Castle Hill, Sheffield: Life After Death

By Michael Clark

Abstract

Following the demolition of Sheffield's Castle Markets in 2016 Wessex Archaeology assessed the likelihood of substantive archaeological features from Sheffield's medieval castle surviving below ground. Assessments of the post-medieval and industrial remains were also recorded. Only a scant chronology exists for the period between the dismantling of the castle in the late-17th and early-18th centuries and the construction of the 20th-century markets, an era when Sheffield evolved from a small town to an industrial giant whose name became synonymous with cutlery and steel. The evidence gathered from the period of industrialisation told an incomplete story with a complex stratigraphy, truncated by many phases of building, rebuilding and service laying. By synthesising the new data gathered by Wessex with a detailed search of Sheffield Archives and Local Studies, previously published and unpublished materials and historic maps, a new, three-stage chronology has been created to tell the story of life on Castle Hill from 1736 when Gosling published the first plan of Sheffield, to 1896 when Goad produced his detailed fire insurance plans of the town.

Map 1: Sheffield City Centre showing the excavation site
Source: Ordnance Survey 2019, adapted by Wessex Archaeology

Introduction

The low plateau upon which Sheffield's Castle once stood became home to a scatter of cottages, gardens and a large bowling green, early in the 18th century (Richardson & Dennison 2014, 21). Over the next 160 years, a mix of tenements, workshops, smithies, furnaces

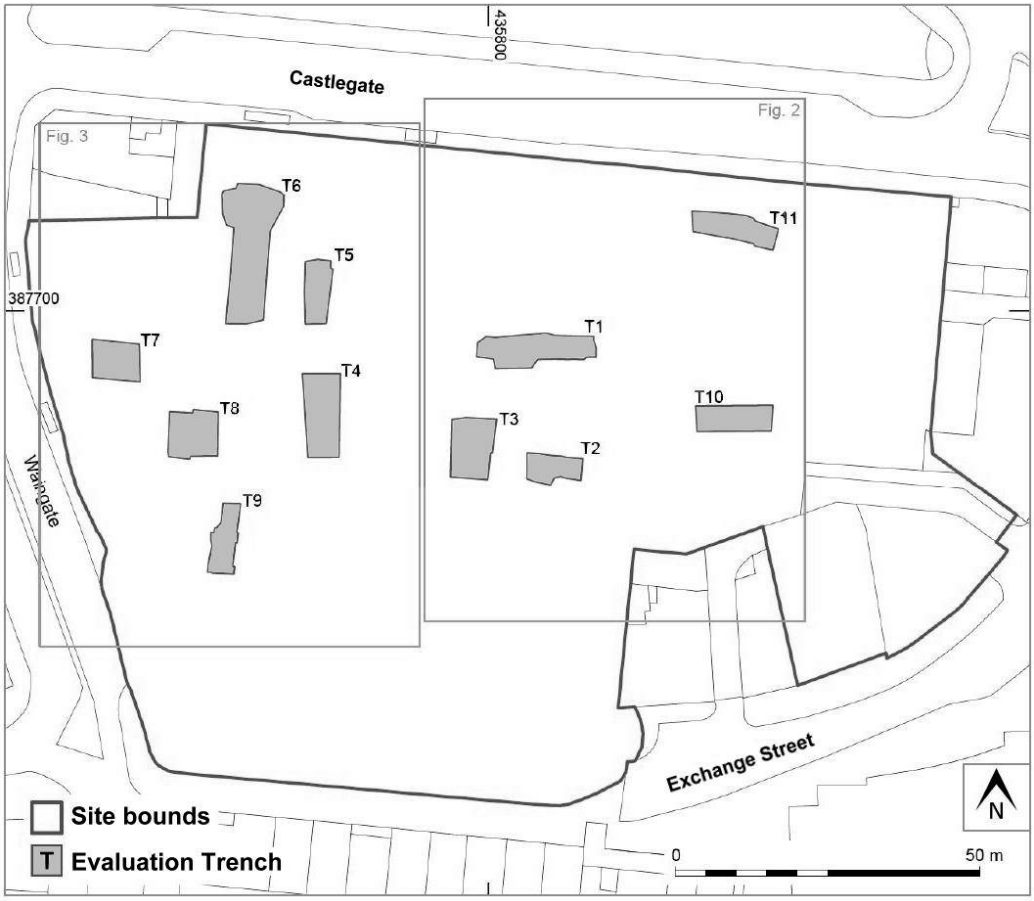
and merchants occupied this once green space (Figure 1). More recently, the construction of a market complex, built in the early 20th century, swept aside this mixed industrial and domestic landscape, leaving the 1.4 hectare plot (Map 1) standing empty, probably for the first time in over 1,000 years (Denison 2014, 6–7; Taylor 1876, 33).

Figure 1: Looking northeast across Castle Hill circa 1900. Source: Picture Sheffield

In the summer of 2018, Wessex Archaeology undertook a programme of archaeological evaluation on the now exposed site of Castle Hill after demolition of the market, with the primary aim of assessing how much of the medieval castle remained, sealed below the concrete floors (Wessex 2018b, 13). They also recorded the exposed stratigraphy from the 18th and 19th centuries that revealed domestic and industrial features from Sheffield's most intense period of growth.

The excavations started on the 13th of August 2018 and lasted for 10 weeks with a total of 11 trenches being excavated (Map 2). As expected, those trenches located on top of the low plateau and to the east of Castle Hill, exposed a complex stratigraphy, rich in industrial, commercial and domestic features, heavily truncated by the building and rebuilding of premises and cutting of drains and services. The impact of the markets constructed in the early and mid-20th century resulted in the trenches on the west side of the site yielding minimal results with only the cut of the medieval castle's moat being of note.

Some of the exposed industrial features and finds were instantly recognisable, cellar floors, clay pipes and pottery from the 18th and 19th centuries, while other features, such as the expected location of a furnace or the presence of grinding pits, proved more elusive. As a result, questions emerged regarding the nature of life on Castle Hill in the period following the removal of the last vestiges of the castle and the complete architectural clearance, which took place in preparation for the building of the 20th-century market complex.



Map 2: Wessex Archaeology Trenching Plan. Source: Wessex Archaeology 2019

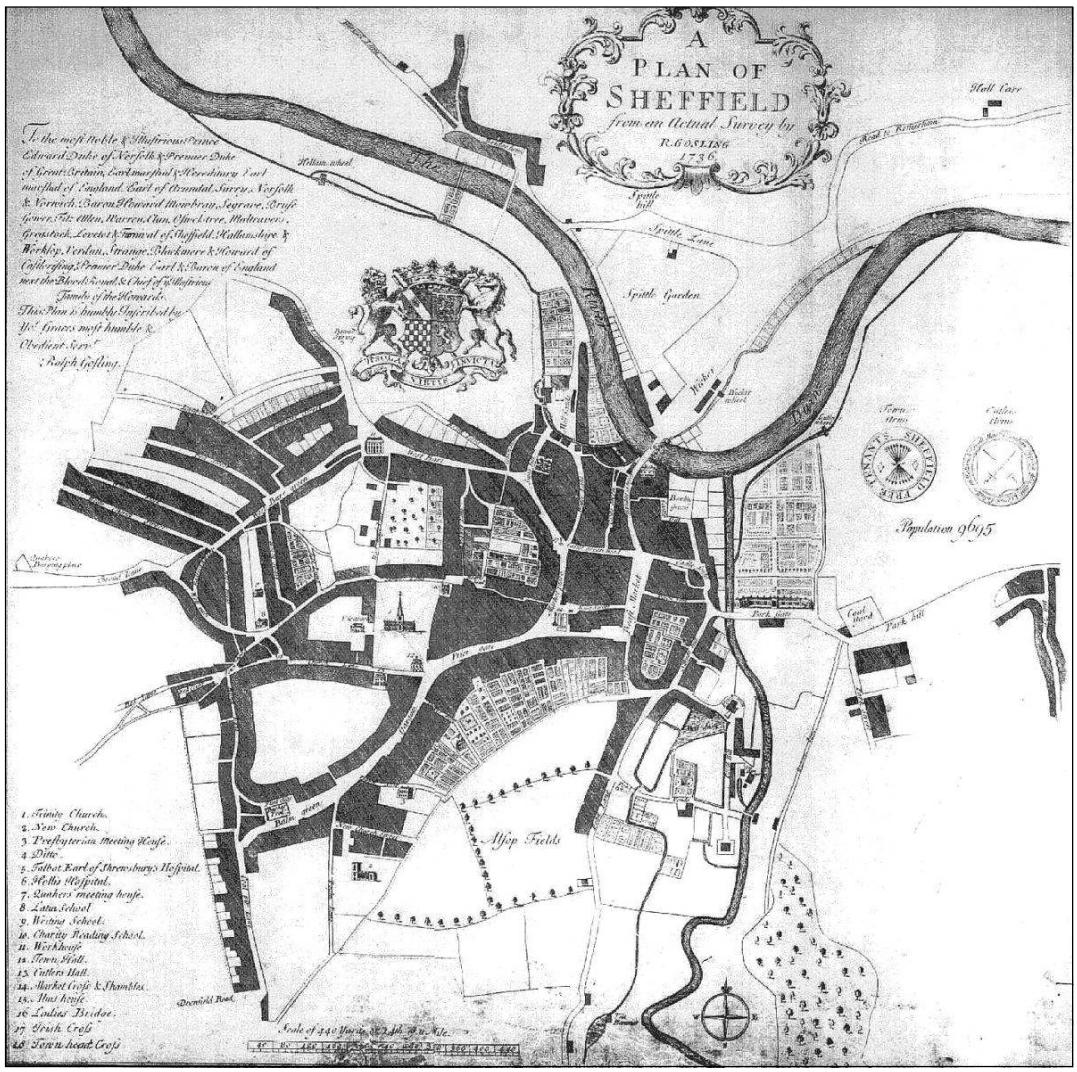
This paper aims is to define a new chronology for the evolution of Castle Hill in the 18th and 19th centuries based on desk-based research cross-referenced with the archaeological evidence recorded by Wessex in 2018, drawing these two strands of evidence together in a conclusion which provides a more nuanced understanding of life on Castle Hill between 1737 and 1896, a period chosen to correspond with Ralph Gosling's Plan of Sheffield (Map 3) and the detailed fire insurance map produced by Goad in 1896 (Map 4).

Sheffield After the Castle

By the time that Gosling's Plan of Sheffield was published in 1736 (Map 3) the site of the old castle lay on the north-eastern periphery of a town rapidly expanding to the west and south (Belford 1998, 13). Castle Hill was then noted only for its bowling green and a doglegged path that links the built-up areas of Bridge Street (later Wain Gate and subsequently Waingate) to the west and Castle Folds to the south.

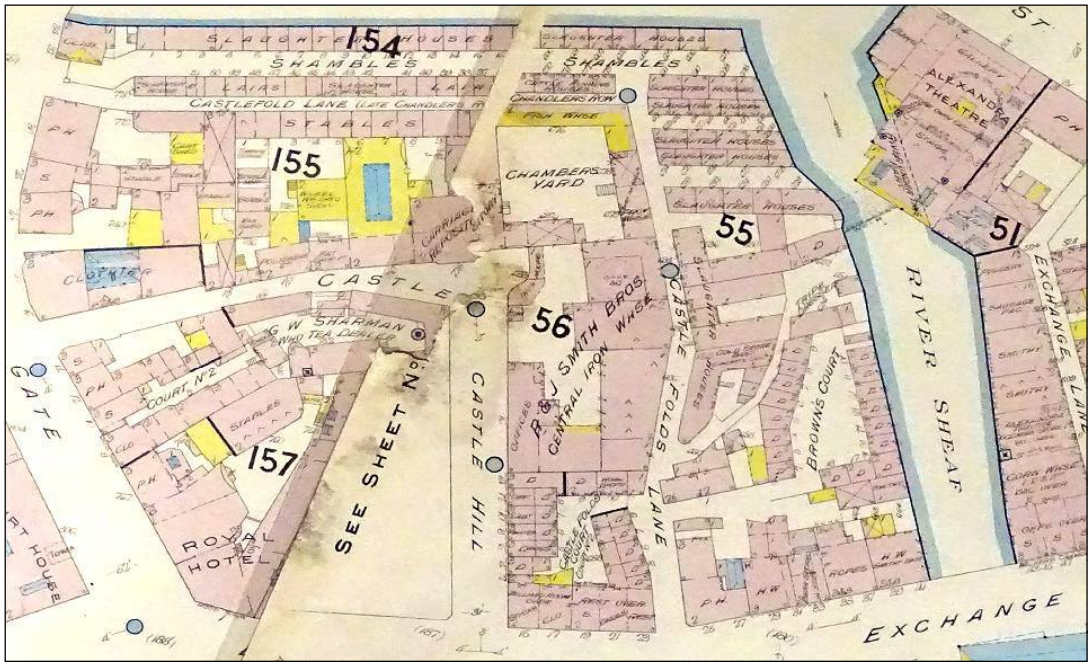
At this time, industrialisation was being encouraged by Sheffield's major landowners who capitalised on the substantial increases in revenue achievable through the leasing of small plots of land to developers (Flavell 1996, 269; Nunn 1985, 93–94). Hundreds of plots, typically of 500 square yards, were leased by the Duke of Norfolk and the Church Burgesses with few, if any, restrictions placed on the mix of industrial, commercial and domestic properties to be

constructed (Flavell 1996, 269; Nunn 1985, 301–2). A pattern of small-scale, tightly-integrated, workshops often focussed around courtyards emerged, turning Sheffield town centre into 'one great workshop' (Anon 1844, 161).



Map 3: A Plan of Sheffield from an Actual Survey. R. Gosling 1736. Source: Sheffield Archive 2019

Throughout the 19th and 20th centuries, a string of developments in technology and transportation transformed Sheffield into a global leader in steel production (Hey 2005, 96) with large-scale foundries, forges and rolling mills established to the east of the town along the Don Valley (English Heritage 2011, 30–31, Tweedale 1995, 4). The increasing scale of production achieved in steel and iron was not reflected in Sheffield's cutlery trade, whose unique culture of 'little mesters and freemen' (Jessop 2019, 7), clung on in part into the early 20th century. Even so, rapidly expanding global markets for steel and cutlery, Sheffield's most well known products, resulted in the town's population exploding, from around 10,000 in 1736 to over 60,000 by 1800 and approaching 450,000 (Sheffield City Council 2018) by the time Goad's Plan was drafted in 1896 (SA/SY674).



Map 4: Detail of combined Map 6 & 16 of Goad's Fire Insurance Plans for central Sheffield
Source: Sheffield Archive

By the 20th century, with the production of cutlery at last consolidating and steel production centred to the east of the town, it was time for life on Castle Hill to change again. The bricks and mortar of the cutlery workshops, small-scale furnaces and the tenements of their workforce, were swept away, just as completely as the buttresses and bastions of Sheffield Castle had been three centuries before (Richardson & Dennison 2014, 30), giving way to the demands of a city which required bigger markets and more shops.

Methodology

A four-stage research process was undertaken in the course of completing this paper.

1. A literature review of relevant published and unpublished documentary sources including archaeological reports and university theses that related to Castle Hill.
2. A search of historic maps, trade directories, Sheffield Rate Books and the Fairbanks and Arundel document collections. When referenced these sources are prefixed by SA (Sheffield Archive) or SLSL (Sheffield Local Studies Library), followed by the appropriate archive or library catalogue number. Sheffield Rate Books for the years 1755 to 1892 were manually searched. The chronology of these records is not complete, with some volumes missing. The books are handwritten, containing errors, corrections and differing spellings with some non-legible entries. All items referenced from this source in the following text are prefixed by SA/RB (Sheffield Archive/Rate Book), followed by the appropriate microfiche roll number.
3. Analysis of the trench summaries, finds index and map overlays produced by Wessex Archaeology following the 2018 excavations. When referenced these sources are prefixed by TS (Trench Summary) and TF (Trench Find) followed by the appropriate Wessex context or find number.

4. Synthesis of the above research to create a new three-staged chronology of Castle Hill.

Literature Review

The following, much abbreviated literature review, focuses on the evolution and nature of the industrial processes, architectural forms and the conditions of the town's workforce that existed, often cheek by jowl, in a mixed industrial and domestic environment (Beauchamp 1996, 29) likely to have been replicated on Castle Hill between 1736 and 1896.

Cutlery and Steel

By 1736 the production of cutlery and related edged tools dominated Sheffield's proto-industrial workforce with three out of five of the working population involved in some aspect of cutlery production and its related trades (Symonds 2002, 2). Whereas in towns, such as Manchester, dramatic increases in production were achieved through centralisation of materials, processes and workforce in large factories, the many specialised and, by then, ancient practices of Sheffield's cutlers mitigated consolidation. Instead Sheffield's craftsmen or 'little mesters' and freemen, as they became known (Jessop 2019 7), retained their artisan independence, improving their productivity by grouping together in functional clusters of mixed trades, often located around a central courtyard (Taylor, 1988, 9). This resistance to centralisation lasted beyond the 19th century (Nunn 1985, 302), with even the introduction of steam power failing to have much of an impact (Taylor 1988, 11–12).

Taylor (1988, 6) tells us that the link between cutlery and steel production in the town was established in 1624 when the Cutlers' Company required the inclusion of a steel edge on all products stamped with a Sheffield Hallmark. Beauchamp (1996, 66) notes that at least two cementation furnaces were producing steel in the township by 1720, while Belford (1997, 29) notes that the cementation furnace owned by Thomas Clegg was located on Castle Folds in the mid-18th century.

Barraclough (1981, 103) highlights the improvements in transportation as key to the expansion of steel production, citing enhancements to the Don Navigation in 1734 and 1751, the turnpike acts from 1756 and finally the arrival of the canal in central Sheffield in 1819. Also noted was the laying of a branch railway line connecting Sheffield to Rotherham in 1838 and the subsequent connection to the North Midland network in 1840, which made it possible for the Don Valley to become the centre of British steel production for the rest of the century.

Hey (1998, 88) identifies Samuel Shore as the first person to build a steel furnace in Sheffield around 1709, suggesting its location was on the site of the old castle while records of the traveller Alströmer are used by Barraclough (1984, 77–78) to establish a steel furnace, again associated with the name Shore, operating in Sheffield in 1720. In contrast Leader (1905, 2) provides anecdotal and personalised reminisces of outdoor public meetings being held on the site of the old castle at the end of the 18th century suggesting Castle Hill retained an area of open ground at this time.

Architecture

Flavell (1996, 288) comments that the last quarter of the 18th century saw a great deal of older property in Sheffield being swept aside before a downturn in building in the first decade

of the 19th century was followed by building booms in the 1830s and 1850s with the mixing of residential and industrial properties persisting throughout (Symonds 2002, 54–55).

In a review of Georgian England, Chalklin (1974, 15) comments, 'Sheffield gained little of the grandeur of Bath, Liverpool or Bristol', with most construction being on a modest scale employing local surveyors and tradesmen (ibid., 67). Beauchamp (1996, 52), in her study of Sheffield cutlery workshops, comments on the vernacular and utilitarian nature of Sheffield's industrial and domestic architecture with buildings being adapted and readapted by a range of trades as the 19th century progressed.

Previous Archaeological Investigation

Richardson and Dennison (2014, 41-69) provide a convenient summary of the previous archaeological investigations on Castle Hill starting with observations by J.D. Leader in 1872 and finishing with the ground radar survey undertaken by ARCUS in 2013. The reports published by Wessex Archaeology, following excavations at Hoyle Street (Powell 2014) and at the Riverside Exchange (Andrews 2015) provide benchmarks for industrial progression and domestic occupation, of the type one would expect to find on Castle Hill.

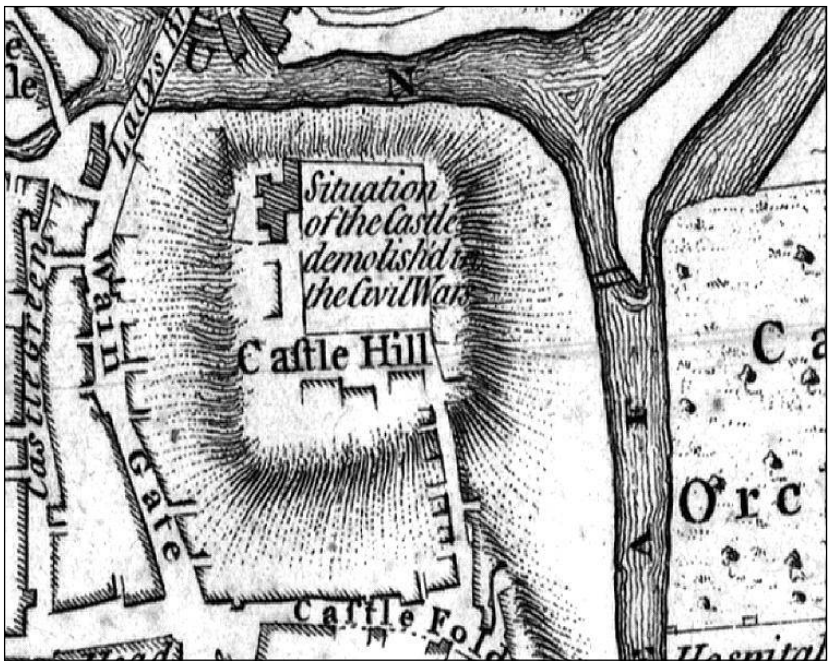
The ARCUS Rapid Scoping Review (2009, 24) adds some detail to the post-castle development, commenting that several metres of levelling material had been imported to the site and all visible remnants of the castle were removed or buried by the early 18th century. The report provides details of tool and cutlery workshops and the cementation furnace of Thomas Clegg, Nelson and Company steel and tool works and the cupola furnace of R. and J. Smith Brothers, being located on Castle Hill in the 19th century.

'A Green and Pleasant Place', 1736 to 1784

Gosling's town plan (Map 3) confirms that by 1736 Sheffield Castle was a distant memory with new identities emerging on Castle Hill and the adjacent streets of Waingate and Castle Fold. The thoroughfare, named Castle Hill, entering from the east end of Castle Fold, is thought to be in line with the main entrance to the (now vanished) castle (Belford 1998, 27). The track ran up to a plateau before doglegging around the central Bowling Green, then turned west to connect with Bridge Street. The width of the track leading up from Castle Fold was schematically consistent with the width of the other roads on Gosling's plan and is therefore likely to have been the main access, while the link between the west side of the bowling green and Bridge Street is depicted as being considerably smaller, suggesting this was a lane or path.

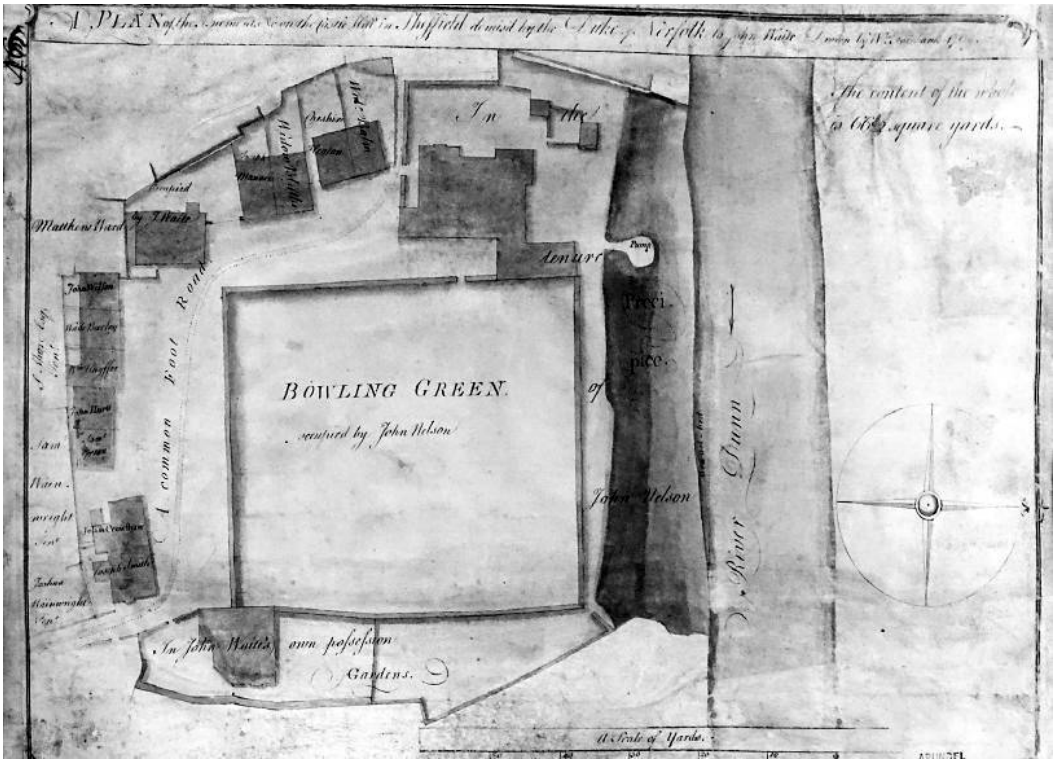
In the north-west corner of Castle Hill is an Alms House, a building clearly of some importance as it is not only illustrated on the plan, but also indexed as one of only 18 structures of note within the town. It is possible this building was related to the original medieval Lady's Bridge Chapel, converted into an Alms House by the Town Trust in the late 16th century (Belford 2009, 11). Other notable features were the geometrically-regular divisions, which line the west bank of the Sheaf and the south bank of the Don. Richardson and Dennison (2014, 21) suggested that these divisions represent gardens or yards running from the rear of the buildings lining the east side of Castle Hill. An alternative interpretation is suggested by payments, noted in the Sheffield Rate Books under the entries for Castle Hill from 1776/77 (SA/RB24) and 1777/78 (SA/RB25), made by Turners' Farm. Could these geometric divisions represent fields, orchards or allotments, similar to those seen on the east

bank of the River Sheaf, at this time? Another possibility is that of cattle enclosures, used for holding animals brought to town before being dispatched to the slaughterhouses located on the nearby Bull Stake (Hey 1998, 63), perhaps providing a precedent for the conversion of this area, in the early 19th century, into the Killing Shambles. Either way, the evidence from the rate books suggests that a parcel of land within Castle Hill precinct was given over to agricultural purposes in the first half of the 18th century.

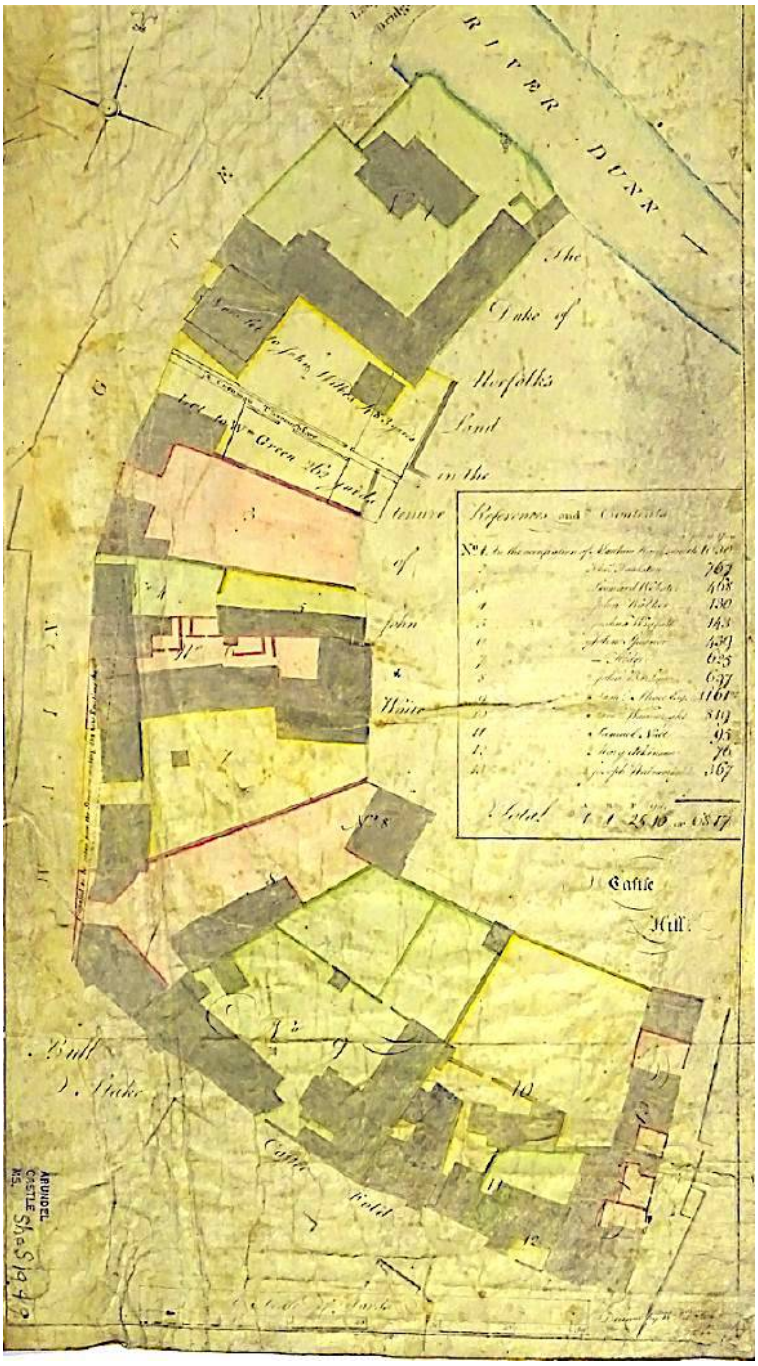


Map 5 (left): Detail showing raised plateau taken from A Correct Plan of the Town of Sheffield in the County of York. William Fairbanks 1771
Source: Sheffield Archives

Map 6 (below): A Plan of Tenements on the Castle Hill in Sheffield demised by the Duke of Norfolk. William Fairbanks 1769
Source: Sheffield Archives



A map produced by Fairbanks in 1771 (Map 5) confirms the raised nature of the central plateau. On this map, Bridge Street has been renamed as Waingate and the past location of the demolished castle noted on the bowling green, which appears as a significantly-larger area than on Gosling's plan. Fairbanks indicated buildings, separated by alleys, running along the road Castle Hill and continuing along the west and south sides of the track that skirts the bowling green. The lane connecting the plateau with what is now Waingate was not shown, nor were the fields, gardens or allotments illustrated by Gosling on the lower land to the east of the plateau.



Map 7: A Plan of the Tenements on the Wain Gate and Castle Fold Sheffield demised by the Duke of Norfolk. William Fairbanks 1771 Source: Sheffield Archives

Two maps prepared by William Fairbanks for the Duke of Norfolk's estate provide an indication of the pace of life on Castle Hill at this time. The first of these, produced in 1769 (Map 6), details the tenants occupying Castle Hill's plateau with John Waite the principle tenant, a gentleman who is noted in the Arundel Castle Manuscripts involved in a number of property-related transactions in the mid-1700s (SA/ACM/5716/7/7, SA/TT/10/43/20, SA/TT/10/43/22). Waite personally occupied two large properties and sublet four other buildings that were divided into 11 dwellings. In the north-west corner, the large building adjoining the bowling green has outhouses, courtyards and substantial walls to the south and west and access to a pump located on the precipice, which formed the open northern border to the prop-

erties. These buildings and the bowling green are noted as being under the tenure of John Nelson.

A geographically-complimentary map (Map 7), produced by Fairbanks in 1771, restates the principle tenancy of John Waite on the plateau and adds the names the 12 occupants of the properties fronting the east side of Waingate and along Castle Fold, as far as the road Castle Hill. Each of the plots on Waingate and Castle Fold contained ranges of buildings, yards and entrances, running back towards Castle Hill. A number of names, commonly associated with Sheffield in the 18th century, appear in the list of occupants, including that of Joshua Wigfall, Samuel Wainwright and, the already noted, Samuel Shore.

The Sheffield Rate Books for 1755/56 (SA/RB1) and 1757/58 (SA/RB2) give no details of the residents living on Castle Hill; it is possible they were included with those listed as residing on Castle Fold, Castle Green or within the 56 entries for Waingate. Sketchley's Sheffield 1774 Trade Directory (SLSL/ 914.274 S) has no listings for traders on Castle Hill, but does provide details of a silversmith, a wheelwright and coach maker, a gunsmith and a baker and confectioner trading from premises on Waingate along with a file maker, raff or timber merchant and a pen and pocketknife cutler trading on Castle Fold (SLSL/ 914.274 S p30-52).

Between 1736 and 1784 then, two areas with distinctive characters had evolved on the site of the old castle. On the lower ground to the west and south, Waingate and Castle Fold were becoming increasingly commercialised with public houses, storefronts and rear courtyards housing workshops, stables and warehouses, as well as homes and apartments.

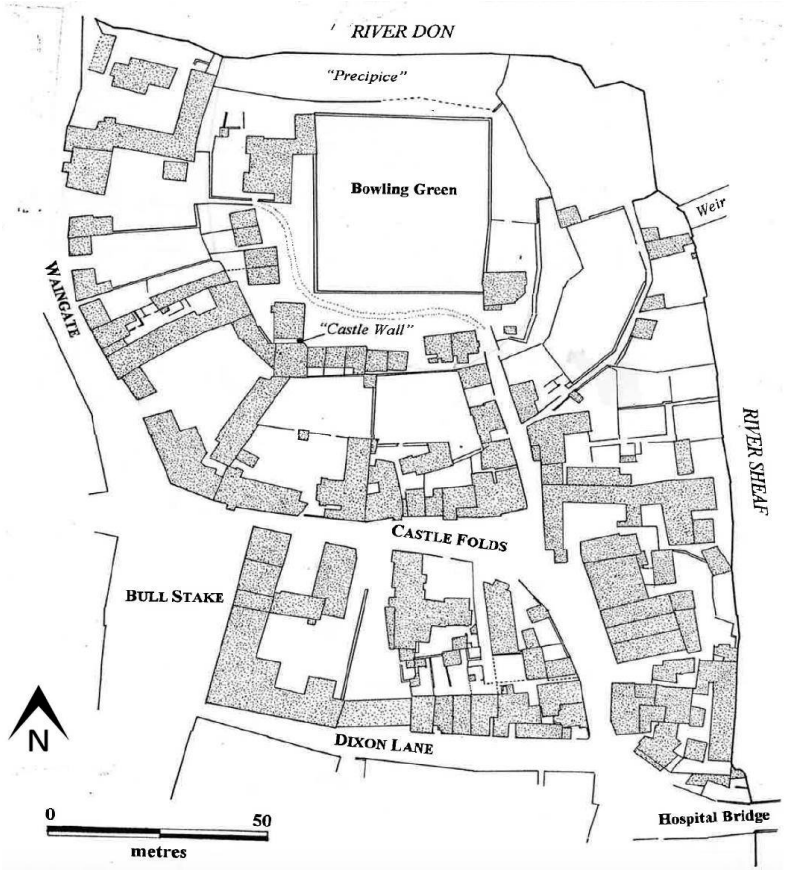
This commercial scene contrasts with the plateau of Castle Hill, probably one of the few green spaces remaining in an increasingly-crowded town. Bowling had become an established and respectable sport, especially among the upper ranks of Georgian society (Hornby 2015, 84) and the properties of John Waite and John Nelson are likely to have been of high status, flaunting their easy access to the bowling green as a sign of wealth and sophistication (Hornby 2015, 85), while the track that skirts the bowling green was lined by small cottages not numerous or substantial enough to have their own listing in the town's rate books.

By using the scale on Fairbanks' plan of 1769 (Map 6), the area of the plateau at can be estimated at approximately 4,000 square yards with the bowling green accounting for 2,000 square yards or 50% of the total space. To the north, the precipice fell sharply away to the gravel banks of the Don and, to the east on the banks of the Sheaf, was an area given over to agricultural, market garden, or livestock management. For most of the 18th century then, the plateau of Castle Hill must have been a relatively pleasant place to live and recreate.

Transition, 1785 to 1829

An Act of Parliament was passed in 1784 instigating a string of improvements in Sheffield's town centre (Belford 1998, 14). The capacity of the town's markets was to be increased, a new Killing Shambles created and a number of roads widened and straightened (Leader 1905, 163–164). These improvements were to change the physical geography and the balance of life on Castle Hill. Two composite maps drafted by Belford (Maps 8 and 9), based on sketches recorded in Fairbanks' Field Books of *circa* 1760 (SA/FC/SheS215L, SA/FC/SheS342S, SA/FB/SheS/1948S, SA/ACM/SheS/1949L) and *circa* 1800 (SA/FC/SheS1242L; SA/FC/SheS211S; SA/FB/SheS/1950L; SA/FB/64 81), make clear the scale of changes; the bowling green and cottages were gone leaving only one of John Waite's properties standing and Castle Hill was widened and moved to a central position and the precipice hacked back. Just prior to these changes, the Rate Books for 1784/85 (SA/RB26)

show Waingate (with 43 returns) and Castle Folds (with 53 entries) continued to thrive. Not so Castle Hill; payments are recorded for the two properties of Mr Waite's and the Castle House and Garden, likely to be John Nelson's residence and adjacent bowling green, along with just four other residents, Joseph Hague, Thomas Waite, Richard Morton and Walter Vavasour.



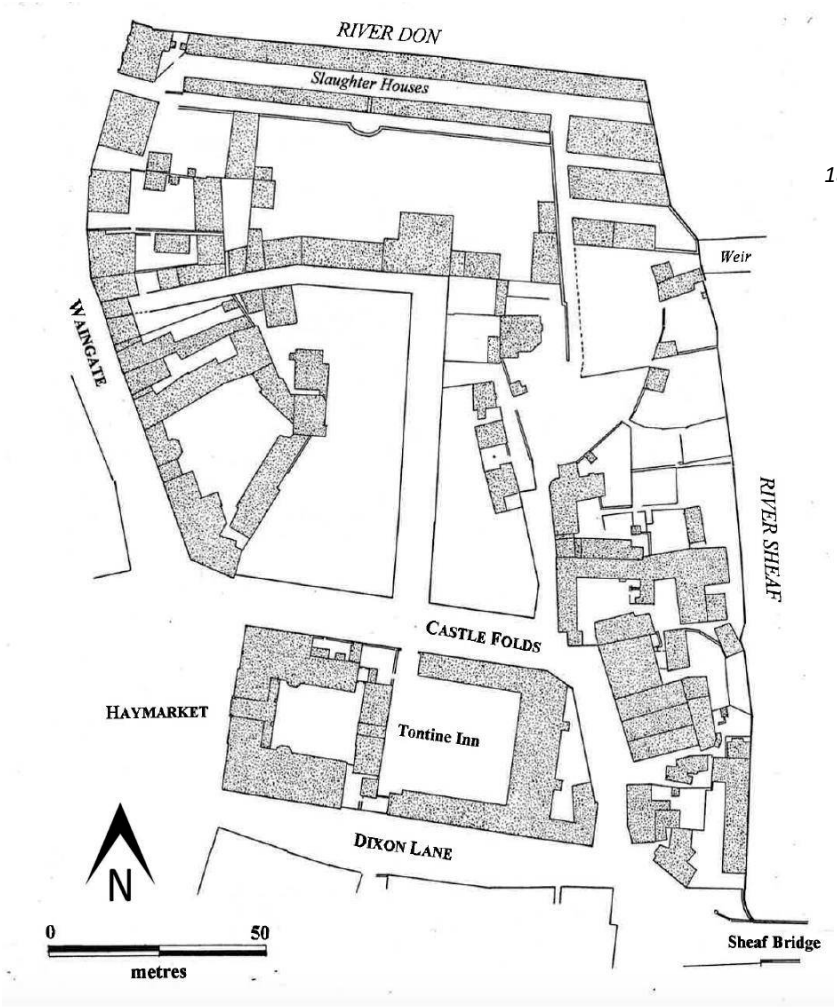
Map 8: Castle Hill circa 1760 produced by Belford 1998. Source: Belford 1998

In 1787, a Directory of Sheffield, published by Gales and Martin (SLSL/914.274 S p5), lists the only trader resident on Castle Hill as Samuel Broadbent, Factor. The same directory (p50–80) goes on to list 11 traders on Waingate, including a blacksmith, a silver and cutlery manufacturer together with a hairdresser and perfumer, a tailor and a retailer of spirits, providing an indication of the growing wealth and consumer demand within the town. By 1797, in the publication of Montgomery's Directory (SLSL/914.274 S p50–78), four traders are listed on Castle Hill. Samuel Broadbent is now described as the 'Agent to the Lombard Street Fire Office' with Matthew Hall, plasterer, William Heffor, victualler and Benjamin Taylor, smith and farrier also detailed.

Some time between 1784 and 1797 the precipice was cut back creating space for two rows of slaughterhouses backing on to the River Don with the resulting loss of the bowling green. Castle Hill road was realigned at the same time and new landlords financed the building of tenements, workshops, forges and smithies, in the established Sheffield tradition. The Rate Book for 1797/98 shows a marked increase in the occupation of Castle Hill, with 22 residents listed and four landlords noted. The Waite family's name is no longer recorded with Widow Broadbent now the major property owner with 13 dwellings sublet, followed by J. Bettany and J. Birks, both of whom have four properties. By the turn of the century, life was on the plateau of Castle Hill was changing.

An anomaly occurs in the rate books at the turn of the 19th century. As would be expected, the names listed as residing on Castle Hill in the 1797/98 rate book (SA/RB45) are, substantially, the same as those listed in 1800/01 rate book (SA/RB121). However, whilst the

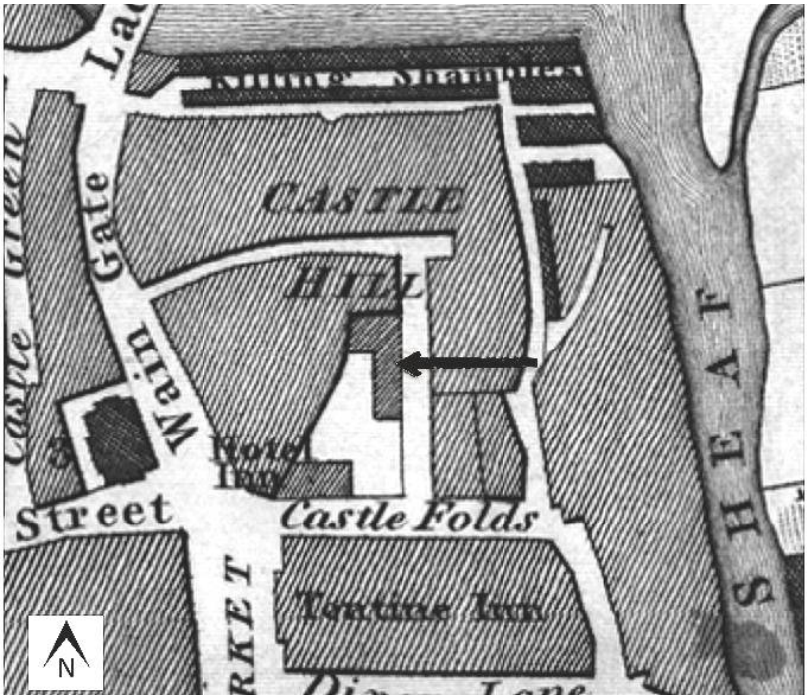
names listed in the 1897/98 books are entered under the heading Castle Hill in 1800/01, the same names are recorded as the residents of Castle Street. This could be explained as a simple administrative error; however, the name Castle Hill and Castle Fold then disappear from the rate books completely until 1829.



Map 9: Castle Hill circa 1800 Source: Belford 1998

An example of the confusion with addresses in this period can be illustrated by Weldon, Furniss and Scholefield, known to have opened a manufacturing business on Castle Hill in 1807 (Flavell 1996, 397), adding a casting and converting furnace in 1810 (Barraclough 1984, 103). The rate book for 1807–1808 (SA/RB127) lists a Weldon and Furniss Company as being located on Castle *Street*, while the 1814/1815 (SA/RB148) and 1820/1821 (SA/RB179) books list Weldon and Furniss on Barn Street, while Holden's London and Country Directory, produced in 1811 (SLSL/914.274 S), lists Weldon and Furniss as 'factors and manufacturers of saws and edge tools', located on Castle Hill. It is not possible to identify the location of the premises of Weldon and Furniss using historic maps with any certainty; however, a map produced by Fairbanks in 1808 (Map 10) distinguishes only two buildings from the block-shaded, built-up, areas of Castle Hill. One is the Hotel standing on the corner of Waingate and Castle Fold, known then as the *Rain Deer Inn* (Oliver 2019, 32); the second is a large building

on the west side of Castle Hill. No indication of occupant or function of this building is given but, as possibly the only manufacturer of scale then operating on Castle Hill, this may have been the original home of Weldon, Furniss and Scholefield.



Map 10: Detail taken from J & W Fairbanks A Map of the Town and Environs of Sheffield from an Actual Survey 1808 with the possible premises of Weldon and Furniss indicated.
Source: Sheffield Archives

The changes on Castle Hill were not the only disruptive developments underway at this time; the ancient barns, which stood on the land between Dixon Lane and the south side of Castle Fold, were demolished to facilitate the building of the Tontine Inn (Belford 1998, 15). Major changes were also being made to the roads and bridges in the area in preparation for the opening of the canal basin in 1819 (ibid.). Another notable anomaly in the rate books is that of Mr Simonite, listed in 1825/26 (SA/RB194) as residing in a property owned by the Canal Company on Barn Street, but by 1930/31 (SA/RB207) the same details reappear listed as being on Castle Hill. Further evidence of names being changed can be seen in a sketch made by Fairbanks in 1817, detailing the layout of the proposed canal basin (SA/FB135/F73). In the sketch, Fairbanks notes the street running between the Tontine Inn and Castle Hill as Castle Street, rather than the traditional Castle Fold (Figure 2).

The impact of the economic slump in the first decade of the 19th century, following the double impact of the French Revolution (1789–1799) and the Napoleonic Wars (1803–1815), can be recognised in the rate book for 1807/08 (RB127). Recorded as one of the two separate entries for Castle Street, 24 properties are listed but only 11 of them are occupied. Recovery in Sheffield's economic fortunes followed in the next decade and, by 1817, Brownell's Sheffield Directory (SLSL/914.274 S p40–66) names James Marsh and Company, pen and pocket-knife manufacturer, John Senior, carpenter and builder and a blacksmith named Taylor, alongside Weldon and Furniss as traders, residing on Castle Hill.

Further growth can be seen in the History Directory and Gazetteer of the County of York (SLSL/914.274 SST p325-395), published by Baines in 1822. This lists 18 traders with addresses on Castle Hill, with Weldon and Furniss evolving into Furniss and Cutler, James Marsh becom-

ing Marsh and Shepherd and William Hepple named as the proprietor of the wheelwright's shop. It is notable other trades now mingled alongside the manufacturers with the Directory including entries for three milliners and dressmakers, a draper, a butter factor, a timber merchant and two furniture brokers. Gell's Directory of 1825 (SLSL/914.274 SST) adds Steers and Wilkinson to Castle Hill's manufacturers as makers of fine scissors, shears and nail nippers.

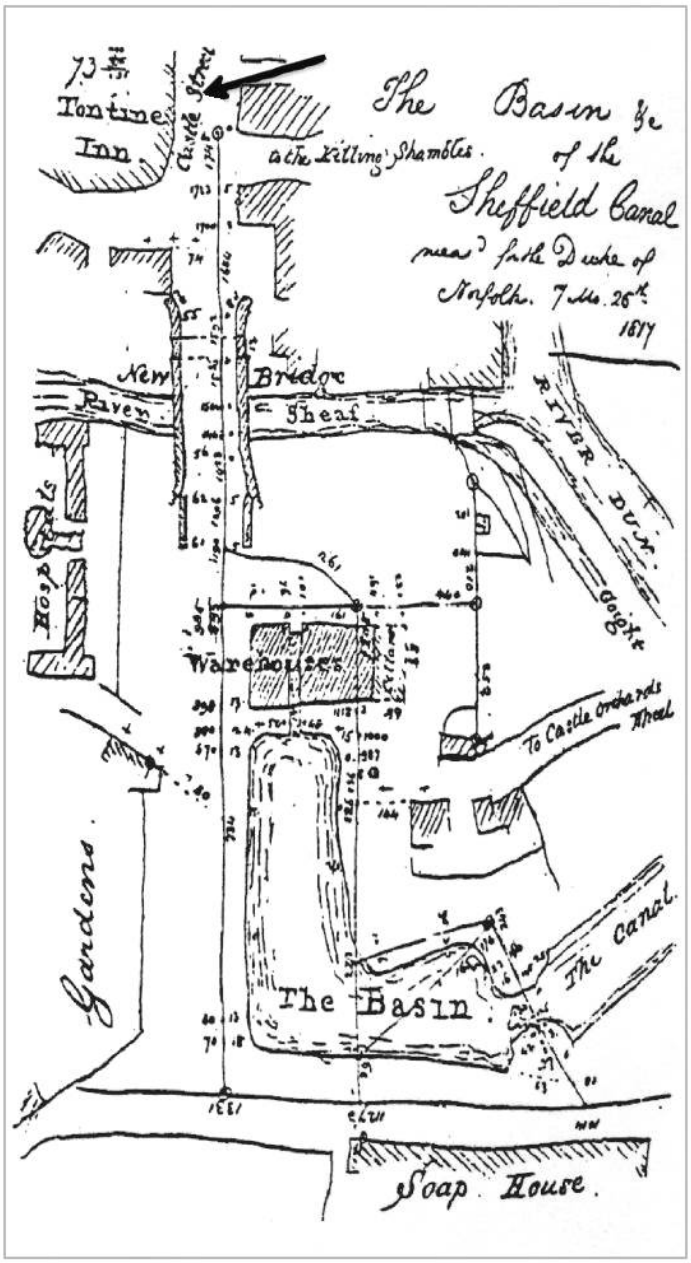


Figure 2: Fairbanks Sketch of Canal Basin Sheffield 1817, change of street name Castle Fold to Castle Street indicated by arrow. Source: Sheffield Archives

Productivity, 1830 to 1900

Castle Hill once again became identifiable in the rate books from 1829/30 and the impact of the strong economic growth of the previous decade can be seen in the 1830/31 rate book (SA/RB207) with a total of 47 payments recorded for Castle Hill with only three vacant properties listed. The resurgence in population residing on Castle Hill is likely to have resulted from the completion of two major infrastructure projects. Firstly, the new Killing Shambles, carved in to the north and east sides of Castle Hill, was large enough to require its own listing in the rate books with over 90 butchers and related trades recorded in 1814/15 (AV/RB148). Secondly, the arrival of the canal into central Sheffield was finally completed in 1819 (Barraclough 1984, 103); this brought significant increases in the volume of goods and raw materials transported into and out of the town. With these two developments came the need for additional labour and the close proximity of Castle Hill provided a convenient location for some of the workers from the shambles and the wharf to reside.

It is known from the rate books that at least one furnace was in operation on Castle Hill in the 1830s under the tenure of Furniss, Cutler and Stacey (White's 1833, 192). Wilkinson Co., Mort Henry and Co. and James Hallam and Co. maintained production of all types of edged tools including scissors, saws, shears, pocketknives, razors and horticultural tools (Post Office 1854, 54). Additionally, 19 dwellings were listed as being 'house with appurtenances', a term used to describe the accessories, tools and trappings associated with a particular industry, a strong indication that these properties were combined homes and workplaces and likely to be associated with the cutlery and steel trades. Twenty-three properties are listed as houses only, one as a shop and yard and one as a house with kitchen. To accommodate this growth, two new courtyards had been established in the southeast corner of Castle Hill and a new passageway, Shambles Lane (later Castle Fold Lane), linked the Killing Shambles with Castle Folds (Map 10).

This phase of domestic expansion on Castle Hill seems to have peaked in the mid-1830s with the number of rate payments made in 1839/1840 (SA/RB/232) declining to 21 properties, occupied by 19 tenants. The premises of George and H. Steer, scissor manufacturers, are the only manufacturers listed in the rate book, while just two warehouses with appurtenances are noted. The term 'Sale Shop' accounted for eight properties, with seven listed as houses only. Ten years later, 1850/1851 (SA/RB/289), numbers dwindle further with only 12 payments being listed from 11 occupants and two owners.

Map 11: Detail from Ordnance Survey 500:1 Map of Sheffield 1853 adapted by Wessex Archaeology 2019. Source: Wessex Archaeology

This reduction in the recorded population of Castle Hill is likely to be the result of a combination of factors. Trade Directories from 1852 (White's 1852, 355) and 1854 (Post Office 1854, 54) list six, well-established traders with expanding product lines operating from

Castle Hill including: Steer and Webster, listed as manufacturers of scissors, shears, razors and horticultural tools, H. Cutler and Son and C. Chambers as merchants and manufacturers of steel, edge tools, saws, files, cutlery and John Lyons as steel manufacturer, converter and refiner manufacturer of anvils, vices, slake, sledge and other hammers. The 1853 Ordnance Survey map (Ordnance Survey 1853) shows two large and two medium-scale integrated workshops (Symonds 2002, 99), clustered at the centre of Castle Hill (Map 11). The word 'steel' is detailed on each workshop, indicating they all had furnaces in regular use at this time. It seems likely that the expansion of these businesses had involved the acquisition of adjacent buildings thus reducing the number of dwellings and smaller workshops.

Waingate and Castle Fold continued to be populous with over 100 shops, houses, inns, stables and yards detailed in the 1850/1851 rate book and 45 listings in White's 1852 Directory (SLSL/914.274 S). Perhaps this explains why the town's Beadle and Inspector of Weights and Measures, John Cooper (SV/RB289), a senior employee of the Cutlers' Company and therefore a man of authority within the town, chose to reside on Castle Hill throughout the 1850s.

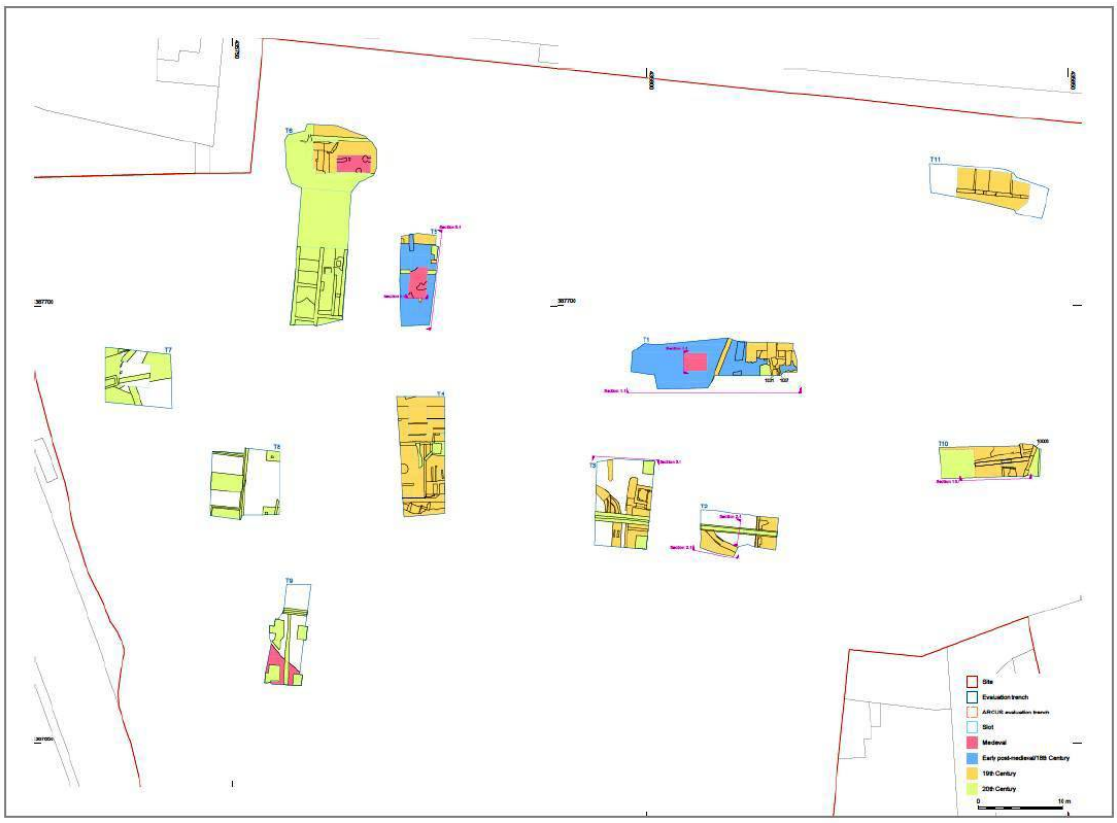
The arrival of the railway in 1838 (Barraclough 1984, 103) facilitated the migration of steel making to the Don Valley (English Heritage 2011, 30–31, Tweedale 1995, 4) and by the 1860s, the belated consolidation of the cutlery trade was also beginning to have an impact (Beauchamp 1996, 34, Pollard 1959, 205). It seems the decline in these trades prompted investment in new housing, or at least the redevelopment of properties as dwellings and, by the time of the 1860/1861 rate book (SA/RB307), the number of houses listed on Castle Hill was back up to 27 compared to just eight in 1850/1851 (SA/RB289). The new investment is suggested by 25 of the residential properties belonging to a single landlord, Ann Batty, who also owned a further nine houses on Shambles Lane. Manufacturing did maintain a presence on Castle Hill throughout the 1860s with Steer and Webster, Joseph Turner and Company and Charles Chambers and Company trading throughout (White's 1868, 69). It is interesting to note that the arrival in the late 1860s of Rowland Ward Auctioneer (*ibid*.) and the presence of an Auctioneer or Auction House remained a consistent feature of Castle Hill for the next 30 years (White's 1900, 110).

The severe depression impacted the country in the 1870s (Beauchamp 1996, 34) and residential occupation on Castle Hill declined with just six houses occupied in 1880/1881 (SA/RB360). Ownership on Castle Hill had also changed with Roland Ward, Auctioneer, owning three properties including a sublet house and Richard Roberts owning five sublet properties. Some previous generations of manufacturers had become landlords, with trustees of Mr Weldon owning the commercial premises sublet to Steer and Webster and the trustees of Hiram Cutler, now the owners of premises occupied by Charles Chambers and Co., Newham and Co. and R. and J. Smith Brothers.

Charles Chambers and Co. continued to produce steel and manufacture goods into the mid-1870s (White's 1876, 135) and by 1880/81 (SA/RB360) the company was occupying three adjacent properties on Castle Hill. These are now listed as warehouses, stables, coach house, shed and yard, premises with appurtenances with no mention of steel production or manufacturing, while the entry in Kelly's directories for 1883 and 1890 has Charles Chambers and Company simply listed as merchants. Steer and Webster continued to be manufacturers of goods and operate a grinding wheel into the early 1880s (SA/RB360), but are not listed in Kelly's directories from 1883 onwards.

It seems as the manufacturing companies declined on Castle Hill in the 1880s, new business took up residence. Kelly's 1883 Directory (SLSL/914.274S p73) lists R. and J. Smith Brothers, iron merchants and metal agents, occupying the large premises previously detailed as Castle Hill Steel Works. With the exception of the Smith Brothers, merchants now dominated the trade directories with traders, such as George Sharman selling tea (Kelly 1890, 74), John Howlden, corn and linseed (Kelly 1883, 73) and John Fielding, provisions (Kelly 1890, 74). In 1891/92, the rate books (SV/RB378B) provide the details of eight residential houses, four warehouses and six offices, but only one workshop and a single machinery yard.

In 1896, Charles Goad produced a comprehensive collection of plans covering central Sheffield, to aid in the assessment of fire insurance premiums (Map 4). A combination of plan 6 (SA/SY674/7) and 16 (SA/SY674/17) from this collection provide details of the major residents of Castle Hill in 1896 (Map 12). The central iron warehouse of Smith Brothers is prominent, but the previous Castle Hill Works now has G.W. Sharman, wholesale tea dealer and the only reference to Charles Chambers is 'Chambers Yard'. The slaughterhouses still dominated in the north and north-east and numerous domestic properties in Browns Court and Castle Folds Court still occupied the south-east. The *Rain Deer Inn*, now *The Royal Hotel*, is still standing at the corner of Waingate and Castle Fold (now Exchange Street) which boasts numerous shops, public houses and restaurants as the end of the century approached.



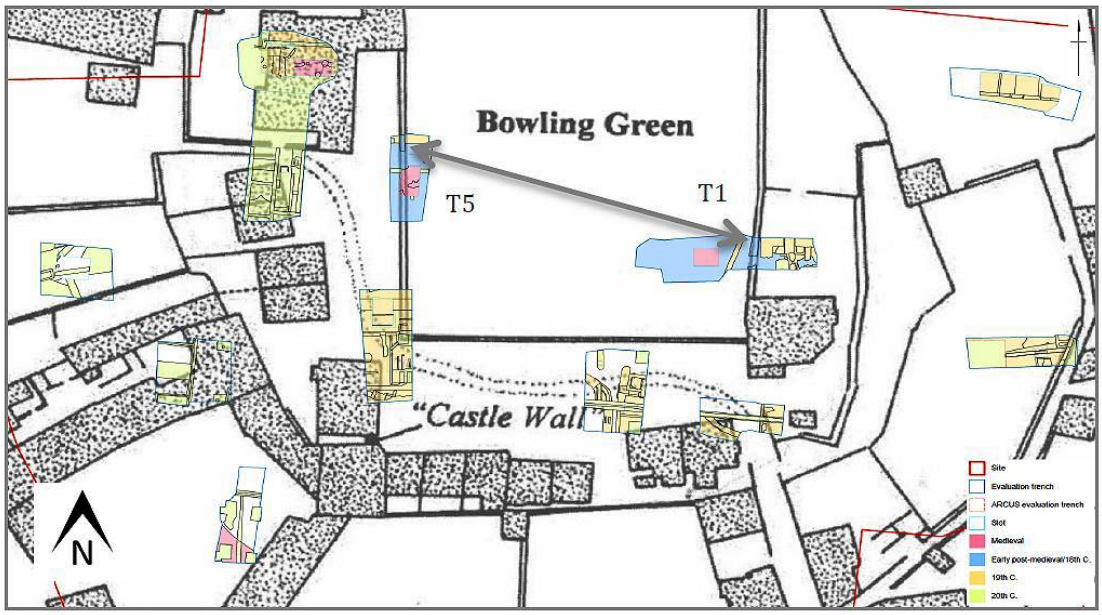
Map 12: Wessex Archaeology Castle Hill Trenching Plan with Results.
Source: Wessex Archaeology 2019

Wessex Excavation Results Analysis

The following observations are drawn from the Trench Summaries, Finds Log and the Trench Results Plan (Map 12) collated following the 2018 Castle Hill excavations by Wessex Archaeology, the latter to be published in due course.

1736–1784

New evidence was found to support the bowling green dominating the Castle Hill plateau prior to the programme of change in 1785. Trench 1 exposed a section of sandstone wall (TS/1055) with a further section of sandstone wall with lime mortar, cut into a pottery-dated, post-medieval, layer in Trench 5 (TS/5010). Superimposing these two sections of wall onto Belford's *circa* 1760 composite map provides confirmation of the location, size and prominence of the Bowling Green (Map 13).

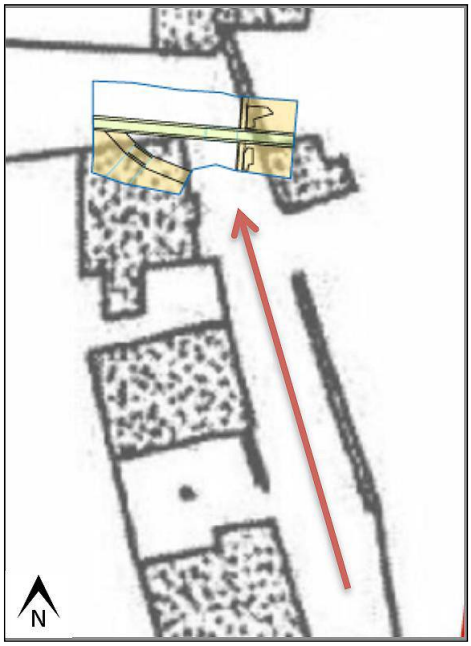


Map 13: Wessex Archaeology excavation results superimposed on the Belfield map of circa 1760, sections of possible Bowling Green boundary walls indicated by arrows
Source: Wessex Archaeology 2019

A total of 225 fragments of pottery, 94 pieces of clay pipe and 26 items of glass were recovered from Trench 1. Of particular interest are the 51 fragments of clay pipe and 81 pieces of pottery recovered from a single context (TS/1006). This cluster of finds lay below the strata of blue/black ash and clinker (TS/1003), red crushed brick with silt ash (T/S1004) and heat-affected stones (TS/1005), layers associated with steel works which later replaced the Bowling Green.

Trench 5 produced a total of 312 pieces of pottery and 54 sections of clay pipe, along with 206 items of glass. Expert dating of the assemblages from Trenches 1 and 5 is anticipated to provide conclusive dating evidence for the stratigraphic sequencing. It is expected that the high concentration of clay pipes and domestic pottery recovered from the strata, which was deposited prior to the steel works being built, will provide strong support for the suggested recreational and domestic nature of the plateau for much of the 18th century.

In Trench 2, lying below the remnants of 19th century industrial buildings, a four-metre-deep layer of redistributed, clean, yellow clay was recorded (TS/2051). This layer had few sandstone inclusions and yielded no notable finds. Informal on-site discussions regarding the purpose of this deep layer focussed on three possibilities; the construction of a civil war earthwork inside the castle walls, the remains of the mound from the original motte and bailey castle, or levelling between upper and lower areas of the castle's inner courtyard. However, Trench 2 truncates the summit of the original Castle Gate road (Map 14), adding the possibility that the deposit of clean clay (TS/2051) may have been levelling materials used in the creation of the original Castle Hill road and building platforms that flanked it.



Map 14: Wessex excavation results from Trench 2 superimposed on the Belfield map of circa 1760, upward inclined direction of original Castle Hill track or road indicated by the arrow. Source: Wessex Archaeology 2019

Figure 3: Trench 6 facing southwest, wall, flagstones and stair-case related to wheelwrights shop. Source: Author 2018

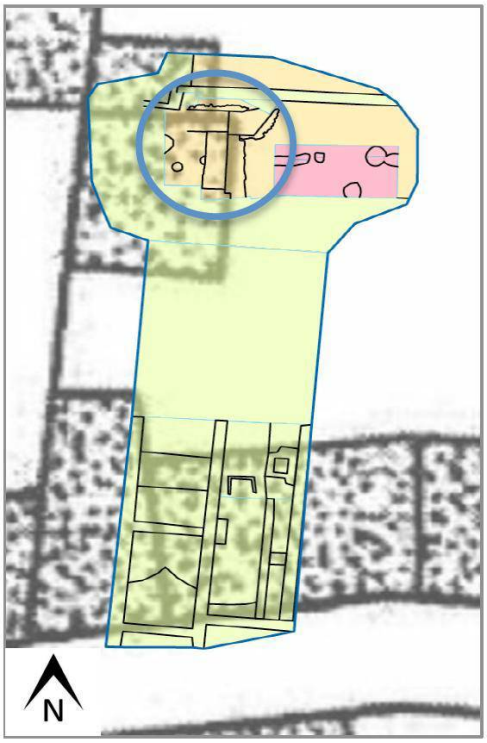
1785 – 1829

A number alignment following the upheaval caused by the major physical changes to the layout of Castle Hill can be confirmed by superimposing the result of Wessex's trench plan over Belford's composite map of Castle Hill *circa* 1800 (Map 15) in this transitional period. Positive alignment is recorded in the northern end of Trench 6 (Map 16) with the remains of a staircase with flagstone treads (TS/6032), a sequence of limestone and mortar walls (TS/6029/, TS/6035) and sandstone floor slabs with a the cut of a door jamb (TS/6036) (Figure 3).

Trench 6 yielded 289 clay pipe fragments, 208 from a single context (TF/6062), along with an assemblage of 293 pieces of pottery recovered from 12 contexts. This span of material should provide strong dating evidence for the sequencing of Trench 6, possibly enabling some

features and finds to be linked with William Hepple, a wheelwright, known to be trading on Castle Hill in 1822 (Baines Directory 1822, 391; 399).

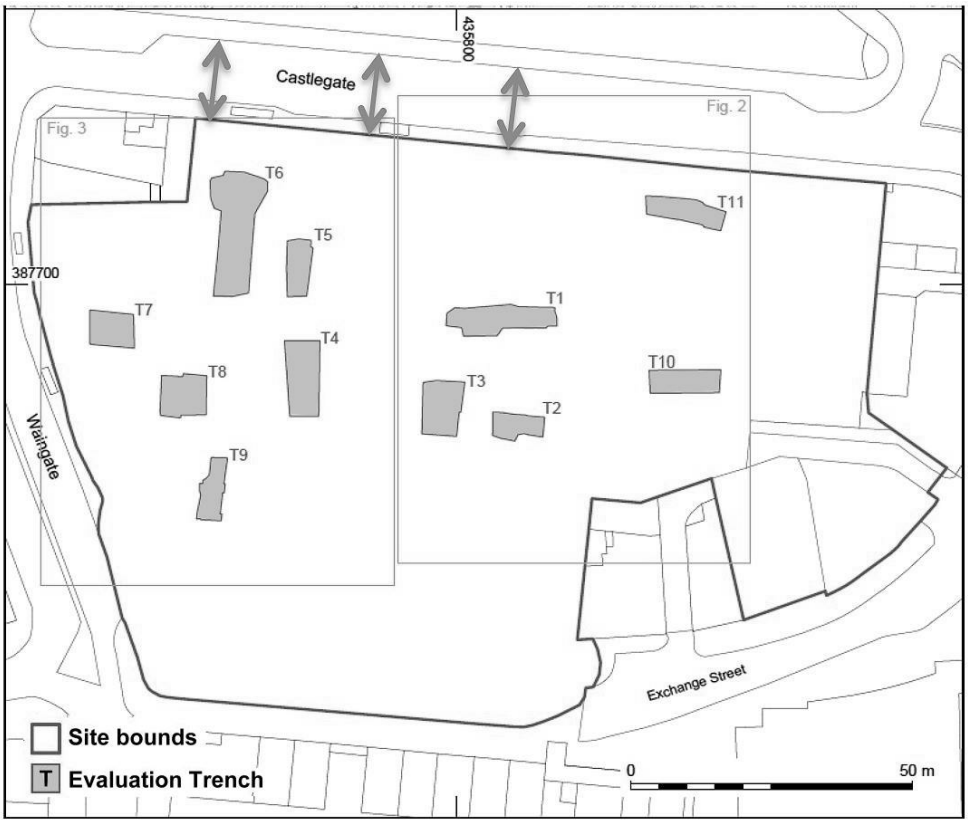
Using the scale on Wessex's trenching plan, it is possible to estimate the size of the cutting back of the precipice undertaken towards the end of the 19th century to facilitate the building of the Killing Shambles (Map 17). With the River Don now canalised, it seems that between 10 and 15 metres of the sandstone cliff-face were excavated, slicing away the north end of the bowling green and impacting on the house once occupied by John Nelson.



Map 15 (above): Wessex Trenching Results superimposed on Belford's composite map of Castle Hill circa 1800. Trench 6 is indicated.
Source: Wessex Archaeology 2019

Map 16 (left): Detail from Trench 6 superimposed on Belford's map of Castle Hill circa 1800.
Area of possible alignment indicated by blue circle.
Source: Wessex Archaeology 2019

Trench 11 confirms the alignment of the slaughterhouses producing clear matches with walls, (TS/11004, 11006, 11007, 11009, 11010) flagstone floors and alleyways (TS/11005, 11008, 11013, 11014, 11015) (Figure 4) shown on Belford's composite maps (Map 18) along with numerous finds associated with animal butchery.



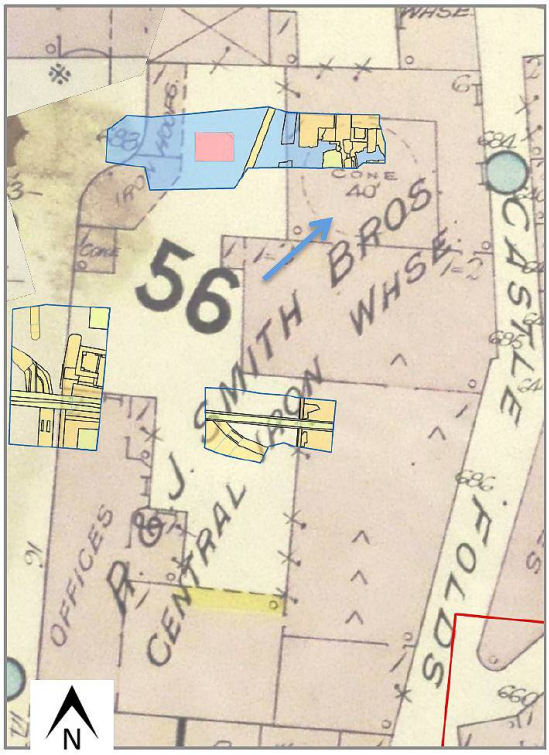
Map 17 (above): Wessex Trenching Plan estimating size of precipice cut back indicated by arrows. Source: Wessex Archaeology 2019 adapted by the author

Figure 4 (left): Trench 11 cobbled Floor, looking west. Source: Author

1830-1896

A section from sheet 6 of Goad's Fire Insurance Plan of Central Sheffield 1896 (Map 19) details a 40-foot (12.2 metre) cone, set within the premises of R. & J. Smith Brothers, possibly indicating the location of a furnace. It is conceivable that this is that visible on a photograph of Castle Hill taken around 1900. It was hoped that Trench 1 would confirm the location of this cone and its function as a part of a cementation furnace.

Map 18 (above): Trench 11 Excavation Results superimposed on Belford's composite maps of 1800 left and 1850 right. Source: Wessex Archaeology 2019



Map 19 (left): Detail from Goad's Insurance Map sheet 6 showing location of 40 foot cone, indicated by a blue arrow, within the premises of R & J Smith Brothers Source: Sheffield Archive adapted by the author

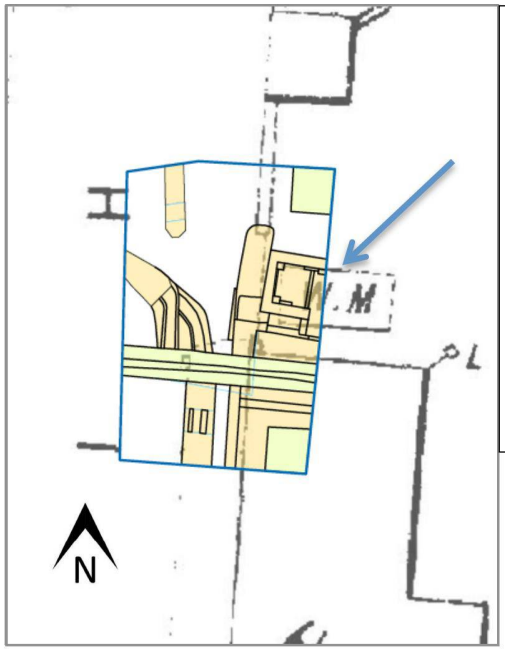
Robust walls, three courses wide (TS/1023), some constructed in handmade red brick (TS/1020, TS1047), were exposed and dated to the 19th century. It is thought that these represent below-ground storage features, while recovered firebricks (TS/1029) and a narrow passage (Figure 5), similar to the ventilation shafts recorded at nearby Hollis Croft (Wessex 2018, 23), were partially excavated. Disappointingly, no indication of the perimeter of the cone was found.

Any site in Sheffield, where landscaping and levelling has taken place, slag - the waste product of metal production and working - is likely to be common. On Castle Hill, slag was recorded in most trenches but with a notably-high concentration of 84 pieces recovered from Trench 1 including pieces of 'crozzle', a local term for the residue produced from furnace lining made from wheelswarf, a waste material produced in the process of cutlery grinding. Pieces of ganister, local refractory sandstone, were also recovered from the backfill (TS/1045) providing further evidence to support the close proximity of Trench 1 to a furnace.

R. & J. Smith are listed in Kelly's Directory of 1883 (SLSL/914.274 S p73) as Iron Merchants and Metal Agents, a description also listed in directories for 1887 (SLSL/914.274S p30) and 1890 (SLSL/914.274 SST p74). No evidence of steel production by R. & J. Smith could be found and it seemed likely that the furnace shown on Goad's 1896 map was decommissioned and

possibly later demolished during R. & J. Smith's tenure of the site. Considerable amounts of iron were recovered from Trench 1 (33 items) and Trench 2 (69 items), attesting to the nature of R & J Smith's core business. In Trench 3, the substantial remains of a weighing machine (TS/3043 to 3054), as recorded on the 1890 Ordnance Survey map, were exposed and the location confirmed, using historic maps, as the courtyard of Castle Hill Steelworks (Map 20).

Figure 5: Trench 1 Looking south, possible furnace related flue
Source: Author



Map 20 (left): Trench 3 superimposed on 1850 Ordnance Survey Map with weighing machine indicated.
Source Wessex Archaeology 2019

Map 21 (above): Detail of the results from Trench 4 superimposed on Ordnance Survey Map from 1853.
Source: Wessex Archaeology 2019

Industrial activity and steel working feature heavily in the 19th-century, pottery-dated, layers of trench 4. The excavations revealed strong alignment with walls running north to south (TS/4006, 4026) and east to west (TS/4017, 4018, 4028) of buildings shown on an Ordnance Survey map from 1853 (Map 21) that notes a chimney in the vicinity of boilers to the west side of the complex. The remains of an exhaust flue (TS/4091) exposed in the north

end of Trench 4, made of red brick and firebricks with sooty covering, are likely to be related to these boilers (Figure 6).

Figure 6: Trench 4: Looking south, exhaust flue 4091. Source: Author 2019

The suggestion that a conduit (TS/4020) in the south of the trench may have housed a leather drive-belt, is supported by the recovery of 147 pieces of leather from the trench, with a single context (TF/4009) accounting for 88 of these. Two large sandstone blocks (TS/4011), thought to be bases for heavy machinery abut the conduit and a large grindstone (TS4023), were recovered lying against the west boundary of the trench (Figure 7). No other evidence was found to support grinding taking place; however, it is known that Thomas Webster and Ernst Swann (later trading as Steer and Webster) (SA/RB360), operated a grinding wheel on Castle Hill from the 1870/1871 (SA/RB334) and 1880/81 (SA/RB360) rate books. Additionally, an unfinished bone handle was recovered from Trench 4 (Figure 7). Goad (1896) confirms these buildings had become the premises of G.W. Sharman, wholesale tea dealer by the close of the century.

Figure 7: Trench 4: Looking north, grindstone left centre, possible drive conduit right centre. Source: Author 2019

Figure 8: Unfinished bone handle recovered from Trench 4. Source: Author

The uncovered staircase in the north of Trench 6, which aligns strongly with Belfield's composite map of circa 1800 (Map 14), is still in existence on Goad's 1896 plan (Map 4); as previously noted, these features are associated with a wheelwright's shop. Local work for the wheelwright is likely to have been generated by Rowland Ward who was operating a carriage house and stable on Castle Hill in the 1870s (SA/RB334) and 1880s (SA/RB360), with J.B.C. Barber taking over the premises in the 1890s (SA/RB378/B), as well as Charles Chambers and B. Newham who also operated coach houses, stables and yards, on Castle Hill at this time.

Summary

From 1736 to 1784, the plateau of Castle Hill, with its large bowling green was surrounded on two sides by cottages and the high status properties of John Waite, gentleman and property owner and John Nelson, bowling green and clubhouse proprietor, overlooking the River Don to the north and the allotments and gardens on the banks of the River Sheaf to the east. On the lower ground to the west and south, the increasingly busy streets of Waingate and Castle Fold surrounded the plateau. Despite the phenomenal growth in population and the constant encroachment of industry, it seems Castle Hill clung on, as long as it could, to this rather genteel image.

The floodgates broke in 1785 with the acceptance of new plans to improve the crowded markets and thoroughfares of the town. For the next 30 years or so, the scale of change was so great that the names Castle Hill and Castle Fold almost disappeared. The bowling green disappeared and new landlords invested in creating the new domestic quarters of Castle Folds Court and Browns Courts, while commercial gentlemen, such as Samuel Broadbent, Matthew Hall, William Hepple and Benjamin Taylor took up residency.

Large-scale manufacturing arrived on Castle Hill when Weldon, Furniss and Scholefield leased a plot from the Duke of Norfolk in 1807. This business expanded its product range to include steel production and through many changes in title, they traded from Castle Hill for three decades or more. The economic slump of the first decade of the 19th century and the boom in the following ten years are easy to trace in the rate books and trade directories, but less so archaeologically. However, the archaeology did confirm the changes in the street layout and changes in the geography of the plateau resulting from the establishment of the Killing Shambles.

By 1830, Furniss, Cutler and Stacey had been joined by the companies of Wilkinsons, Mort Henry and James Hallam in producing steel and the manufacturing of an expanding range of edged tools from four integrated workshops located at the very heart of Castle Hill. The

expansion of these larger businesses eventually resulted in a reduction in the availability of domestic dwellings and workshops. In the second half of the 19th century, steel production and traditional cutlery production slowly relocated elsewhere, providing an opportunity for merchants of diverse goods, ranging from iron to tea, to take advantage of Castle Hill's central location and proximity to transportation links. Archaeology confirms the longevity of some of these businesses with the wheelwright shop, possibly owned by William Hepple in the 1820s, still in existence by 1896.

Buildings are rarely frozen in time (Symonds 2002, 106) and as the manufacturing workshops and furnaces on Castle Hill gave way to merchants and retailers, the (mainly) portable equipment used by the steel-maker, forger, grinder, buffer and cutler would have been removed (Symonds 2002, 87–95), leaving just the foundations of the buildings, drains and cellar floors, along with a few artefacts for the archaeologist to find. Nonetheless, slag from steel making, hammer scale from forging, swarf from grinding and disused or rejected cutlery parts, as well as the refuse from domestic dwelling and recreational activities, were some of the clues recovered by the Wessex 2018 excavations that have helped build a more complete understanding of life on Castle Hill between 1736 and 1896.

In short, the site of the Castle was once dominated by leisure, before this gave way to a mix of domestic dwellings and small-scale manufactures which, in turn, gave way to larger integrated workshops and finally to merchants and traders through 160 years of evolution rather than revolution.

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