23	18	38	25
St Peter in the East	32	57	27	104	38	58	49	20	18	22	15

Burial totals are taken from the parish registers and so are quite possibly not absolute totals.

The drop in burials for the parishes of St Peter le Baylie, and St Ebbe's (and to a lesser extent St Michael at the Northgate and St Martin's) must have been effected by the fire that swept through the parishes in October 1644 which destroyed so much property, and forced residents and 'strangers' to flee the parishes. So the decrease in burials are not solely down to a lessening of infection, but a decrease in population overall.

members of parliament still loyal to Charles, and those fleeing to Oxford for the security and protection that they thought the city now offered.[34] The greatest increase in population occurred in the wealthier central parishes, no doubt because of the relatively comfortable living quarters expected, and almost certainly demanded, by the royal household and gentry. This could also be the reason why there is a comparatively small rise in the populations of St Peter-le-Bailey and St Ebbe's parishes, in that housing was either too squalid or was otherwise not as desirable as other parishes, possibly because it was already at or near full capacity before the war broke out.

As a result of this influx of people, the city was at bursting point, which must have made daily life uncomfortable for all concerned, residents and 'foreigners' alike. An increase in population went hand-in-hand with an increase in the number of recorded deaths. A tally of the burial totals for each parish shows the extent of the increase (Table 3).

The table above clearly shows that there was a substantial increase in recorded burials in every parish from 1642 to 1643. The largest burial totals are in the two parishes that straddle the Oxford's North Gate, St Michael's with 223 interments in 1643, an increase from 34 in 1642, and St Mary Magdalen with 210 in 1643 compared to 49 in 1642. The central parishes of All Saints and St Mary the Virgin recorded burial totals of 107 (up from 17) and 127 (from 25) respectively, with St Martin's a little lower at 88 (from 11). The poorer parishes of St Ebbe's (66, up from 19) and St Peter-le-Bailey (59 from 4, though this may not be an accurate figure) had a smaller increase in burials echoing the smaller increase in population. The totals drop off in the following year, 1644, and continue to fall every year for the duration of the war.

But does a high total in deaths necessarily constitute a crisis? Indeed, what actually forms a crisis? Burial totals on their own do not make it easy to compare increases in interments brought about by the Civil War with those burial totals recorded in pre-war Oxford. Nor,

St Mary Magdalen: OHC, St Mary Magdalen parish register transcripts. *A Proclamation for the redresse of certaine Grievances complained of by the Inhabitants of the County of Oxford,* 3 June 1643 (Bodl. Don. b 4 (1), f. 45 lists the third grievance as 'Whereas there is 3s. 6d. by the week allowed for a Souldiers Dyet, in many places a Souldier, a Woman, and a child, or a Boy, be billeted and dieted at the same rate.'

[34] Proclamations were issued ordering non-essential residents within the city to leave so that the army and the King's retinue could be adequately housed, for example *Proclamation for the speedy clearing of Lodgings for Accommodation of the Members of both Houses, summoned to assemble in Oxford. . .* (Bodl. Don. b 4 (1), f. 29).

Table 4. Crisis Mortality Ratios by parish

	1640	1641	1642	1643	1644	1645	1646	1647	1648	1649	1650
All Saints	1.3	1.4	1.1	6.9	2.8	2	1	0.5	0.6	1.6	1.2
St Ebbe's	1	1.4	1.1	3.9	1.3	1	0.6	1	0.7	1	0.4
St Martin's	1.2	2.6	1.3	10.4	5.1	3.1	1.6	0.6	0.8	2	0.7
St Mary the Virgin	0.8	1.7	1.7	8.8	5	1.9	2.2	0.5	0.2		0.1
St Michael's	1.1	1.2	1.2	8	4.7	2.1	1.6	0.7	0.6	0.9	0.9
St Peter le Bayley	1.2	2.4	0.2	2.7	1.9	0.9					
St Mary Magdalen	1	1.5	1.6	6.7	3.8	2.8	1.8	0.7	0.6	1.2	0.8
St Peter-in-the- East	1.3	2.3	1.1	4.2	1.5	2.3	2	0.8	0.7	0.9	0.6

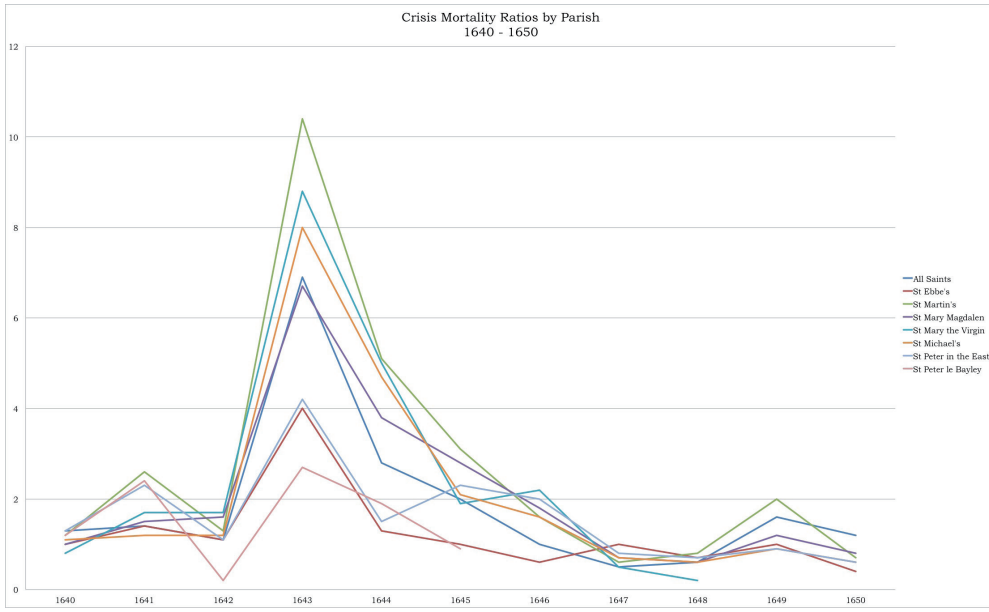

Fig. 4. Crisis Mortality Ratios of parishes of Oxford for the years 1640–50.

as raw data, do they facilitate a comparative study between the parishes. In order to make comparative studies possible a methodology has been adopted for producing a Crisis Mortality Ratio (CMR).[35] A crisis is taken to be a situation where the CMR figure is above 2.0, that is a more than a two-fold increase in burials. A CMR above 3.0 would be a sign of an exceptional crisis.[36] Therefore a high total in deaths does not necessarily mean that the city or parish is in crisis, it is the degree of the increase, compared to previous years burials, that determines whether the city or parish is in crisis or not (Table 4 and Fig. 4).

With the Crisis Mortality Ratio figures it is easier to see how the Civil War affected individual parishes. In the first year of the analysis, 1640, all the parishes examined have expected ratios that hover around the average reading of 1.0. The council set up a pesthouse on Port Meadow in

[35] P. Slack, *The Impact of Plague on Tudor and Stuart England* (1990), p. 81. The years 1630 to 1639 were used to derive the average used in calculating CMR figures.

[36] Slack, *The Impact of Plague*, p. 81.

August of the following year,[37] indicating the rise in the ratios for 1641 was due to an outbreak of disease in the city.[38] But given that the ratios vary from a minor outbreak to a serious crisis, the problems seem to have been somewhat localised since only three parishes (St Martin's, St Peter-le-Bailey and St Peter-in-the-East) reached crisis levels. On the other hand, the impact of the king's decision to relocate his court and army to Oxford in 1642 was immediate and general. Mortality levels reached crisis levels for all parishes in the city and also the extra-mural parish of St Mary Magdalen. Oxford's central parishes experienced the greatest increase, St Martin's suffered a tenfold rise in the number of burials, followed by St Mary the Virgin and St Michael's with Crisis Mortality Ratios (CMRs) of 8.8 and 8.0 respectively, and All Saints with a CMR of 6.9. As has previously been mentioned, the quality of the housing, and central location of the parishes, were major factors in the severe overcrowding and subsequent death rates. The lack of attractive housing for incomers would explain the ratios for the parishes of St Ebbe's (a CMR of 3.9) and St Peter-le-Bailey (CMR 2.7), which both reached crisis levels, but at a much lower level than the other city parishes. The parishes of St Mary Magdalen and St Peter-in-the-East both experienced extreme crisis with a CMR of 6.7 and 4.2 respectively.

The CMR figures fall in 1644 as soldiers and non-combatants ebbed in and out of the city and its environs. However, the drop for All Saints, St Martin's, St Peter-le-Bailey and St Ebbe's parishes was more defined, a fall to just under half, by half, a third and two-thirds respectively. This was, undoubtedly, due, in part at least, to the 'Great Fire of Oxford', the effects of which were concentrated in those parishes.[39] Thereafter the CMR figures for the city as a whole continued to decline until reaching a normal level again in 1647, remaining at normal levels for the duration of the decade.

A further breakdown of the burials for three of the parishes (St Martin's, St Michael's and St Ebbe's) was possible through additional information noted in the parish registers. From these notes burials could be separated into residents and non-residents, and the non-residents further sub-divided into 'College', 'Strangers', 'Soldiers', and 'Royal Household' categories. Once burials are separated in this way a better understanding can be achieved of how the make-up of the population of each of the three parishes changed from the outset of the Civil War (Figs. 5 to 7).

Although the graphs are created from information on burials and so will not give a true make-up of the population of the parishes, they give an indication nonetheless. The graphs suggest that nearly half population of St Martin's and St Michael's were non-residents, and for St Ebbe's non-residents make up a third of the population for 1643, the first full year of the war. The charts help to illustrate that the wealthier central parishes (represented by St Martin's) were the destination of choice and attracted the 'better sort'.[40] The moderately wealthy parishes (represented by St Michael's) absorbed the majority of the soldiers and strangers.[41] The poorer parishes (represented by St Ebbe's) were home to the less fortunate. Interestingly the non-resident population for St Martin's tapers off relatively quickly, whereas the reduction is a little more gradual for St Michael's. For St Ebbe's, a mixed population only occurs for the year 1643, with very few or no non-residents recorded for the rest of the First Civil War, indeed for the 1640s as a whole. This again implies that St Ebbe's either had no

[37] Hobson and Salter (eds.), *Oxford Council Acts 1626–1665*, p. 101.

[38] Wood says that 'one of the weekly bills of mortality in the city which was published in Oxford the week 6–12 Aug. 1641 shows a total of 13 deaths': A Clark (ed.), *Wood's Life and Times, Vol. 1, 1632–1663*, OHS 19 (1891), p. 49.

[39] S. Porter, 'The Oxford Fire of 1644', *Oxoniensia*, 49 (1984), pp. 289–300.

[40] Entries in the parish registers for St Matin's included the duke of Richmond's groom, the earl of Southampton's coachman, the earl of Dorset's gentleman, Prince Charles's servant, and Lord Grandison's servant, to name but a few titled residents during Civil War.

[41] Of the soldiers noted, slightly more than half were of officer rank (Coronet, Lieutenant, and Captain). St Michael's only recorded nine entries from November 1642 to May 1646 for members of the royal household, with the rest of the burials being made up of soldiers and 'strangers'.

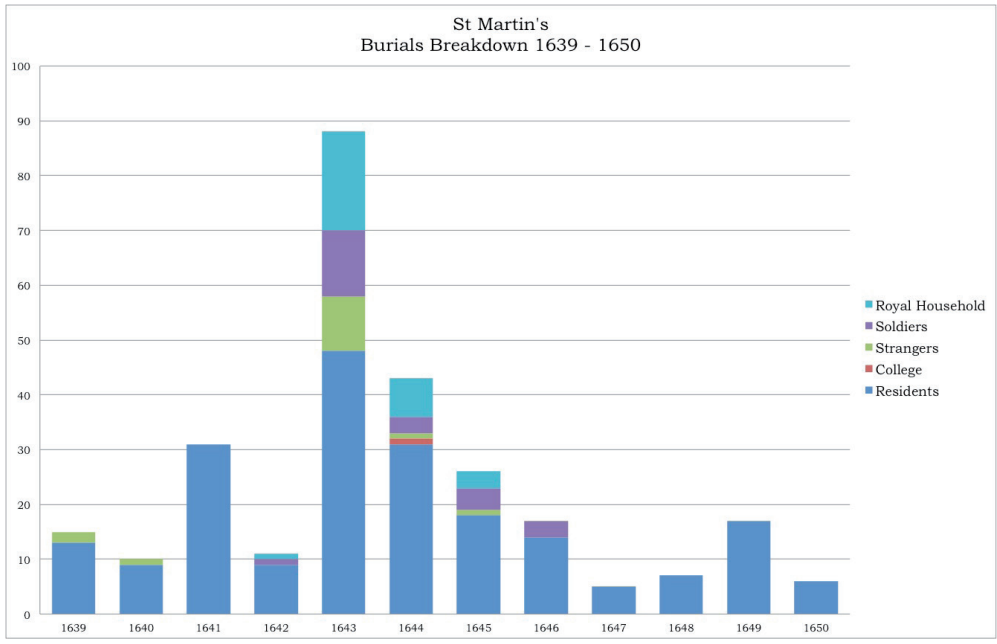

Fig. 5. Burials in the parish of St Martin's by year from 1639–50, broken down into residents and non-residents.

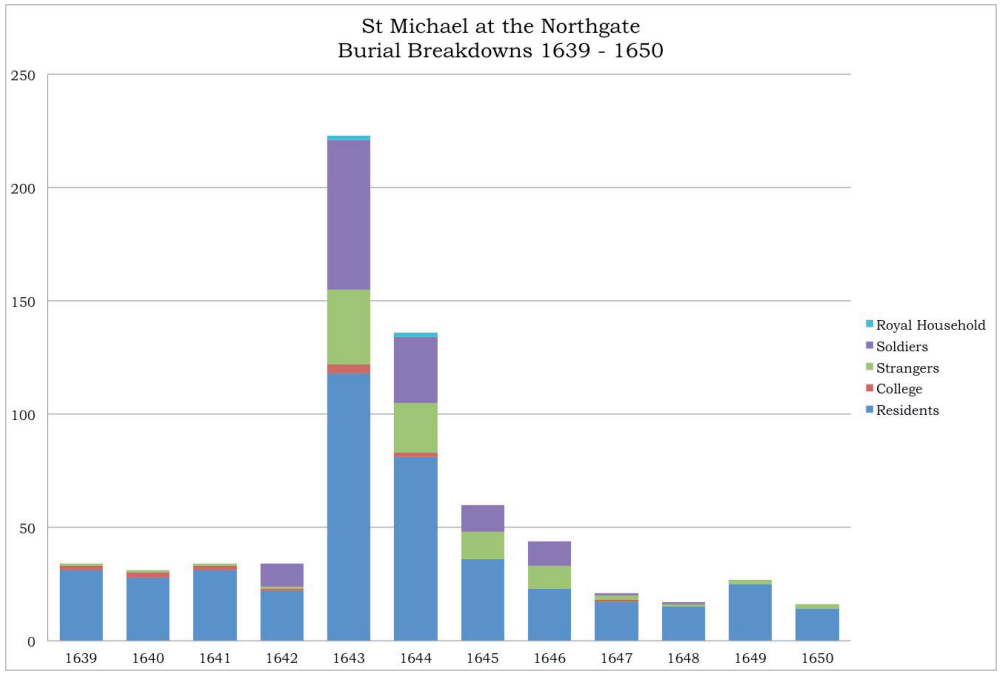

Fig. 6. Burials in the parish of St Michael at the Northgate by year from 1639–50, broken down in residents and non-residents.

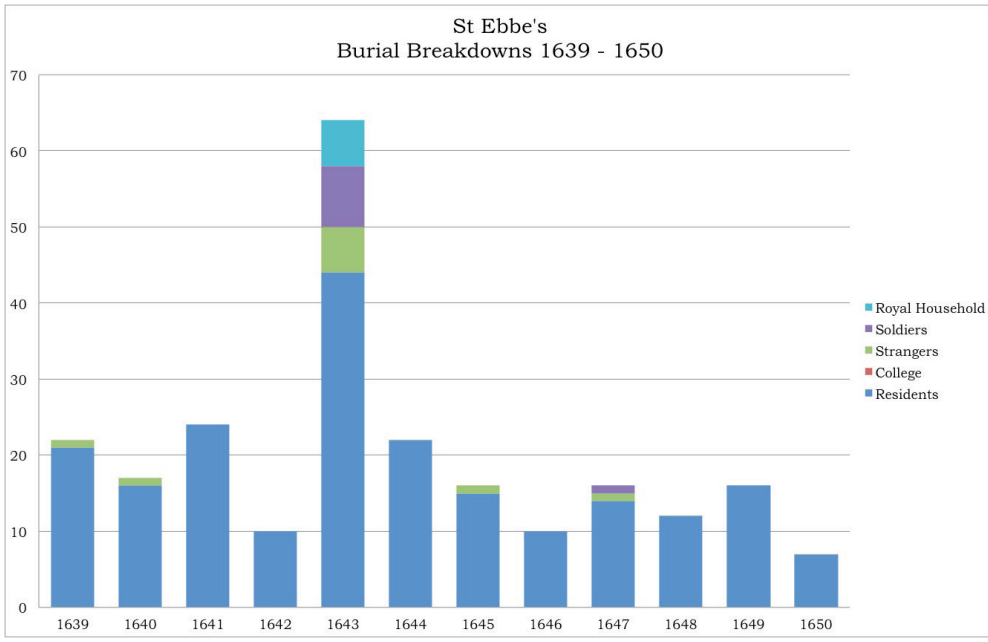

Fig. 7. Burials in the parish of St Ebbe's by year from 1639–50, broken down in residents and non-residents.

spare or available accommodation, or the accommodation that was available was not desirable for non-residents, particularly after the fire that spread through the parish in October 1644 damaged, although not necessarily destroyed, around 80 of around 200 houses in the parish.[42] St Michael's, however, was attractive to those arriving in the city, for the non-resident part of the population remains constant at between a third and a half for the duration of the war.

A constant feature in all of Oxford's parishes was the itinerant poor, the journeymen workers and traders, river wayfarers, hawkers and sellers. But can the number of these transient people be extracted from the parish registers, measured, and assessed to determine their impact on the parishes during the first phase of the Civil War (Table 5 and Fig. 8)?

As with previous analysis, the ratio results show an exceptional spike in 1643. Many of the entries for All Saints and St Mary the Virgin are predominantly from high-ranking members of the royal household, titled men and women and superior officers.[43] This seems to bolster the notion that these parishes were the parishes of choice for the wealthy and important. The other central parishes of St Michael's (ratio 7.8) and St Martin's (ratio 6.3) also bore exceptional increases in their non-resident population. St Peter-in-the-East had a similarly large non-resident population with a ratio of 7.7. The poorer parishes of St Ebbe's and St Peter-le-Bailey both had ratios similar to their CMR reading: 3.6 and 2.5 respectively. St Mary Magdalen echoed the central parishes in having an extreme rise with a nine-fold increase in non-residents. Interestingly, though, the drop-off in the ratios for the years following 1643 were more gradual than those for the deaths in the city previously examined, strongly suggesting that there was a substantial presence of non-residents throughout the war. Whereas the recorded burials returned, by and large, to pre-war levels by 1646 (the year the First Civil War ended), those of non-residents did not return to pre-war levels until 1648.

[42] Porter, 'The Oxford Fire of 1644', p. 295.

[43] Captain, Sergeant Major, and Lieutenant Colonel. High-ranking members of the king's retinue included Sir Edward Hyde, chancellor of the exchequer.

Table 5. 'Strangers' ratios by parish

	1640	1641	1642	1643	1644	1645	1646	1647	1648	1649	1650
All Saints	1.1	1.3	1.8	12.1	6.1	5.3	1.8	0.5	0.5	2.6	1.3
St Ebbes	0.9	1.8	1.8	3.6	2.1	2.5	1.1	1.3	1.1	1.4	1
St Martin's	0.8	2.3	1	6.3	5.1	2.3	2.8	2.3	0.8	2	1.3
St Mary the Virgin	0.9	1.5	1	12.3	6	1.9	1.8	0.8	0.4	0.1	0.1
St Michael's	0.9	1.2	1	7.8	5.9	4.6	2.5	1.5	0.9	2.3	1.5
St Peter in the East	1.7	1.5	0.7	7.7	3.4	5.5	4.9	2.1	1.5	1.8	0.3
St Peter le Bayley	1.2	1.7	0.2	2.5	1.7	1.3		0.1			0.1
St Mary Magdalen	1.1	0.8	1.4	9.1	7	6	3.9	3.9	1.2	1.8	1.1

Those entries in the parish registers that were designated as 'strangers', or defined as so by single entries in the parish registers, or two within the space of one month, and no other entries as appeared in the parish reconstructions. By its nature this is by no means accurate but is intended as an indication of transient population in Oxford during the Civil War. The entries are taken from parish population reconstructions, 1600–1650. Source: OHC, parish register transcripts, using the same method as for CMR.

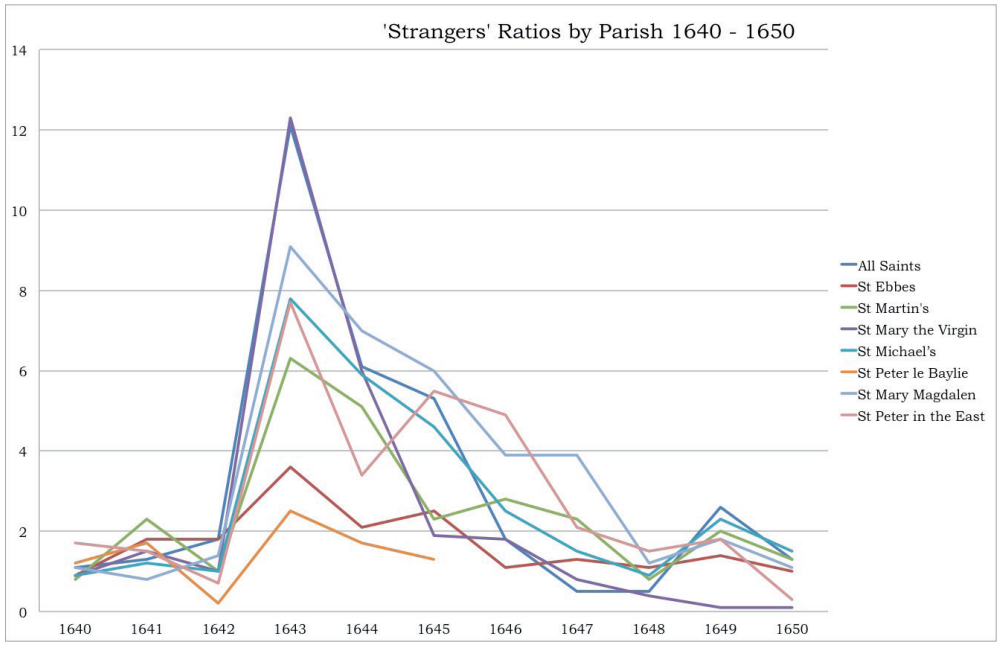

Fig. 8. Ratios of the increase in 'strangers' by parish from 1640–50.

CRISIS IN OXFORD

As the parish registers have clearly illustrated, Oxford was indeed in crisis from the outset of the Civil War, with the number of burials per year not falling to pre-war levels, for all parishes, until 1647, a year or more after the ending of hostilities. But what could have led to and cause

such an extreme rise in the deaths and burials in Oxford, and why was the rise so immediate? Oxford was never stormed or suffered destruction as other towns and cities had,[44] and even the sieges were, at best, half-hearted attempts.[45] If there is no obvious military explanation for the increase in deaths in Oxford, then attention should be turned to disease.

The main vehicles for the spread of disease during the Civil War were the roaming armies. Even before hostilites began in ernest in October 1642, Royalist and Parliamentarian forces criss crossed the country drumming up support, and seeking alliegences from towns, cities and counties for their respective causes,[46] constantly looking to strengthen their armies by recruiting additional soldiers wherever they went.[47] With so many soldiers from so many localities travelling, living and sleeping in close proximity to each other a small outbreak of disease in a particular county, town or even village could be transported hundres of miles and infect many people in a relatively short space of time. The forced capture and movement of prisoners taken at the sacking of Marlborough[48] and Cirencester[49] to Oxford castle and the bridewell, the city's gaol over the north gate,[50] was another possible avenue through which disease could fester amongst and spread. A total of 180 prisoners arrived from Marlborough on 9 December 1642 after a four-day journey and were housed in the churches of St Mary Magdalen and St Giles. The presence of so many people whose physical wellbeing must have been weakened after such an arduous journey, all huddled together for warmth, would have provided the requisite conditions for the outbreak of disease in the city.[51] Within days some started to fall weak and sick, and according to a contemporary leafleter 'almost all of us like to perish and end our daies by the bloody flux'.[52] Those housed in the bridewell were placed in a room so small that 'wee were scarse able to stirre one by another, the place also being made very noysome, because wee eased our selves in the same, so that in some place, we might goe over the shooes in Pisse and filth'.[53] Those that were sick grew weaker and weaker 'so that one eased nature as he lay';[54] another was troubled with continuous vomiting. A second contemporary leaflet describes similar treatment and conditions, adding that the sick persons were also housed in the dungeon, emptying their stomachs over the floor, 'so that the stinch of the place was enough to poyson us'.[55] Conditions in the churches may have been slightly better, with more room to move around, ventilation and perhaps access to the church yard.

Soldiers and prisoners were not the only people to be housed in cramped conditions, but also the 'strangers' coming to Oxford as part of the royal retinue, soldiers' families, and hangers on. St Aldate's parish had on average more than five people lodged in every house which must have caused stress and strain for all concerned, more so as they were billeted there without payment to the owner or tenant.[56] Anne Harrison (later to become Lady Fanshawe) wrote in her memoirs of her coming to Oxford:

[44] S. Porter, *Destruction in the English Civil Wars* (1994), pp. 64–85.

[45] The first siege of Oxford lasted only a week from 27 May–3 June 1644, and the second siege from 22 May–5 June 1645: J. Adair, *Roundhead General: The Campaigns of Sir William Waller* (1997), pp. 175–80.

[46] R. Hutton, *The Royalist War Effort 1642–1646* (2003), p. 27.

[47] T. Royle *Civil War, The Wars of the Three Kingdoms 1638–1660* (2005), p. 185.

[48] Clark (ed.), *Wood's Life and Times, Vol. 1*, p. 73.

[49] Ibid. p. 88.

[50] There is some confusion as there was also a hospital called the bridewell situated in New Inn Hall Street, established in 1562. In Hollar's map of 1643 it is still identified: Gruber von Arni, *Justice for the Maimed Soldier* (2001), p. 18; *VCH Oxon.* 4, p. 344.

[51] Shrewsbury, *History of Bubonic Plague*, p. 402.

[52] 'The Inhumanity of the King's Prison-Keeper at Oxford' (1643) (OHC, STACK 944.32).

[53] Ibid.

[54] Ibid.

[55] 'The Prisoners Report – A true Relation of the cruell usage of the Prisoners in Oxford' (1643), pp. 2–5 (OHC, STACK 944.32).

[56] Toynbee and Young, *Strangers in Oxford*, p. 10.

> That had till that hour lived in great plenty and great order, found ourselves like fishes out of the water . . . for, from as good a house as any gentleman of England had, we came to a Baker's house in an obscure street, and from rooms well furnished, to lie in a very bad bed in a garret, to one dish of meat, and that not the best ordered, no money, for we were as poore as Job, nor clothes more than a man or two brought in their cloak bags: we had the perpetual discourse of losing and gaining towns and men; at the window the sad spectacle of war; sometimes plague, sometimes sickness of another kind by reason of so many people being packed together.[57]

Soon all available accommodation in the city was taken up, and not just by people needed for the war effort, resulting in the king having to issue a removal proclamation just two months after re-entering the city.[58]

Within four months of the king's arrival in Oxford a complaint was made to him 'for not cleansinge the streets of this Cittie, but suffering the filth and dust to lie in the same . . . to the great dainger of breeding an infeccon amongst us',[59] which led to each parish being charged to investigate the cause of the filth and dirt, and to name the defaulters. The council's chamberlains' accounts do not mention any payments for the removal of dirt from the city before the start of the Civil War, but for the year 1642–3 they record payments for cleaning the streets and removing dirt from the North Gate, bridewell and bocardo, the city gaol over the north gate, at the charge of £8 5s. 1d.[60] In the following year, 1643–4, the sum rose to £12 14s. for moving almost 350 loads.[61] In 1644–5 removal of 173 loads, in addition to 'durt from Pennyless Bench', cost £13 11s. 11d. In 1645–6 109 loads cost just £2 14s., and in 1646–7 85 loads cost £2 2s. 6d.[62] These expenditures were only for keeping the notorious Northgate clear, and not for the city as a whole. But filth was not just on the streets and against buildings. St Martin's paid two shillings for the 'carrying the filth in the church and before the door which the soldiers made',[63] presumably as a result of being garrisoned there. The river was equally as dirty, according to John Taylor, bailiff and 'Water Poet':

> Dead Hogges, Dogges, Cats and well flayed Carryon Horses, Their noysom Corpses soyld the water courses; Both swines and stable dunge, Beasts guts and Garbage, Street durt, with Gardners weeds and Rotten Herbage. And from these Waters filthy putrifaction, Our meat and drink were made, which bred Infection.[64]

It was only a matter of time before disease broke out for, as Thomas Willis, a Royalist doctor, wrote 'it is seldom or never known that an Army, where there is so much filth, and nastiness of diet, worse lodgings, unshifted apparell etc. should continue long without contagious disease'.[65]

But what diseases could have broken out in Oxford which were capable of spreading so quickly?

As can be seen in the graph (Fig. 9) burials increased in February 1643 and peaked with a five fold increase in July of the same year, when there was on average five burials a day in the

[57] A.H. Fanshawe, *Memoirs of Lady Fanshawe* (2000), p. 13.

[58] *A Proclamation for the ease of the Citty of Oxford, and suburbs, of the County of Oxford, of unnecessary Persons lodging and abiding there* (Oxford, 20 January 1643). Another similar proclamation was issued the following year: Toynbee and Young, *Strangers in Oxford*, p. 11.

[59] Hobson and Salter (eds.), *Oxford Council Acts 1626–1665*, p. 112.

[60] Ibid. p. 425.

[61] Ibid. p. 426. The loads taken away add up to 196, with 'durt at bridewell' costing £5 15s., which would equate to at least 150 cart loads. This is based on the figure of thirty loads costing about £1 to remove. In the accounts the cost of removing dirt averaged out at about 8d. per load.

[62] Hobson and Salter (eds.), *Oxford Council Acts 1626–1665*, pp. 427–31.

[63] OHC, PAR207/4/F1, f. 182 (1641 and 1642). St Peter-le-Bailey also recorded paying 5s. 5d. for 'carrying durt from the church dore & sweeping it to gether': PAR 214/4/F1/84.

[64] I.G. Philip, 'River Navigation at Oxford during the Civil War and Commonwealth', *Oxoniensia*, 2 (1937), p. 156.

[65] Dils, 'Epidemics, Mortality and the Civil War in Berkshire, 1642–46', p. 153.

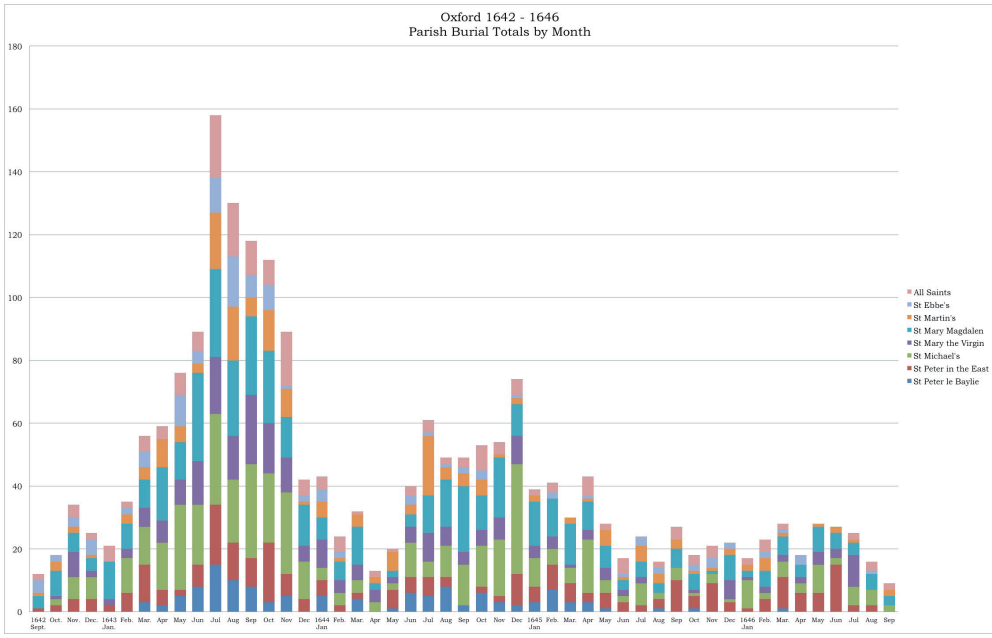

Fig. 9. Totals of recorded burials in the parishes of Oxford from September 1642 to September 1646, by month.

city.[66] The following three months witnessed more than a hundred burials each, before the number fell to 89 in November and 42 in December. After declining in the first third of 1644 burials increased rapidly until July before falling slightly in August, but increasing again until December. The totals dropped at the start of 1645 but remained relatively high until May when a more settled burial rate began.

It must be more than coincidence that the increase in burials in Oxford began in the same month as the arrival of in excess of the 1,100 prisoners from Cirencester, in February of 1643.[67] It is almost certain that the epidemic of 1643, that contemporaries called 'morbus campstris'[68] (camp fever), was typhus, a disease spread by body lice, ticks, mites and fleas, and especially contagious during the colder winter and spring months – a disease of prisons, hospitals, and armies, and also spread through the crowded slums of the poor.[69] But this may not have been the only disease present: considering the conditions some prisoners were kept in, dysentery and typhoid may also have been active.[70]

Unlike during previous outbreaks, the city was not in a position to wait for the infection to run its course, or remove infected people to cabins set up in areas outside the city wall, as all available land was taken up for the quartering of men, horses and artillery. The city and parishes were well versed in recognising the signs and symptoms of disease, and methods of

66 The total number of burials for July 1643, for the parishes for which registers exist, was 158.

67 Clark (ed.), *Wood's Life and Times, Vol. 1*, p. 88. Wood writes 'about 6 of the clocke at night the prisoners captives, to the number above eleven hundred'. *'Mercurius Aulicus'* (Oxford, 1643) states 'There taken in the Towne neare 1200 Prisoners' (Bodl. 4A° M 68 Art, p. 63).

68 *VCH Oxon*. 4 p. 82.

69 A. Wear, *Knowledge and Practice in English Medicine 1550–1680* (2000), p. 15.

70 Typhoid is transmitted through the ingestion of food or drink contaminated by the faeces or urine of infected people, which could easily fit with the reports of prisoners' treatment: http://www.who.int/topics/typhoid_fever/en/ accessed 28 August 2013.

treatment of infection from the previous outbreaks, but the sheer weight of the number of people infected and dying was overwhelming. And the dead were not just found in houses, but also in public places: in the streets[71] and on doorsteps,[72] under the 'Pennyless Bench' at St Martin's church,[73] even in the hay barn of the Cross Inn.[74] Deaths were not just limited to humans: St Mary the Virgin parish recorded paying £1 4s. in 1644 for 'carrying away a horse out of the Churchyard that dyed there',[75] and St Peter-in-the-East made a similar payment the following year.[76] As it was no longer an option to send people infected with the plague to pest houses and cabins outside the city, victims of the plague had to be contained within the parish.

Containment put a possible death sentence on those who were free from infection, and, in turn, could have a devastating effect on families so confined. Richard Spencer, a locksmith from St Michael at the Northgate parish, having buried his son John in January 1642, buried another son, Luke, and a soldier, John Hatwell, on 11 September and 3 November respectively the following year. The outbreak of plague in 1644 and having his house 'shut up' proved devastating for the family. Richard himself was buried on 17 November, his six-year-old son, also called Richard, on 6 December, and his nine-year-old daughter on 13 December. A 'stranger' John Chapman was buried from the house on 18 December, and Eleanor, his two-month-old daughter, buried on 24 December, followed by another 'stranger' Alice Mariott on Christmas Day.[77] The burial of six people in a little over five weeks, or three burials in a week from one household was, sadly, not uncommon. Edward Smith, a butcher from St Mary Magdalen parish, buried three of his children within the space of four days in November 1644, two of the children on one day.[78] This put added pressure not only on the parish authorities but also on the churchyards. In 1645 St Martin's paid for burying 'poor soldiers' at the 'Jews' Mount' (land near the castle) and St Peter-le-Bailey paid for ground at 'Bayleiffe Hills,[79] both cases probably representing overspill graveyards. There was even a report that 'the bodies were digd up before they had been buried a month',[80] such was the need for burial ground. Alongside having to contain the infected people within the city, sick and ill soldiers were also brought into Oxford from surrounding garrisons.[81]

Fear of disease and death was a powerful force, and one that almost certainly must have prayed upon the minds of the inhabitants of the city. When Anne Hinton died at the beginning of 1644, having buried three of her children in the previous of six months,[82] all her goods and chatels were to be sold off for the 'present relief of her Children who all lay sicke in the House and alsoe for the sattisfyinge and payinge of a wooman whoe tended ye sayd Anne Hinton and her Children 20 weekes'.[83] Because her house had been 'shut up', the clerks of the parish sent to

[71] St Aldate's paid 4s. 5d. 'for burying of a soldier that died in the streate of the said parish': OHC, PAR185/MSS dd Par. Oxford, St Aldates, b 18 (1643).

[72] St Aldate's paid 4s. 4d. 'for burying of a souldier that died about Mr Miles his dore & for making a grave': ibid. (1643).

[73] OHC, PAR207/4/F1/1, f. 184 (1643).

[74] 'a poore souldier from the Cross-Ins haymow' was buried 29 July 1643: OHC, St Martin's parish register transcripts.

[75] OHC, PAR209/4/F1/35 (1644).

[76] PAR213/4/F1/3, f. 57b (1645).

[77] OHC, St Michael at the Northgate parish register transcripts.

[78] Twelve-year-old Elizabeth and five-year-old Thomas were buried on 16 November 1644 and his ten-year-old son Thomas 19 November: OHC, St Mary Magdalen parish register transcripts.

[79] OHC, PAR207/4/F1/1, f. 185; PAR214/4/F1/86.

[80] PAR189/10/2D/38 (a letter from Mary Younge to the parish of All Saints).

[81] Some 1,200 soldiers with casualties arrived in April 1643 from Reading bringing infection with them, and in September of the same year 1,000 casualties entered the city after the First Battle of Newbury. The following year sixteen carloads of sick soldiers arrived from Abingdon, increasing an ever-growing sick and wounded population. Gruber von Arni, *Justice for the Maimed Soldier*, pp. 19, 26–7.

[82] Her son Arthur was buried 30 May 1643 aged five, daughter Anne 20 June 1643 aged nine, and son Daniel 18 Oct. 1643 aged one: OHC, St Mary the Virgin parish register transcripts.

[83] OHC, PAR209/5/W1/1 (inventory of Anne Hinton, St Mary the Virgin, 1643).

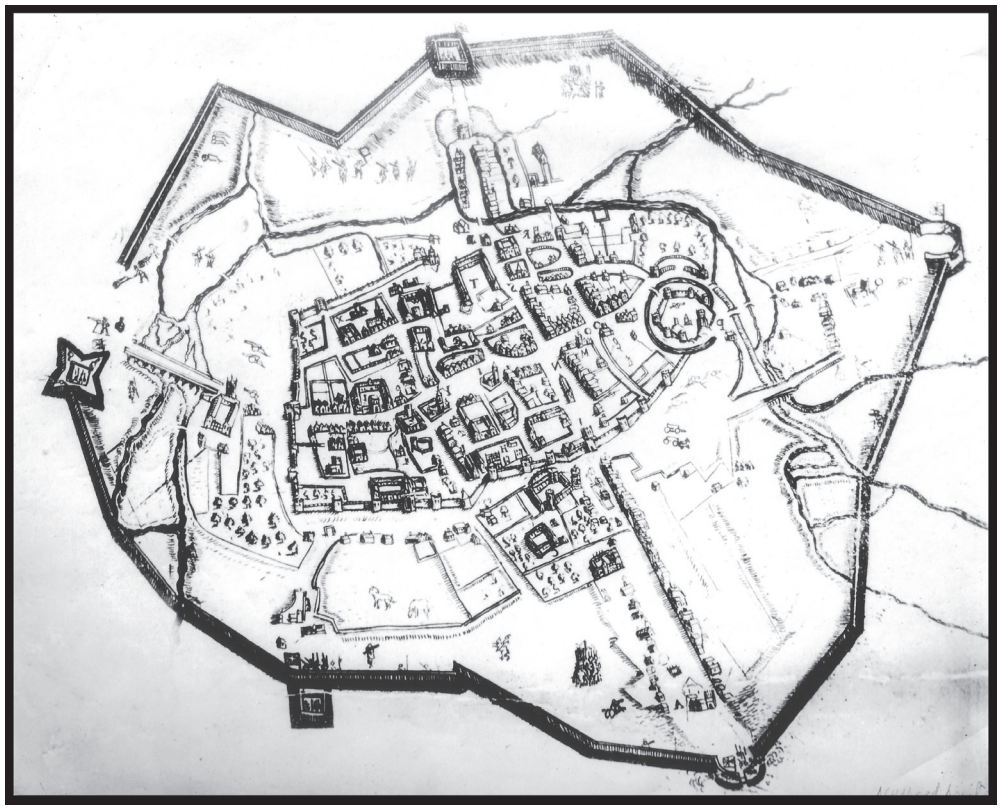

Fig. 10. Civil War defences of Oxford, 1645. Map of Oxford showing the defensive bulwarks that were thrown up around the city during the Civil War, and how every available piece of land within the fortifications was used and occupied. As was common with contemporary maps the image appears reversed, with the south at the top. Cartographer unknown: Taunt collection, OHC. Used with permission.

appraise Anne's goods for sale refused to enter the house for it 'being visited with an infectious disease and a soldier and a wooman tending in the House being both sicke neighbours [the clerks] would not go into the House to value the goods, soe that they were valued in the streets as they were brought forth and in Mr Whistlers backside'.[84] It would be fair to assume this was not an isolated case. Fear of a spreading disease was also the reason why St Martin's churchwardens paid 2s. in 1645 'to a soldier for killing Doggs in the street in the time of Infeccon'.[85]

The worst affected parishes were St Michael's and St Mary Magdalen, which between them accounted for 44 per cent of the burials in 1643,[86] and 46 per cent of the total burials recorded between September 1642 and September 1646,[87] the duration of the First Civil War. Multiple burials in a day were not uncommon within the two parishes: during 1643 there were two burials on forty-six days, three burials on five days, four and five burials on two days. On one

[84] Ibid.

[85] PAR207/4/F1/1, f. 184 (1644).

[86] The total burials recorded for the two parishes for 1643 were 435, with the total for parishes in Fig. 5 985. The split of the total between the parishes was almost even – 223 (51 per cent) for St Michael's and 212 (49 per cent) for St Mary Magdalen.

[87] The total burials recorded for the two parishes between the dates amounted to 958. The total burials recorded for all parishes in Fig. 5 was 2,098.

occasion, 13 November, four unnamed soldiers were buried in one grave. Another unknown soldier from John Austen's house was buried on the same day. In fact one in five of the burials in St Michael's parish in 1643 were unknown soldiers, the vast majority of whom came from the bridewell.[88] St Mary Magdalen also had a ratio of one in five for unknown burials, although not all were recorded as being soldiers.[89] This would suggest that these parishes had a transient population and were possibly the churches most used for soldiers stationed in the field to the north of the city. The central parishes of St Mary the Virgin, St Martin's and All Saints also suffered a dramatic increase (see Table 4), and, in proportion to the previous decade, were more affacted than the parishes of St Michael's and St Mary Magdalen. However, there are no recorded burials in these parishes for unnamed soldiers or strangers,[90] possibly suggesting a more settled and established population.

Plague was first recorded in the southwestern parish of St Ebbe's when Alice Wheatcroft was buried on 28 June 1644 'suspected to die of ye Plague'. On 11 July John Younge and his daughter Anne were buried with the note 'Plague, buried w[i]thout any comon prayers' added to the register.[91] The next recorded entry was for the central parish of St Mary the Virgin when William Jacob was buried with plague given as the caused of death on 17 July.[92] St Michael's recorded an unknown soldier from John Pricketts having died of 'consumption' on 20 July. 'Surfeit and sickness' continue to be noted by the parish, with an occasional record of 'consumption', before plague was finally mentioned on 16 November, continuing to be noted, along with consumption, until April 1645. The outbreak of infection in 1643 centred around the summer and autumn months, suggesting a transmission by fleas and lice as trade, people and soldiers moved back and forth. By contrast, the outbreak of 1644 started in June and remained severe until May 1645. This suggests respiratory transmission of infections, spread by coughs, sneezes and spital, and could include pneumonia and tuberculosis. Whereas the original outbreak of infection at the start of 1643 may well have come from the rapid influx of soldiers, strangers and prisoners into Oxford, subsequently plague and other infectious diseaes may have come via the movement of goods along the River Thames.[93] This is hinted at by the fact that the first recorded incidence of plague in 1644 was in the parish of St Ebbe's, a parish skirted by the river and whose inhabitants relied heavily upon it for trade and commerce.

Aside from taking the burden of incoming soldiers,[94] there was little or nothing that either individual parishes or the city as a whole could do in response to the crisis that was unfolding. The king's arrival in Oxford had negated the city's power and influence: the council was reduced to being a conduit through which the king disseminated orders. By and large, the council was there to support the king's war effort, to raise funds through taxation, to rubber-stamp royal requests and proclamations, and to pass grievances back. In early 1643 a complaint was made by the city to the king for not cleansing the streets 'to the scandoll of the government of this place',[95] when just a few months previously it would have been the council that was responsible for dealing with the problem. A week later letters from Charles were sent to the mayor for the setting up of three 'horse mills' to process grain which were to be paid for out of the £2,000 lately imposed on the city, and so things continued for the duration of the war. The council did, however, set up a magazine of wheat and maslin (mixed grain) in the

[88] OHC, St Michael at the Northgate parish register transcripts.
[89] Ibid. St Mary Magdalen parish register transcripts.
[90] Ibid. St Mary the Virgin, St Martin's and All Saints parish register transcripts.
[91] Ibid. St Ebbe's parish register transcripts
[92] Ibid. St Mary the Virgin parish register transcripts.
[93] The outbreak of two different disease epidemics in subsequent years was not uncommon during the Civil War: Slack, *The Impact of Plague on Tudor and Stuart England*, pp. 117–20.
[94] Many churchwardens' accounts mention providing shrouds for soldiers to be buried in, cleansing the church after soldiers were stationed in them, and removing unruly soldiers from the church. Additional costs were also incurred for the purchase of faggots for bonfires to celebrate Royalist victories.
[95] Hobson and Salter (eds.), *Oxford Council Acts 1626–1665*, p. 112.

council chamber and the thirteen members were to pay £5 each for the magazine, and also to provide for their own families so that more can be given to the poor, at the rate it was brought in. A few months later the council was commanded to see that everyone, who was able to, was to provide for their family for six months. St Mary the Virgin and St Martin's were the only parishes to record having a store of provisions'.[96]

CONCLUSION

Ultimately, Civil War Oxford was a victim of its time – in that there was believed to be a divine hand in almost everything that happened and the king himself had a divine right to rule, whether it was on a parochial or national level. Proclamations issued by the king were littered with references to a divine presence: [Parliament's] 'damnable offence, against God and Us'; 'Our good Subjects to aide and assist Us in this Our necessary defence to which their duty to God and Us obliges them';[97] '[billeting tickets] We shall carefully pay when God shall enable Us',[98] and so on. When houses were shut up because of infection 'a Red Crosse be set on the outward doore of the House, with an inscription in Capitall Letters, with these words, LORD HAVE MERCY UPON US, and this Crosse, and the Inscription be taken off againe when the House is appointed to be opened, and not before'.[99] During previous outbreaks of plague the council ordered cabins to be built 'At this time of God's visitation of this Cittie with sicknes (which God averte with all speed),[100] and a Mr Andrew Carpenter, 'whoe lyinge sicke and visited by the hand of God' . . . his 'poor child, which he is like to leave behynd'.[101] Even when an apothecary was consulted and received a remedy it came with a caveat that 'in as many as it pleaseth God to send and sanctifie the right means unto' and that 'it pleased God to blesse my labours and counsailes, and to let a very small number faile under my advice'.[102] So no matter what the trials and tribulations in the lives of the inhabitants of Oxford were, the outcome came down to 'God's Will'. Plague and War were also two of God's three arrows, with famine being the third.[103]

However, a contemporary news book best summed up the feelings and viewpoints of many living in Oxford during the Civil War:

'. . . [the author] thought it more dangerous to fly from the City, as the case then was, then to abide in it; it being better to fall into the hands of God, who in wrath remembers mercy; then into the hands of such mercilesse bloody men, as then did, and still doe lye in waite to devour us'.[104]

Despite the subsequent emergence of a greater understanding of science and public health,[105] change and progress in sanitation, housing and welfare in the city was slow to improve. Modern Oxford did not really come into being until the establishment of the Paving

[96] OHC, PAR209/4/F1/35 (1644–5) PAR207/4/F1/1, f. 184 (1644–5).

[97] *His Majesties offer of Pardon to the Rebells now in Armes against Him*, 24 October 1642 (Bodl. Don. 4 b (1), f. 19).

[98] *A Proclamation for preventing the Plundering, Spoyling, or Robbing of any His Majesties Subjects, and for restraining of stragling and Idle People from following the Army, as likewise for supplying His Majesties Army with necessary provisions during their March*, 17 March 1644 (ibid. Don. 4 b (1), f. 15).

[99] Proclamation issued 12 May 1645: Bodl. Wood 276a (311).

[100] Salter (ed.), *Oxford Council Acts 1583–1626*, p. 331.

[101] Ibid. p. 293.

[102] Wear, *Knowledge and Practice in English Medicine*, p. 297.

[103] Ibid. p. 14.

[104] L. Gatford, *Hyperphysicall Directions in time of Plague &c.* (1644), p. 1 (Bodl. 4º L 72(7) Art).

[105] Regimen pamphlets, or health advice books, were published from the early sixteenth century, although these were aimed at the literate and well-to-do: Wear, *Knowledge and Practice in English Medicine*, pp. 157–8. The city council was formulating plans to bring fresh piped water to Oxford as early 1615: Salter (ed.), *Oxford Council Acts 1583–1626*, p. 245. The Royal Society emerged in 1660 from earlier meetings of 'The Philosophical Society of Oxford': R.H. Syfret, *The Origins of the Royal Society* (1948), pp. 76–8.