Placing nature: natural history collections and their owners in nineteenth-century provincial England

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Abstract. The cultural history of museums is crucial to the understanding of nineteenth-century natural history and its place in wider society, and yet although many of the larger metropolitan institutions are well charted, there remains very little accessible work on the hundreds of English collections outside London and the ancient universities. Natural history museums have been studied as part of the imperial project and as instruments of national governments; this paper presents an intermediary level of control, examining the various individuals and institutions who owned and managed museums at a local level in provincial England, and their intended audience constituencies. The shifting forms and functions of collections in Newcastle, Sheffield and Manchester are studied in the hands of private collectors, learned societies, municipal authorities and civic colleges. I argue that the civic elite retained control of museums throughout the nineteenth century, and although the admission criteria of these various groups became ostensibly more inclusive, privileged access continued to be granted to expert and esteemed visitors.

There were over 250 natural history ‘museums’ in Britain by the turn of the nineteenth century, and countless menageries, shops, libraries and gardens also displayed natural objects, alive or dead. Such collections were important sites for the experience and practice of life science, the physical manifestation of the Victorians’ perception of the natural world, and if taxonomy can tell us as much about the classifiers as the classified, then the museum provides a vital space for the historical analysis of science and society.1 Nick Jardine has recently argued that the history of museums is vital to the comprehension of science and its assimilation into broader cultural history, and yet although many of the larger metropolitan institutions are well charted, there remains very little accessible work on developments outside London.2 Provincial collections, although in many ways modelled

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on the museums in the metropolis (and often interacting with and dependent on them for specimens), nonetheless exhibit particular characteristics, developments and forms, and a distinct range of social groups engaged with them as owners, collectors, curators and audiences. This paper sets such collections firmly within their regional contexts, providing a rudimentary typology of natural history collections in provincial urban Britain.

Whereas historians of science have traditionally focused on the content and arrangement of natural history collections, my focus here is on those who owned, managed and governed them, and in particular on how intended audiences changed across the nineteenth century and between these groups and individuals. Museums have recently been treated as part of the imperial project, and domestically as instruments of the state in the subjugation of the people, but these emphases can serve to obfuscate the multiplicity of sites and functions inhabited and exhibited by museums across the country. Accordingly, I want to supplement existing work with an analysis of an intermediary level of control, which is brought sharply into focus when we examine the local contingencies of provincial collections. The emerging bourgeoisie, consolidating their authority in the expanding urban provinces, displayed natural history collections as emblems of their cultural erudition alongside art galleries, libraries and gardens. Such institutions were manifestations of civic pride, evidence of the sophistication of one town in contrast to its neighbours, the capital and the wider empire.

In order to elucidate the differences between different collections over the course of the century, I have teased apart four of the loose groupings of collection types: personal, society, municipal and university. They are presented in this order not because they superseded or eclipsed each other, but rather as the beginning of a chronologically sensitive typology of natural history collections according to their mode of ownership. I hope thereby to steer the discussion away from simplistic public/private dichotomies, and by presenting a range of intentions and functions, away from a crude education-versus-entertainment debate. To provide critical focus I discuss three collections in most detail, based in Sheffield, Manchester and Newcastle upon Tyne (hereafter ‘Newcastle’) respectively. All three had their roots in personal collections, which were then purchased by a learned society. Their later developments diverge, however, and by the end of the century each museum operated within a different sector of civic culture: one remained with the society, one was transferred to the municipality and one became part of a university college. Over the decades they were in turn broken up, added to, moved, rearranged and rebuilt; a collection is a protean assemblage.

‘Museum’, of course, is itself a fluid and elusive category; by presenting a variety of sites we are able to observe its diverse meanings shifting over time. It was during this period that the present English meaning was formalized as museum advocates and organizations wrested the concept from its origins as ‘a temple of the muses’, from a Renaissance cabinet to a modern institution. Because of the subtle difficulties in definition and the danger of anachronism, the focus of study below is the location of the ‘collection’, the assembled group of objects often housed in a museum building. The objects’ meanings also shift over the more heterodox sites for display in the capital see, for example, R. D. Altick, _The Shows of London_, Cambridge, MA, 1978; M. R. Burmeister, ‘Popular anatomical museums in nineteenth-century England’, unpublished doctoral thesis, Rutgers University, 2000, AAT 9991862.
time and audience, and the collection as a whole is a dynamic entity – but as a historically stable category, the collection works well for my purposes.

In the sections below I compare and contrast the functions of collections, and especially their intended or perceived audiences, thus illuminating the complex mechanics around the urban experience of nature. I will demonstrate how firmly embedded were the material cultures of natural history in the middle-class networks of urban provincial Britain, and how far the civic elite continued to be involved in the management of collections, whether directly, as owners, or – in a subtler fashion – as members of committees and learned societies. Also evident is the endurance of privileged access even as collections became ostensibly more permeable. By examining the locally contingent functions and forms of collections we can bridge the critical gap between the processes of collection and exhibition and begin to construct a more rounded cultural study of natural history collections.³

**Personal collections and the ‘learned virtuoso’**

From the high Renaissance onwards, wealthy individuals gathered diverse cabinets that acted, partly, as emblems of their cultural and social status.⁴ In the late eighteenth century their ranks were swelled by members of the emerging bourgeoisie. These new collecting constituencies, unlike their metropolitan and continental counterparts, have been relatively neglected in the history of museums, and yet their practices and specimens play a critical role in the development of museum collections across the country.

Among the most prolific collectors in eighteenth-century Sheffield was Jonathan Salt (1759–1815).⁵ Like many of his townsmen, Salt was involved in cutlery manufacture,


eventually to be partner in the family table-knife firm J. & J. Salt. A keen entomologist and botanist in his free hours, from 1773 until 1809 Salt constructed an extensive herbarium, detailed in his manuscript *Flora Sheffieldiensis*. It was especially strong in lichens, gathered from all over the West Riding of Yorkshire, from Lincolnshire, Derbyshire and Nottinghamshire, and included specimens from as far afield as Greenland. Elected to the Linnean Society of London in 1797, Salt added the sedge *Carex elongata* to the British flora in 1807, and he had ‘the friendship and correspondence of many persons distinguished for science’, including James Sowerby, to whose *English Botany* (1790–1814) he made five contributions. The immediate fate of Salt’s renowned *Hortus Siccus* after his death is not clear, but by 1825 it was in the possession of William Staniforth (1750–1833) of Truelove’s Gutter, an ocular surgeon at the Royal Infirmary, who sold it to the Sheffield Literary and Philosophical Society the following year.

While Salt gathered a relatively focused collection, many of his peers were more eclectic, such as his near contemporary John Leigh Philips (1761–1814), whose collections became the basis of the Manchester Natural History Museum. Like Salt, Philips was involved in manufacturing as partner in his family-based firm, but as we might expect of a Manchester man, it was cotton and silk spinning rather than steel. He served in the First Battalion of the Manchester and Salford Volunteers as lieutenant colonel; although he saw no active service, Philips is alleged to have been a participant in the last duel to be fought in Manchester. He collected voraciously: paintings, prints, etchings, books and natural history specimens, particularly insects. As with other provincial collectors, he was well connected to regional and national networks, and was a lifelong friend of Joseph Wright of Derby and a correspondent of James Edward Smith. After his death, his ‘very extensive, valuable, and nearly perfect collection of insects’ in three mahogany cabinets was purchased by the dissenting merchant T. H. Robinson.

The third of the collections in question was initiated by Marmaduke Cuthbert Tunstall (1743–90), of a well-to-do Roman Catholic family from Wycliffe in the North Riding of

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6 *Sheffield Iris*, 25 August 1815, 3. I am grateful to David Allen for technical information regarding Salt’s collection.

7 J. D. Leader and S. Snell, *Sheffield Royal Infirmary 1797–1897*, Sheffield, 1897.


Yorkshire. Educated in France, he spent the 1770s in London acquiring books, paintings, flora and fauna (alive and dead), shells, minerals, antiquities and other curiosities. In 1776 he took his collection back to the family estate, where he gained renown for his ‘noble library’ and ‘very large collection of fine and valuable prints’, prompting one visitor to exclaim that ‘few private gentlemen are in possession of a Museum containing so large a collection, especially of the feathered race, or of so rich a cabinet of antiquities’.

Already a Fellow of the Society of Antiquaries by 1764, Tunstall was elected to the Royal Society in 1777. He died suddenly in 1790 (allegedly from living too sedentary a lifestyle), and his collections passed to his half-brother William Constable, who only outlived Tunstall by six months and bequeathed the collections in turn to his nephew Edward Sheldon with the rest of the estate. Sheldon kept some of the manuscripts and prints, sold most of the books to the bookseller Mr Todd of York, and prepared to auction Tunstall’s museum in May 1792. A large portion of the collection – mostly birds – was bought before the auction by George Allan of Blackwell Grange near Darlington, for £700 (a bargain: the birds alone were reckoned to be worth £5000, and the total collection may have cost around £20,000 to construct).

George Allan (d. 1800) was a lawyer by profession, but always had a keen interest in genealogy, heraldry, typography, antiquities and natural history, and forsook business upon purchase of Tunstall’s collection to concentrate on collecting and printing. He was considered to be a worthy successor to such a distinguished collector as Tunstall: the traveller and naturalist Thomas Pennant (1726–98), author of *British Zoology* (1766), wrote to him, ‘Much as I lament Mr Tunstall, I am glad that his Museum has fallen into such hands. Long may you live to enjoy it!’ Allan built up his own museum around Tunstall’s collection, which he kept at Wycliffe for two years before transferring it to Blackwell Grange, where he prepared a three-volume catalogue. In the possession of his son (also George), the collection remained there for twenty years after his death, after the executors of Allan senior’s will could find no other buyer.

The ‘infinite varieties of objects’ of Philips, Tunstall and Allan stubbornly refuse to be


13 Thomas Pennant to George Allan, 16 January 1792, cited in Nichols, op. cit. (12), 752; DNB.

categorized by modern disciplinary standards (although Salt's appears to have been surprisingly homogeneous).15 Catalogues juxtapose natural history and antiquities, fine art and printed material in a dizzying array, demonstrating the diversity of ‘extended’ natural history.16 As an eyewitness wrote of Tunstall’s collection, ‘Such a collection of books, manuscripts, paintings, prints, coins, gems, &c is not every day to be seen.’ They were each kept in the private residences of the collectors – respectively at Mayfield near Manchester, at Hollis Croft in Sheffield and at Blackwell Grange. Tunstall arranged his in ‘a handsome, large, airy room, in the back of the house’, for example, and once they were transferred, Allan kept the specimens in two rooms on the north side of his ground floor.18

It was in their private residences that collectors – like other proud owners of large eighteenth-century houses – welcomed esteemed visitors, who in turn conferred status upon the museum or mansion.19 The connoisseur therefore had to make his residence accessible to those persons deemed expert enough to judge the collections, and preferably to account for them. Tunstall’s collections were to ‘demand in a particular manner the attention of the learned virtuoso’: visitors included Thomas Pennant, working on his mammoth History of Quadrupeds (1781), and later the celebrated engraver Thomas Bewick, finding models for his History of British Birds (1797–1804).20 James Montgomery, the prominent Sheffield poet, felt it a privilege to visit Salt and be told about the wonders of botany.21 The practice of storing and displaying natural history collections in large private residences for the perusal of particular guests would continue through the nineteenth century, as evidenced (albeit in a rural context) by Charles Waterton, the eccentric squire of Walton Hall, near Wakefield.22 During the later century such sites also

17 Daniel Watson to Mr Harrison, n.d. (c. 1790), North Yorkshire County Record Office ZDG(A) X5/9.
18 Fox, op. cit. (10), 10.
became popular for larger groups of excursionists: the Sheffield Literary and Philosophical Society, for example, enjoyed an excursion to Waterton’s estate in 1851.23 Already by the end of the eighteenth century, indeed, provincial museums such as Ralph Thoresby’s in Leeds were admitting visitors in larger numbers, just as the gentry opened their show houses to the new ‘tourist’.24 When George Allan opened up Blackwell Grange to wider viewing from 1792 to 1800, it is alleged that over seven thousand visitors took advantage of his hospitality to view the collections.25 The ‘public’ character of this mode of access, however, should be viewed critically. Although the British Museum was ‘open’ to the public from 1759, this public was carefully circumscribed: entry was by ticket only, for which the visitor had to apply in advance, with two guarantors – a practice common to art collectors who opened their houses to a carefully constrained audience.26 Nevertheless, Allan’s manuscript Descriptive Account of 1790 marks a move in the direction of admitting spectators as well as participants, and was drawn up at the same time as the more renowned country houses were illustrated by early guide books.27 These plans and catalogues served to replace the owner-curator as personal escort; they acted as surrogate tour guides, directing the visitor through the collections.

Numerous late-Enlightenment collections remained in the hands of a single individual or family, and personal collecting remained a popular pastime and vocation throughout the nineteenth century. In the decades around 1800, however, the status of the home was changing, new notions of ‘private’ and ‘public’ were being fashioned, and the accessibility of personal natural and art collections in Europe and Britain reflected these changes.28 Significantly, however, other spaces were emerging as forums for shared activities. All three collections in question here were transferred to collective ownership during the 1820s, as voluntary associations formalized and elaborated many aspects of urban culture.

Society museums: voluntary associations and collective ownership

While Salt, Philips and Tunstall were gathering their collections in the late eighteenth century, they and other wealthy manufacturers, clergymen and physicians were also forming learned societies, as part of the culture of the ‘voluntary association’ that would

25 E. L. Gill, The Hancock Museum and Its History, Newcastle, 1908; Goddard, op. cit. (10); North Riding County Record Office, op. cit. (12).
27 Allan, op. cit. (14); Mandler, op. cit. (19).
cement the emergence of the new urban provincial middle classes. The activities of these
groups spanned many aspects of society, from philanthropy to natural philosophy. They
shared a common format – formal rules, public meetings and published accounts – and
they exhibited what R. J. Morris has termed a ‘subscriber democracy’: within their ranks
they were ostensibly democratic, but entry was regulated by hefty subscriptions and
sometimes by membership by election.²⁹ By avoiding the volatile topics of religion and
politics, voluntary associations bound together a dynamic but fragmented stratum of
society.³⁰

Foremost among these associations were literary and philosophical societies (‘lit and phil’s’), of which a host were founded, with varying longevity, in the 1780s. Those that
survived – notably societies in Manchester (1781) and Newcastle (1783) – had small
natural history collections, but specimens or artefacts were not their principal concern;
they concentrated instead on their libraries and lecture series. From the 1820s, however, a
second generation of provincial societies was formed with stronger remits to establish
museums.³¹ The Hull Society (established in 1822), for example, was

not simply an institution, the only business of which it is to provide first-class lectures on literary
and scientific subjects, but it has also to give the [natural] sciences a permanent home, where they
may be illustrated by a continually increasing number of appropriate specimens.³²

These societies were by no means the first groups to keep collections under shared
proprietary ownership – we need think only of the Royal Society’s seventeenth-century
repository – but their rapid proliferation in the early nineteenth century was staggering.³³

The Sheffield Literary and Philosophical Society, also formed in 1822, was typical of the
second wave of societies, established during a flurry of society formation in Yorkshire.³⁴

Led by the prominent physician Arnold Knight, the society soon set about gathering a
collection of natural history, antiquities and curiosities. By 1826 they were the proud


owners of a few hundred fossils, a handful of local insects and plants, some antiquities and a leopard. It was the surgeon William Staniforth’s donation of Jonathan Salt’s entomological specimens and herbarium in that year, however, that established their collection on a firm footing, and it was henceforward central to their activities (and finances). The older philosophical societies in Manchester and Newcastle, by contrast, were less focused on material culture. The Manchester Lit and Phil did not move to purchase John Leigh Philips’s collection when T. H. Robinson prepared to offer them for sale in 1821. Rather, a contumacious group of members assembled independently in rooms on St Anne’s Place in the centre of the city, contributed ten pounds each and, as the ‘Manchester Society for the Promotion of Natural History’, purchased the collections and set up a museum.

In Newcastle, too, the core of a Natural History Society was drawn from the membership of the Literary and Philosophical Society, which had accumulated occasional objects since its formation in 1793. Their small collection, however, was ancillary to their lecture series and library, which imbalance would lead to the well-mannered schism that gave rise to the Natural History Society of Northumberland, Durham and Newcastle-upon-Tyne. In 1822 the Literary and Philosophical Society natural history collections had grown considerably when the enthusiastic Newcastle antiquary and naturalist George Townshend Fox purchased George Allan’s museum from the latter’s son on the society’s behalf. Fox was then left with the thorny problem of how to remove hundreds of objects from Blackwell Grange:

Its conveyance from thence was effected by its being most commodiously packaged in a frame of wood work, placed on a spring glass-waggon ... and it arrived safely in Newcastle without the injury of a feather, notwithstanding its encountering on Gateshead Fell, one of the highest gales of wind ever known.

After seven years, however, Fox had not been reimbursed for the £400 he paid for the museum, nor for the £100 he had subsequently invested in having the collections remounted and organized. Thus hindered by the council’s ‘culpable neglect of this essential department’, Fox and the museum committee arranged a meeting in February 1829 with the Reverend John Collinson in the chair, and set about organizing a circular that would bring to the attention of the town the existence and plight of the collections. Just as their peers had in Manchester in 1822, they formed a society dedicated to the conservation and upkeep of a formerly personal collection. At eleven o’clock on 19 August 1829 they held their inaugural meeting in the lecture room of the Literary and Philosophical Society, at which they proposed to ally themselves closely to their hosts. The combined collections of

35 Newcastle Literary and Philosophical Society, Plan of the Literary and Philosophical Society of Newcastle Upon Tyne, Newcastle, 1793; Goddard, op. cit. (10); A. Meek, ‘The Newcastle Museum of Natural History’, Natural Science (1895), 7, 115–18.
36 Fox, op. cit. (10), 40.
37 W. Turner, An Introductory Address, Delivered by the Rev. Wm. Turner, at the First Meeting of the Natural History Society of the Counties of Northumberland, Durham, and Newcastle Upon Tyne, Newcastle, 1829, 10; Goddard, op. cit. (10).
both societies, together with those of the Society of Antiquaries, became collectively known
as the ‘Newcastle Museum’.

The collections of such societies were the physical manifestation of civic pride,
demonstrations of the sophistication of the emerging bourgeoisie writ large (and small) in
material culture. To encourage donation, cash-strapped societies such as that in Hull
played on civic conscience: ‘it is hoped that some, who have the means, will feel a pleasure
in adding something to the completeness of an Institution, which seeks only the public
good’. Such ploys were clearly effective, and the Salt, Philips and Allan cabinets were but
the first of many personal collections acquired by the societies, as their museums grew
through donation (frequently) and purchase (rarely). The resulting museums were as
heterogeneous as their private counterparts, if not more, but curators worked hard to
separate the collections along the disciplinary lines then emerging within Victorian
science.

Such growth made accommodating the collections problematic, especially for the
Sheffield Lit and Phil. Their museum was originally stored in the Cutler’s Hall, but soon
transferred to the society’s rooms in the Surrey Street Music Hall, where they remained for
forty-four years, until they rented space at the School of Art in 1868. These shared
premises – striking evidence of how far museums were embedded within wider civic
culture – were a common feature of nineteenth-century philosophical societies. At Whitby,
for example, the society shared cramped accommodation with the subscription library and
the civic baths. Such arrangements were not always agreeable: for four decades, the
Sheffield Society complained about their cramped, ill-lit and allegedly unsound rented
accommodation, yet none of their plans to erect their own premises came to fruition and
this lack of custom-built space was a significant factor in their later decision to bestow their
collections upon the municipal authorities.

In Manchester and Newcastle the natural history societies had more success, and both
had housed their museums in purpose-built town-centre accommodation by 1835. The
former originally kept their collections in rooms in St Anne’s place, rented from a member
of the society. In 1824, after declining to move to apartments in the Manchester Exchange,
they transferred to more spacious rented accommodation at the top of King Street on the
site of the Reform Club. The building was of two storeys, the first dedicated to mineralogy
and antiquities, the second with three rooms devoted mostly to ornithology. After a

38 Anon., ‘Anniversary meeting of the Literary and Philosophical Society’, Northern John Bull; or, the
Newcastle Pocket Magazine (1829), 115–16; R. O. Heslop, ‘The Society’s museum’, Archaeologia Aeliana (1913),
10, 13–25; J. C. Hodgson, ‘A history of the Newcastle Society of Antiquaries, 1813 to 1913’, Archaeologia
Aeliana (1913), 10, 1–5.
39 Hull Literary and Philosophical Society, A Guide to the Museum of the Literary and Philosophical Society,
40 T. Ashton, Visits to the Museum of the Manchester Natural History Society, Manchester, 1856; [H. P.
Harwood], Catalogue of the Specimens of Natural History in the Museum of the Sheffield Literary and
Philosophical Society, Sheffield, 1840.
41 H. B. Browne, Chapters of Whitby History 1823–1946: The Story of the Whitby Literary and Philosophical
Society and of Whitby Museum, Hull, 1946.
decade of fund-raising, they erected their own building on Peter Street, opened on 18 May 1835 at a total outlay of around £4000. For this they boasted two large rooms and an entrance hall on the ground floor and nine smaller rooms and a gallery upstairs.43

Upon its initial relocation to Newcastle, Allan’s Museum had been kept in a temporary store until 1825 (courtesy of the firm Doubleday & Easterby), when the Lit and Phil transferred it to a long room on the second floor of their new building on Westgate Road. Here, however, members claimed to be ‘surprised that the society should ever have supposed that the present little cockloft was to be a permanent museum’.44 The new Natural History Society continued to use this unsatisfactory accommodation (albeit with some extra rooms, over the showroom of the cabinet-maker John Anderson next door), but the naturalists immediately began to consider other options for accommodation, instituting a fund for this purpose. Given the close association of the two societies, the

43 Ashton, op. cit. (40). They performed extensive additions in 1850, when the Society amalgamated with the Manchester Geological Society, adding three further sixty-two-foot rooms.

naturalists elected to erect premises in the grounds of the Literary and Philosophical Society: building was completed in 1834 at a cost of nearly £5000, with a general entrance from the street and an adjoining door from the Lit and Phil building.

These splendid Grecian mock-temples, Kate Hill has argued, were emblematic of the present as heir to a classical past.\(^45\) They trumpeted the worth not only of the societies and their collections, but also of the status of the visitors, who in the early decades of the society museums were largely drawn from the membership (and their families). The visitors thereby fell largely into three categories. The first rank were proprietors, or governors, who had donated significant sums (around £10) to become joint owners of the collections, with the added responsibility and kudos that entailed. Next were subscribers, who paid around a guinea or pound per annum for full membership without proprietary rights; finally there were associates, a class comprising members of allied societies, young persons or women. Admission was also granted to honorary members, whose scholarly merit – or generosity in donating books, specimens or money – warranted unlimited entrance. By joining the society, proprietors and subscribers gained exclusive access to these collections, at once satisfying their interest in natural history and demonstrating their cultural sophistication.

Gradually, however, other selected members of the middle classes were admitted. Alongside the individual virtuosi, privileged visitors came to include professors at budding middle-class educational institutions such as Owens College in Manchester and the Newcastle Medical School. Indeed, education in a broader sense was becoming more central to the remit of societies and their museums. By the middle of the century they began to provide not only an uplifting pastime for the upper-middling ranks of society, but also rational recreation for the masses.\(^46\) Such endeavours met with mixed results. In 1839 the Manchester naturalists elected to admit working men for 6d., but by the end of the year not a single application had been made. More successful was a mutual admission deal with the Manchester Mechanics’ Institution the following year: 188 ‘mechanics’ attended as a result. In Sheffield the Lit and Phil made a similar agreement with the local Institute, and they admitted any workingmen naturalists who donated their collections to their museum (although there is no record of any such visits taking place). Furthermore, in 1858, the society’s Council deigned to permit members of the Free Library entry to the museum, ‘adding only such restrictions as they considered necessary for the preservation and care of the Society’s property’.\(^47\)

Up and down the country, museums’ doors appeared to be opening. The Natural History Society of Northumberland claimed to run the first museum in the provinces to admit the public free of charge, and that their example was instrumental in the 1845 Museum Act (discussed below). It is unclear, however, just who constituted their ‘public’. Initially, artisans and operatives were only admitted one evening per week, ‘with a view towards assisting the diffusion of a taste for Natural Science amongst the working classes’.


The ‘interest excited was so great’, however, ‘and the people came in crowds so large, as to fill the whole building’, that they discontinued this practice for the time being. Thereafter it was open ‘almost to everyone’ – which, considering it was only open between 12 noon and 4 p.m., would have excluded anyone on a day shift. Their impulse to provide rational recreation soon resurfaced, however, and in 1836 they proudly reported that the museum was lit on occasional evenings. During these times, they were pleased to note that not a single breakage or theft had occurred and loafing had been kept to a minimum.\textsuperscript{48}

Faced with financial difficulties and soaring visitor numbers as a result of the new Great North Eastern line at the nearby Central Station, the Northumberland naturalists considered introducing a small fee. And so after fifteen years of being one of the earliest free museums, in February 1849 a penny charge was implemented, which immediately halved the visitor figures to around 20,000. This served to increase their income considerably; elsewhere, by contrast, such small charges spelt financial ruin for societies. In Manchester the decision to reduce the entrance fee to 2d. deprived the proprietors of their motivation for subscribing, as the obvious perk, access to the museum, was no longer exclusive. The resulting financial problems suffered by many societies would prompt significant changes in ownership of the collections, and fuel the migration of many collections from society hands to municipal control, as I outline in the following section.

A number of notable philosophical museums continued to thrive, however, especially in Yorkshire, where the ‘philosophical movement’ had been particularly strong, and the collections at Leeds, Scarborough and York remained with their societies until the twentieth century.\textsuperscript{49} The Newcastle Museum, like that of the Whitby Literary and Philosophical Society, was one of the few philosophical collections never to be completely transferred. Nevertheless, there were considerable changes in Newcastle in the late nineteenth century, thanks largely to the indefatigable taxidermist and ornithologist John Hancock (1808–90).\textsuperscript{50} He set out to find a new site for the crowded museum on the Westgate, and with a group of supporters presented the society with architectural plans and a proposed site and, almost as a fait accompli, secured promises of significant donations from the public and from wealthy patrons, including the Armstrong and Joicey families. Building work began in 1880 and the museum was opened four years later at Barras Bridge by the Prince and Princess of Wales. It was renamed in 1891 in honour of Hancock and his brother Albany, a keen conchologist.

The culture of the voluntary association, then, continued to thrive in the late nineteenth century, thanks to urban population growth and in particular the expansion of the lower middle classes. In the period from 1830 to 1880, for example, there was an unprecedented

\textsuperscript{48} Report of the Natural History Society of Northumberland, Durham and Newcastle-upon-Tyne (1835), 9; (1836), 8, emphasis added; (1837–8).


growth in middle-class natural history clubs. Although they were often based at the local museum – as were the Tyneside Naturalists’ Field Club (1846–1903) – these later groups tended to be focused more on field activities. Some members gathered considerable private cabinets that they often donated to the museum at retirement or death, but it was rare for these younger groups, often peripatetic, to hold a large central collection. Other natural history groups met in heterodox sites such as public houses; indeed, the limited response to the early bourgeois attempts to provide rational recreation may have been in part due to the existence of healthy working-class cultures of collecting and display. That the museums of learned societies never quite succeeded in attracting a broad cross-section of society is evidenced by their visitor figures: in the later century, even the museums of such prosperous philosophical societies as those at Leeds and York attracted only tens of thousands of visitors. The most popular museums by this time, attracting hundreds of thousands, were those controlled by municipalities.

Museums and municipalities: natural history on the rates

As philosophical museums sought to open their doors wider during mid-century, another administrative locale was emerging, eventually to become the most prevalent form of collection control in provincial England: the public museum. In the decades following the emergence of voluntary associations and the foundation of society museums, local governments expanded their functions within civic life, thanks to legislation such as the Municipal Corporations Act of 1835 (Manchester, for example, was incorporated as a borough in 1838). Parliament gave such local authorities the power to levy a penny rate to maintain museums and free libraries in the Museum Acts of 1845 and 1850; boroughs such as Ipswich took advantage of this from the early 1850s. Over the following century, many society museums in Britain (although by no means all, as we have seen above) were absorbed by corporation-run museums, of which there was an exponential increase between 1850 and 1900.


54 R. A. D. Markham, A Rhino in High Street: Ipswich Museum – the Early Years, Ipswich, 1990. Further legislation was introduced in the Museums and Gymnasiums Bill of 1891.

reform as public libraries, parks and gardens; as the editor and free-library campaigner Thomas Greenwood wrote in 1888, ‘a Museum and Free Library are as necessary for the mental and moral health of the citizens as good sanitary arrangements, water supply and street lighting are for their physical health and comfort’. Thanks to the varied provenance of their collections, such public museums inherited a plethora of objects, from the exotic to the mundane – increasingly, however, curators sought to emphasize local aspects of the collection, contributing to the town’s civic identity.

By the 1860s the Sheffield Literary and Philosophical Society were contemplating relinquishing their collections to the town, ostensibly because they felt ‘the Museum might be made of greater general use to the town at large’, but probably more as a result of their chronic accommodation problems. The Corporation agreed, and under its auspices the collections were transferred in 1875 to a converted mansion in Weston Park overlooking the city. The monumental task of maintaining, accommodating and safekeeping a growing collection became too much for many societies, and the society-to-town route was repeated all over the country. In Halifax, for example, the Lit and Phil ‘wished to see the valuable collections made more useful and placed in safe keeping, and at the same time to relieve the society of the expense of maintaining the Museum’, so they transferred the collections to the Corporation’s Belle Vue Museum in 1896.

Like the Hancock Museum, the Sheffield Public Museum (SPM) was situated in a pleasant suburb, conveniently situated on a tram route. This location was typical of the new public museums: more spacious than the earlier town-centre site and opportunely located in parkland that attracted promenaders. The intention of their advocates was to make collections accessible to larger portions of society in far greater numbers, and in Sheffield at least their crusade met with a healthy response. A small provincial museum might expect anywhere between two thousand and fifty thousand visitors per year; an astounding 350,000 visited Weston Park in its first year, which rivalled even the mighty British Museum’s half million. Visitors then settled down to around 125,000 per annum; still a massive figure compared with Newcastle and Manchester museums, who generally attracted around twenty thousand. Such mammoth attendances, we can assume, were partly due to location and partly due to the swell in leisurely pastimes generally and the popularity of natural history in particular. Even taking into account multiple visits, it is clear that public museums comprised a very significant opportunity for the public at large to experience natural history collections.

Such crowds brought with them new challenges for those who managed public collections. This responsibility usually fell to a municipal committee, such as the Property

and Bridges sub-committee in Hull and the Committee of the Free Public Libraries and Museum in Sheffield. Prominent local dissenters with broad interests such as John Pye Smith and the *Sheffield Independent* proprietor Robert Leader sat on the committee, which was spearheaded by one of Pye Smith’s successors as Mayor, William H. Brittain (1835–1922). Alderman Brittain encapsulates the extent to which natural history collections and those who controlled them were embedded within the *mélange* of middle-class provincial life. A Master Cutler and later President of the Museums Association, Brittain was evidently ‘a man of culture, with artistic and literary tastes, something of a book collector’, and an avid rose cultivator besides.\(^{62}\)

Brittain and other museum champions sought to distance their institutions from the cultural locale of the festival and fair, the circus and menagerie. Behaviour codes both implicit and explicit served to transform the many-headed mob into an orderly crowd, to promote a genteel, mixed-sex environment. With the decline of the personal tour as the only mode of regulation, police or attendants were stationed around museums, apparently with satisfactory results.\(^{63}\) In the first few weeks of the SPM, visitors’ comportment was ‘most exemplary’ and the new curator Elijah Howarth observed ‘very few instances of disorderly or improper conduct’.\(^ {64}\) In defence of Sunday opening some years later, he commented on ‘the orderly behaviour’ therein.\(^ {65}\) (The staff, meanwhile, were not so angelic: one keeper, George Elliot, was reprimanded for being rude to a visitor.\(^ {66}\))

Expanded opening hours, facilitated in many museums by electric lighting, appear finally to have attracted a broad cross-section of urban society to museums in the very last years of the century.

The explicit focus of public museums on working-class visitors did not preclude privileged access for prestigious visitors, which in Sheffield included relatives of the Ecclesfield phycologist Margaret Gatty (whose collections are to be found at the museum), the archaeologist Augustus Pitt-Rivers and the local metallurgist and marine biologist Henry Clifton Sorby.\(^ {67}\) On Fridays the museum was closed to most of the public for cleaning, but suitable ‘students’ were permitted for detailed (and quiet) study. Such visitors were granted rare use of Salt’s herbarium and of the museum’s library, and were even allowed to remove items from the cases. When Sheffield’s new university college moved to premises adjacent to Weston Park, the expert constituency expanded considerably, and the Museum Committee proclaimed that ‘it is eminently desirable that the natural history collections should be arranged so that they can be used by students’.\(^ {68}\) Just as in London,
where University College and the British Museum were immediate neighbours, so in Sheffield, museum and university operated in physical juxtaposition. In Manchester, by this time, however, museum spaces were embedded within the very fabric of a university college.

**University collections and the new museum**

Given the potential powers of the Corporation, it was reasonable that the Manchester naturalists should turn in the town’s direction when they ran into difficulties in the 1860s. Deeply in debt from building and upkeep costs, and unable to replace deceased subscribers, they approached the Corporation in the hope of persuading them to take advantage of the Museum Acts and relieve of them of their expensive burden. The naturalists’ offer was not accepted, however, the objection being to the level of control they sought to retain. Salford Corporation having also refused, the naturalists successfully approached the Council of Owens College, who were at the time embarking upon a period of significant expansion that eventually resulted in the formation of the federal Victoria University. The transfer agreed upon, the society dissolved itself in January 1868 – but only after securing certain demands, most significantly that the collections themselves were to be kept available for public viewing. In return, they agreed to contribute £5000 towards a new building, and that the remainder of the society’s property (including the proceeds from the sale of the Peter Street Museum) should form an endowment fund to pay for a curator’s salary and to maintain the collections.

Manchester’s new museum building, however, would not be opened until twenty-two years after the deal was struck. Instead, the collections were ‘temporarily stored rather than displayed in the upper rooms of the college buildings’. For although the College was contractually bound to erect new accommodation for the museum, the sheer cost was prohibitive: the society’s contribution barely covered a fraction, and it was only thanks to a further £28,000 from the legatees of Sir Joseph Whitworth’s will that the new building eventually became a reality. Alfred Waterhouse, who had been responsible for the College’s 1873 building, was again commissioned, and he designed a densely fenestrated, three-storey Gothic edifice on the third side of the Oxford Road quadrangle. Although the collections were not entirely in place, the museum hosted some functions during the British...
Association for the Advancement of Science visit to Manchester in 1887, and three years later the formal opening took place.

Although in a different administrative locale to the other collections, like many other late nineteenth-century cultural institutions, the Manchester Museum was run by a cross-sector committee. It included representatives of both College and Corporation, including the wealthy Manchester merchant James Cosmo Melvill (1845–1929), who would later donate his own zoological collection to the museum, demonstrating the continuing importance of both patronage and personal collections.73 Melvill and other members of the committee secured subsidies for the museum from the Corporation, which they justified by arguing that although it was part of the College, the museum was nevertheless open to a wider public. On Mondays, Tuesdays and Saturdays admission was free, and no ticket was necessary. Manchester’s inhabitants were reticent at first, given that the museum had been inaccessible for so many years. But the curatorial team worked hard to fulfill the terms of the deed and to raise public awareness of the museum, and by the turn of the century they were attracting over a thousand visitors on public holidays. By this time they were opening on occasional Sunday afternoons, and electric lights had been installed.74

The general public, however, as in Sheffield, were firmly segregated from the other intended visitor constituency, ‘students’. When the commission entrusted with the transfer of the museum had approached Thomas Huxley for advice, he advocated both the ‘public exhibition of a collection of specimens’ and ‘the accessibility of all objects contained in the museum to the curator and to scientific students, without interference with the public or by the public’.75 Huxley and museum practitioners such as William Flower at the British Museum (Natural History) were seeking to distinguish between those collections for public display and those for ‘serious study’ by promoting the notion of the ‘new museum’, where research collections were kept in separate rooms in rows of densely packed cabinets, away from the select few specimens on public display. Curators sought to construct self-consciously scientific collections, setting aside privileged space for the expert. Research collections were to ‘be used only for consultation and reference by those who are able to read and appreciate their contents’.76

Nowhere was the public/student bifurcation more evident than at Manchester: the former were admitted through the main entrance on Oxford Road, whereas members of

the College entered through the door that connected the Museum with the Beyer laboratories on the north-east corner of the quadrangle. A room was ‘assigned for the use of Students engaged in the study of the Zoological Specimens’. The Sheffield museum also privileged staff and students of the neighbouring college, as detailed above, and the Hancock had dedicated space for students of the College of Physical Science (later Armstrong College). The museum continued to be a vital space for teaching within civic colleges, mechanics’ institutes and medical schools. In educational institutions across the country, collections were nestled inside departments of pathology, physiology, biology, geology and engineering, often sharing space with laboratories. Personnel were also shared: in Manchester, Owens College academics staffed the museum; in Leeds, Louis C. Miall ran both the Philosophical and Literary Society Museum and the biology department at the Yorkshire College. Large university museums open to the public such as those at Manchester and Oxford were only the most visible of many museum spaces, practices and staff operating within higher education establishments. The museum continued to be an important site for studying and displaying natural history in the late nineteenth century.

Conclusions

The three collections in question, we have seen, followed loosely similar paths through the complex web of museum forms and functions over the course of the nineteenth century. Gathered by wealthy late-Enlightenment collectors, they formed the core of museums of learned societies in the early decades of the nineteenth century that were among a range of activities designed to display provincial civic pride. By the 1860s these neo-classical palaces of middle-class science were bursting at the seams and were proving burdensome as the societies ran into financial difficulties under competition from other cultural and educational sites. The societies turned to their towns, either the municipal authorities or the public, to pay for the transfer to new accommodation, and the collections then became the responsibility of one of the various forms of civic committee. The collections they managed were increasingly removed from the less savoury aspects of Victorian cultures of display by an increasing emphasis (however unheeded) on education, shaping the twentieth-century understanding of the public museum.

Other collections exhibit different genealogies. Individuals continued to gather personal collections, of course, and society museums are still evident in the era of the ‘public museum’. Although each mode of control was perhaps most prevalent in the order in which I presented them, this has not been a linear progression of replacing museum types; rather, novel physical and administrative sites of display emerged alongside earlier forms, supplementing them, drawing on them and overlapping with them. Provincial collecting constituencies expanded enormously over the course of the century; there is evident a

77 Report of the Manchester Museum Owens College (1908–9), 5.
78 E. L. Gill, Short Guide to the Hancock Museum, Barras Bridge, Newcastle-Upon-Tyne, Newcastle, 1911.
prodigious net growth in the total number of collections, collectors and sites. There was also a staggering explosion of visitors. During these changes there were a variety of intended audiences for the collections: learned virtuoso, society proprietor, bourgeois public, student and mechanic.\(^{80}\) I have argued throughout that the apparent shift from exclusive to inclusive masked the continuing privilege given to the expert, elite visitor.

Also unremitting despite the changes during the century was the influence exercised by the urban elite. Members of the *haute bourgeoisie* managed personal collections as owners, society collections as proprietors, and both public and university collections as members of the museum committees. Officially or not, these panels all contained representatives of the municipal authorities, the local university college and the museum itself. Despite the apparent permeability of the museums in the second half of the century, if anything the local middle-class elite strengthened their grip during this time. Whereas the personal museum was explicitly exclusive, the public educational museum was potentially a more potent tool of bourgeois hegemony, an attempt to impose middle-class definitions of culture and nature upon other sections of society.\(^{81}\) In this way natural history collecting and collections were but one facet of middle-class cultural activities – art galleries, theatres, libraries – that served in part to educate the working classes and in part to reassure the urban bourgeoisie of the cultural sophistication of their town compared with other regions and the capital.

Only a handful of collection forms and sites have been discussed here; such a study might be extended to compare and contrast with national collections, with museums in the colonies, with school collections.\(^{82}\) Commercial museums functioned throughout this era, and demand further study. Their histories are inextricable from those of taxidermists' shops and menageries; in other directions the history of natural history collections segues seamlessly into that of libraries and gardens. Solely needed is a close examination of the networks of collecting and acquisition that linked these sites, these regions and the wider empire, and we need to know more about the relationship between metropolitan museums and their provincial counterparts.\(^{83}\)

It is clear that a study of local control, however neglected, is only part of a range of issues relating to the history of natural history collections that would stand further exploration. There remains much work to be done examining the careers, roles and practices of museum staff – especially in smaller institutions, in which individual curators wielded considerable


\(^{81}\) Hill, op. cit. (3).

\(^{82}\) S. Sheets-Pyenson, *Cathedrals of Science: The Development of Colonial Natural History Museums During the Late Nineteenth Century*, Kingston, Ontario, 1988; Thackray and Press, op. cit. (2); Stearn, op. cit. (2).

Natural history collections in nineteenth-century provincial England

influence.\textsuperscript{84} Perhaps most of all, historians of natural history need to ascertain who actually visited these collections. I have touched here upon the intended and perceived audiences of these collections; the genuine visitors need to be studied, their voices recovered.\textsuperscript{85} A detailed examination of the exhibits and their modes of display has the potential to add a material dimension to the bounty of recent work on the popularization of science, a focus justified not least by the sheer volume of museum visiting: we need to know how, where and why these displays were staged. This was, after all, in Lightman’s words, the ‘age of the popularization of science’, and that culture of popular science was a particularly visual one.\textsuperscript{86}

My arguments have implications for museum studies and for historians of science. The techniques and approaches of historians of museums, who have primarily worked within the history of art, can usefully be extended to museums of nature and science. Like art collections, natural history museums are dynamic, shifting entities, growing and shrinking, changing over space and time. These changes are not only evident in the exhibitions and displays, the customary focus of museum scholarship, but also in the administrative locale of the institutions. We should look behind the sciences, at their owners and managers, as well as at their curators, donors and collectors, supplementing scholarship on the content of the collections with studies of their contexts. Exploring these complex dynamics demonstrates how far natural history collections were embedded in their wider civic cultures.

