

AUGUSTUS
DE MORGAN,
POLYMATH



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Fig. 11 No. 57–58 Russell Square has served as the headquarters of the London Mathematical Society since 1998, when it was re-named De Morgan House, after the Society's founding President. With its distinctive late Georgian architecture and imposing terraced houses, Russell Square is both an archetypal Bloomsbury location and an area De Morgan would have known well. (By Nicholas Jackson - Own work, CC BY-SA 3.0, via Wikimedia Commons, <https://commons.wikimedia.org/w/index.php?curid=26549887>)

8. Augustus De Morgan and the Bloomsbury Milieu

Rosemary Ashton

Our house was so near the college that my husband could come home in the intervals between his morning and afternoon lectures, instead of remaining away from 8 A.M. till 5 P.M., as he was obliged to do afterwards when we lived at a greater distance from Gower Street.

— Sophia Elizabeth De Morgan¹

In 1906 E. V. Lucas, in his book *A Wanderer in London*, described Bloomsbury as follows:

It is a stronghold of middle-class respectability and learning. The British Museum is at its heart; its lungs are Bedford Square and Russell Square, Gordon Square and Woburn Square: and its aorta is Gower Street, which goes on for ever. Lawyers and law students live here, to be near the Inns of Court; bookish men live here, to be near the Museum; and Jews live here, to be near the University College School, which is non-sectarian. Bloomsbury is discreet and handy; it is near everything, and although not fashionable, any one, I understand, may live there without losing caste.²

This is an accurate sketch of the geographical, social, and professional character of Bloomsbury at the beginning of the twentieth century. Only two years before Lucas published his book, the sisters Vanessa and Virginia Stephen and their brothers moved from Kensington after

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- 1 Sophia Elizabeth De Morgan, *Memoir of Augustus De Morgan* (London: Longmans, Green, 1882), p. 88.
 - 2 E. V. Lucas, *A Wanderer in London*, rev. edn (London: Methuen, 1913), pp. 189–90.

the death of their father Leslie Stephen, choosing Bloomsbury to start their new independent lives. A society of *avant garde* writers and artists soon joined them, forming what is widely known as the 'Bloomsbury Group'. But Lucas gives us a glimpse of the area in the *preceding* century, when it gained its early character, becoming established as the home of several important progressive educational and cultural institutions and individuals. One progressive individual who made his home in Bloomsbury in the 1820s as a very young man was Augustus De Morgan.

In the early years of the nineteenth century Bloomsbury expanded as the large Bedford Estate in the western part of the area was developed into streets and garden squares, while in the eastern half the Foundling Hospital Estate was also turned into residential streets. In 1800 the land to the north of the old British Museum in Montagu House on Great Russell Street consisted of open fields leading as far north as the villages of Hampstead and Highgate. At that time only two large institutions existed in Bloomsbury (the name is believed to derive from the manor house—'bury'—of William Blemond, who acquired land around what is now Bloomsbury Square in 1201).³ These were the Foundling Hospital, established by Thomas Coram in 1745, and the British Museum, founded in 1753. From the 1820s to the 1840s the new, much extended British Museum was built in neoclassical style by Robert Smirke on the site of Montagu House, which was demolished to make way for the new building.

Francis Russell, the fifth Duke of Bedford, had demolished his London house in neighbouring Bloomsbury Square in the year 1800, and had begun laying out the area of his land to the north, which was developed over the next forty or more years by successive Dukes of Bedford to include new residential streets and squares such as Tavistock Square, Gordon Square, Bedford Square, and the imposing Russell Square. From the 1820s onwards, new institutions appeared in Bloomsbury; these were many and varied, but almost all of them had

3 See Eliza Jeffries Davis, *The University Site, Bloomsbury* (Cambridge: Cambridge University Press, 1936), p. 30; Richard Tames, *Bloomsbury Past: A Visual History* (London: Historical Publications, 1993), pp. 8–9.

pioneering founders with radical and progressive principles in the fields of education or medicine.⁴

London as a whole doubled its population in the first half of the nineteenth century, from approximately one million in 1800 to over two million in 1850. Some hitherto rural areas, including Pimlico, the Portland Estate around the new Regent's Park, and Bloomsbury, grew with particular rapidity during this period.⁵ A new method of land development emerged; speculative builders leased large quantities of land from landowners in order to build houses which were then let to their new inhabitants on long leases. Whole swathes of streets and squares were developed according to this system. Two such builders—James Burton, and slightly later, Thomas Cubitt—were responsible for much of the building of Bloomsbury.⁶ In October 1826 the *Morning Chronicle* carried an article, 'Increase of London, from the Rage for Building', which marvelled at the building boom going on in the capital. The author singles out Bloomsbury for particular mention:

Upon whatever side we turn ourselves towards the suburbs, we find not only houses, but whole streets, squares, villages, and we might almost say towns, raised as if the architects had become possessed of the lamp of Aladdin. Taking the Strand as a centre, and looking north upon that space bounded by the New Road [renamed Euston Road in 1857] and Tottenham and Gray's Inn Roads [respectively the western and eastern boundaries of Bloomsbury], we are struck with astonishment to see the ground which, thirty years ago, formed the garden and meadows of Montague [*sic*] House, now covered with spacious and even magnificent houses, and laid out in squares and streets not to be surpassed, if they are equalled by any portion of the metropolis.⁷

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- 4 For a detailed history of these institutions as Bloomsbury evolved in the nineteenth century, see Rosemary Ashton, *Victorian Bloomsbury* (New Haven and London: Yale University Press, 2012), and the website of the UCL Bloomsbury Project, led by Rosemary Ashton: www.ucl.ac.uk/bloomsbury-project.
- 5 See Donald J. Olsen, *Town Planning in London: The Eighteenth and Nineteenth Centuries*, 2nd edn (New Haven and London: Yale University Press, 1982).
- 6 For the work of Burton (1761–1837) in Bloomsbury, see Dana Arnold, *Rural Urbanism: London Landscapes in the Early Nineteenth Century* (Manchester: Manchester University Press, 2005); for Cubitt (1788–1855), see Hermione Hobhouse, *Thomas Cubitt: Master Builder* (London: Macmillan, 1971).
- 7 *Morning Chronicle*, 25 Oct. 1826, p. 3.

As Lucas pointed out eighty years later, these new Bloomsbury houses were intended for middle-class professionals, not the aristocracy, which had its grand squares further west and closer to the centre of power in Westminster. Geographical position largely determined the demographic. The expanding new British Museum on Great Russell Street was attractive to visitors, readers who wished to use its unrivalled library, and hopeful employees, many of whom took houses or parts of houses as they were built in the new streets surrounding the Museum. The already well-established Inns of Court to the south-east employed many legal men who were happy to move with their families to a pleasant street or square close to their workplace. In *The Pickwick Papers* (1836-7), Dickens observed the local life of lawyers, and in particular of their clerks, rather lower down in the social order, but still part of the increasing and diversifying middle class now colonising the area:

There are several grades of lawyers' clerks. There is the articulated clerk, who has paid a premium, and is an attorney in perspective, who runs a tailor's bill, receives invitations to parties, knows a family in Gower Street, and another in Tavistock Square; who goes out of town every long vacation to see his father, who keeps live horses innumerable; and who is, in short, the very aristocrat of clerks.⁸

Dickens knew of what he wrote. In 1827, not long after his father's brief spell as a debtor in Marshalsea Prison in 1824, Dickens had left school and been taken on as a junior clerk by a firm of solicitors based in Gray's Inn Road. He had then become a parliamentary reporter on the *Morning Chronicle*, living in bachelor lodgings in Furnival's Inn until his marriage to Catherine Hogarth in April 1836; in April 1837 they took a house at 48 Doughty Street in the south-east of Bloomsbury, adjoining the Foundling Estate. This was not Dickens's first experience of living in Bloomsbury. In December 1823, when he was eleven, the family, hoping to avert the Marshalsea fate, had moved to 4 Gower Street North, where Mrs Dickens briefly and unsuccessfully tried to save the family finances

⁸ Charles Dickens, *The Posthumous Papers of the Pickwick Club* (London: Chapman & Hall, 1837), ch. 31.

by opening a school.⁹ Later, from 1851 to 1858, Dickens and his family lived in Tavistock House on the north-eastern edge of Tavistock Square.

As Bloomsbury grew physically in the 1820s, plans were underway for a remarkable institution to be sited near the top of the everlasting Gower Street—at that time divided into Gower Street North at the top end where the street met the New Road, a middle stretch named Upper Gower Street, and the lower portion, plain Gower Street, which ran south to Bedford Square. The new institution would thus be located just five minutes' walk to the north of the British Museum. On 6 June 1825 *The Times* printed an article entitled 'The London College'. It described a meeting held two days earlier at the Crown and Anchor Tavern in the Strand of 'about 120 of the gentlemen who have taken a principal interest in the formation of the London College, or University'. In the chair was Henry Brougham, the radical Whig lawyer and politician who had acquired a formidable reputation on account of his bravura performance in 1820 as the defence lawyer for Queen Caroline, consort of George IV. After the death of George III, the new king had demanded that Caroline be put on trial for adultery in order to prevent her from attending his coronation. The process, which took the form of a 'Bill of Pains and Penalties' brought in the House of Lords, was debated from August to November 1820 but abandoned when the Tory government led by Lord Liverpool realised that the bill, which passed by a very slim majority in the Lords, would fail in the House of Commons. Partly because of George IV's unpopularity in the country, but also in large measure thanks to Brougham's witty cross-examining of witnesses, Caroline was taken to the people's hearts as she was daily cheered and the king jeered at by large crowds of Londoners.¹⁰

During the 1820s Brougham was a prominent member of several reforming educational movements, including Dr George Birkbeck's new Infant School Society and the London Mechanics' Institution, which Birkbeck opened in 1823 to offer instruction to working men. Brougham himself was the leading spirit in the foundation in 1826 of the Society for the Diffusion of Useful Knowledge (SDUK), which used new printing

9 See Michael Slater, *Charles Dickens* (New Haven and London: Yale University Press, 2009), pp. 19–22, 27.

10 See R.A. Melikan, 'Pains and Penalties Procedure: How the House of Lords "Tried" Queen Caroline', *Parliamentary History*, 20:3 (2001), 311–32.

techniques to print cheap educational pamphlets for working people on a variety of subjects including hydrostatics, hydraulics, pneumatics, electricity, galvanism, and the workings of the latest industrial invention, the steam engine.¹¹ Brougham was doing all this at the same time as organising preparations for the Gower Street college, drumming up publicity and financial support, appointing professors, and also finding time to make influential speeches in the House of Commons in favour of radical legal reforms. The plan for London's new university was devised by Brougham along with the Scottish poet Thomas Campbell. It was supported by members of the radical Whig wing in parliament, including Lord John Russell, son of the sixth Duke of Bedford. Other supporters were the fiercely anti-establishment MP Joseph Hume, George Birkbeck, Zachary Macaulay, the Benthamite James Mill, and reform-minded lawyers like Stephen Lushington, who had worked alongside Brougham as one of Queen Caroline's counsellors in 1820.

All of those present at the meeting in the Crown and Anchor, according to *The Times*, were agreed on 'the necessity of establishing for the great population of this metropolis a college, which would comprehend all the leading advantages of the two great universities', while allowing students to live at home with their parents, so avoiding the expense of an education at Oxford or Cambridge. Taking its cue from the Scottish universities, at which Brougham and Campbell had both been educated, and from German universities which Campbell had visited and admired, the University of London would expand the traditional syllabus to include new subjects under the headings 'science, literature, and the arts'. Most boldly and radically of all, no theology would be taught, and the new university would have no chapel. There would be no religious tests for entry or graduation, such as those operating at the two existing English universities, where students were obliged to sign the Thirty-Nine Articles of the Church of England before being allowed to take their degree and teaching fellows were likewise obliged to sign. In Gower Street there was to be, as *The Times* reported, quoting Brougham at the meeting, 'no barrier to the education of any sect among His Majesty's subjects'.¹² Roman Catholics, non-conformists

11 See Ashton, *Victorian Bloomsbury*, pp. 58–81 (Chapter 2: 'Steam Intellect: Diffusing Useful Knowledge').

12 *The Times*, 6 June 1825, p. 4.

including Methodists, Baptists, Unitarians, as well as Jews, Muslims, Hindus and those of no faith, would be welcomed.

Brougham announced that the institution would be financed by raising transferable shares of one hundred pounds each. A committee was appointed to take the plan further, and letters of support were read out from the Dukes of Bedford and Norfolk, the former not only a local landowner, but also a reforming Whig, and the latter a Roman Catholic who would naturally take an interest in the opening of higher education to his co-religionists.¹³ The editor of *The Times*, Thomas Barnes, was a friend of Brougham's and of the fledgling institution. He reported encouragingly on its progress from 1825 until October 1828, when the doors opened at the new building in Gower Street, designed in neo-classical style by William Wilkins, who went on a few years later to create the National Gallery building in Trafalgar Square.

The founders of the university had four clear aims. The first was to offer higher education in the largest and most advanced city in the world, it being a shameful anomaly that London had no university, unlike Paris, Prague, Florence, and other great European cities, not to mention the four ancient universities in Scotland. Secondly, the intention was to educate the sons of the expanding middle class, including the manufacturing class, who might be priced out of Oxbridge or who belonged to dissenting religious groups. The most radical principle was the non-sectarian one later noted by Lucas. (This forward-looking aim was almost immediately the cause of problems when it came to choosing professors, as the well-meaning founders differed between those who thought there should be no discrimination on the grounds of religious belief, so that even an Anglican clergyman—several of whom unexpectedly applied for professorships—would not be barred, and others who wished for religion of every denomination to be a barrier to appointments.)¹⁴ Finally, another innovation, and one which was soon emulated by the many new universities which sprang up in the later nineteenth century, was the enlargement of the curriculum beyond the traditional classical, mathematical and theological education offered by

¹³ *The Times*, 6 June 1825, p. 4.

¹⁴ See H. Hale Bellot, *University College London 1826-1926* (London: University of London Press, 1929), the most comprehensive account of the early years – and struggles – of the university.

Oxford and Cambridge. The new institution planned to have classes in geography, architecture, geology, modern history, various branches of science and medicine, and modern languages and literatures, including English, French, German, Italian, Spanish and Hebrew. Brougham and his friends were not quite so radical as to promote the higher education of women, but it was at University College London (the name adopted in 1836 in place of the University of London) that women did first register for degrees in 1878.¹⁵

Site-clearing began in 1826, and by April 1827 enough had been achieved to allow a ceremony marking the laying of the foundation stone of the building. Cheered on by a long account by the Brougham-friendly *Times*, the event took place on 30 April 1827 in front of a reported crowd of 'upwards of 2,000'. The Duke of Sussex, the only one of George III's sons to associate with liberal causes such as anti-slavery and Roman Catholic rights, laid the first stone with a frank speech praising the 'present undertaking' as being likely to 'excite the old Universities to fresh exertions, and force them to reform abuses'. At the dinner following the ceremony, held in the Freemasons' Hall on Great Queen Street, just south of Bloomsbury, the Duke of Sussex, Grand Master of the Freemasons, took the chair, and over four hundred supporters and subscribers attended. Radical and in a sense anti-establishment though the new venture was, its leaders were careful to propose toasts to the King and the Royal Family, and when Brougham came to give his speech, he was keen to balance the Duke of Sussex's attack on Oxbridge with an assurance that, though the aim was to 'spread the light of knowledge over the world' and overcome the sneers and jibes of the 'enemies of human improvement, light, and liberty', he was by no means 'inimical to the two great English Universities', which he hoped would 'flourish as heretofore'.¹⁶

The dinner broke up after further toasts, including one to Birkbeck's Mechanics' Institution and another to Brougham's Society for the Diffusion of Useful Knowledge. It was clear to friends and foes alike that the new university was intimately connected with the widening

15 Hale Bellot, *University College London*; see also Negley Harte and John North, *The World of UCL 1828–1990*, rev edn (London: University College London, 1991), which brings the history of University College London nearer to the present day.

16 *The Times*, 1 May 1827.

of education for the non-academic classes as well as for the aspiring student sons of the London middle class. Brougham chaired both organisations, and many of the same liberal politicians and lawyers were on the committees of both. The SDUK produced from March 1827 a series of sixpenny treatises, mainly on scientific subjects. Brougham wrote the first, *A Discourse of the Objects, Advantages, and Pleasures of Science*, which sold over 40,000 copies within a few years.¹⁷ With characteristic confidence Brougham offered an up-to-date survey of science, from mathematics to natural philosophy, the solar system, electricity, and the workings of the steam engine. The tracts were written with the honourable intention of ‘conveying knowledge to uneducated persons, or persons imperfectly educated’, and they were written by experts in their fields. De Morgan was soon one of them, serving on the committee for many years and writing hundreds of essays and articles on mathematics; he saw the SDUK as part of what he called approvingly ‘the social pot-boiling’, and preserved his own copies of the papers of the Society.¹⁸

It was not long before sceptical observers of both the SDUK and the university went into print with parodies and caricatures of the ‘March of Intellect’ or ‘March of Mind’ mantras of Brougham and his fellow members of the ‘Steam Intellect Society’. The cleverest, most famous, and most humorous of these was *Crotchet Castle*, the comic novel published in 1831 by Thomas Love Peacock. The SDUK and Brougham himself are targets for Peacock’s not entirely unjust satire. Chapter 2 begins with the Reverend Doctor Folliott bursting out in indignation:

I am out of all patience with this march of mind. Here has my house been nearly burned down, my cook taking it into her head to study hydrostatics, in a sixpenny tract, published by the Steam Intellect Society, and written by a learned friend who is for doing all the world’s business as well as his own, and is equally well

17 See Ashton, *Victorian Bloomsbury*, p. 61. The fullest account of the SDUK is to be found in an unpublished M.A. thesis held by the University of London Library at Senate House: Monica C. Grobel, ‘The Society for the Diffusion of Useful Knowledge 1826–1846 and its Relation to Adult Education in the First Half of the Nineteenth Century, alias “The Sixpenny Science Company” alias “The Steam Intellect Society”’, 1933.

18 De Morgan’s collection of SDUK papers is in the UCL Special Collections. His remark about ‘social pot-boiling’ is quoted in his wife Sophia’s *Memoir of Augustus De Morgan* (London: Longmans, Green, 1882), p. 51.

qualified to handle every branch of human knowledge. I have a great abomination of this learned friend... My cook must read his rubbish in bed; and as might naturally be expected, she dropped suddenly fast asleep, overturned the candle, and set the curtains in a blaze.¹⁹

As for the building going up on Gower Street, there was more at stake for hostile observers, of whom there were many, than merely sneering at the idea of cooks neglecting their tasks or workmen downing tools to read improving books. Many believed that religion was in danger. They liked to call Wilkins's building 'pagan', partly in allusion to its architectural style, but more because they saw the principles on which the new university was founded as a threat to Church and State. The reason for raising finance through selling shares was that the new institution could expect neither blessing nor funding from the political and religious establishment. George IV could hardly have been expected to welcome an enterprise managed by his nemesis Brougham. Moreover, the Tory government and the leaders of the Church of England were suspicious of the group of radical and liberal lawyers and politicians who were setting up this new seat of learning at a time when the government was attempting to resist introducing political and social reforms in parliament, including the extension of the franchise and the emancipation of Roman Catholics.

The Tory press soon got to work attacking the Gower Street project and rejoicing in the opportunity to conflate the two educational projects—university and SDUK—and to write fancifully about labourers in muddy boots attending lectures. As early as February 1825 the ultra-Tory satirical newspaper *John Bull* was sneering at 'this magnificent national establishment' and its 'liberal committee' proposing to 'instruct butchers in geometry, tallow-chandlers in Hebrew'.²⁰ The selling of shares was looked down upon; Robert Cruikshank produced a cartoon, 'The Political Toy-Man', which showed Brougham in his lawyer's wig and gown hawking shares like a street vendor in the hallowed courts of Lincoln's Inn.²¹ *John Bull* thought up nicknames for the as yet unbuilt

19 Thomas Love Peacock, *Crotchet Castle* (London: T. Hookham, 1831), Ch. 2, 'The March of Mind'.

20 *John Bull*, 14 Feb. 1825; quoted in Ashton, pp. 28–29.

21 The cartoon is reproduced in Harte and North, *The World of UCL*, p. 15.

university; it was 'a new Cockney College' intending to teach dustmen to speak Latin and Greek (10 July 1825), and it was to be named 'Stinkomalee' in honour of the marshy, stagnant plot of land bordering the Bedford Estate which was soon purchased at the top of Gower Street (26 December 1825). More humorously, a poem by Winthrop Mackworth Praed purportedly addressed to the fellows and professors of Oxford and Cambridge, appeared in the *Morning Chronicle* in July 1825:

Ye Dons and ye doctors, ye Provosts and Proctors,
Who are paid to monopolize knowledge,
Come make opposition by voice and petition
To the radical infidel College.²²

At the same time the leading members of the Duke of Wellington's Tory government, with the blessing of George IV, came together with the leaders of the Church of England to set up a rival institution, to be named King's College London. Intent on spoiling the planned opening of the Gower Street institution in October 1828, an impressive group of luminaries met together on Saturday 21 June 1828 in the Freemasons' Tavern next door to Freemasons' Hall. Their purpose, as *The Times* reported on the following Monday, was to establish

a seminary for educating the youth of the metropolis and imparting religious instruction as taught by the established church, to be entitled 'The King's College, London'. At half-past 12 o'clock his Grace the Duke of Wellington entered the hall, accompanied by the Archbishops of Canterbury and York, the Bishops of London, Chester, Winchester ..., the Lord Mayor, and several other persons of rank and distinction.²³

Wellington explained that the new college would teach (cannily taking its lead from its godless equivalent in Bloomsbury) 'the various branches of literature and science', but also (like the ancient universities) 'the doctrine and discipline of Christianity as inculcated by the united Church of England and Ireland'. The meeting ended with the pledging

22 Winthrop Mackworth Praed, 'A Discourse delivered by a College Tutor at a Supper-Party', *Morning Chronicle*, 19 July 1825, p. 3.

23 'New College on the Principles of the Church of England', *The Times*, 23 June 1828, p. 5.

of subscriptions from two dozen individuals and institutions, from Wellington's £300 to £1000 each from the Archbishops of Canterbury and York.²⁴

The Anglican university which opened its doors on the Strand in October 1831, only three years after the upstart 'godless' college in Bloomsbury, did not, as is clear, struggle for funds. Its governors included, *ex officio*, the Archbishops of Canterbury and York, the Home Secretary, the Speaker of the House of Commons, the Dean of St Paul's, the Dean of Westminster and the Lord Mayor of London.²⁵ Unlike the Gower Street establishment, King's College London was instantly given a charter. A few years later, by a piece of good will and good management on both sides, the two institutions agreed to co-operate. In 1836 both became constituent parts of a new examining and degree-awarding body, called the University of London; in order to be permitted to distribute degrees, the Gower Street institution agreed to drop its original name and become University College London instead.²⁶

Throughout the spring and summer of 1828, amid all the satire and protest and rivalry, Brougham and his colleagues on the university committee determinedly set about finding professors for the various subjects. At the Annual General Meeting of Proprietors held on 27 February 1828 there was a report on the progress being made on the building itself, and on the recent success in appointing professors to the chairs of, among other subjects, Greek Language, Literature and Antiquities (George Long, 'late Fellow of Trinity College, Cambridge'); Roman Language, Literature and Antiquities (The Rev. John Williams, 'late of Balliol College, Oxford, Rector of Lampeter, Cardiganshire'); and Jurisprudence (John Austin 'of Lincoln's Inn, Barrister at Law'). Also filled were the chairs in modern languages, though not, of course, by graduates of Oxford and Cambridge, where such subjects were not taught. Interestingly, radicals of a different kind from Brougham and his fellows stepped up to fill these language posts. The chair of Italian Language and Literature went to Antonio Panizzi, a political exile from Italy who had arrived in England in 1823 penniless and with a death

24 *The Times*, 23 June 1828, p. 5.

25 See *The Times*, 31 May, 26 June, 15 Sept. 1828, and 31 Aug. 1829.

26 See the UCL Bloomsbury Project, www.ucl.ac.uk/bloomsbury-project/institutions/ucl.htm.

sentence from Modena for belonging to a secret revolutionary society. Against all odds, Panizzi would move on in 1831 to become an assistant librarian at the British Museum. Six years later he achieved the astonishing feat of being appointed Keeper of the Printed Books at the Museum, an Italian thus taking charge of the greatest English copyright library.²⁷ A second political exile, Don Antonio Alcalà Galiano, became professor of Spanish, and a third, Ludwig von Mühlenfels, who had spent nearly two years in prison in Germany a few years earlier for alleged revolutionary activities, became professor of German. Another German, the brilliant philological scholar Friedrich Rosen, was appointed to teach Oriental Literature. He was 22 years old. The chair of Hebrew went to Hyman Hurwitz, 'late Master of the Jewish Academy at Highgate' and friend of the ageing 'Sage of Highgate', the poet Samuel Taylor Coleridge, who sent the committee a testimonial for Hurwitz.²⁸

Among this group of first appointments was another very young and brilliant man. The person who became the first professor of mathematics, a subject which had always been taught with distinction at Oxford and Cambridge and which attracted one of the strongest fields of candidates, was 21-year-old Augustus De Morgan, 'of Trinity College, Cambridge'.²⁹ De Morgan, who had recently arrived in London, having graduated in 1827 as fourth Wrangler, was chosen out of 31 candidates.³⁰ He was later described by a former student as 'towering up intellectually above all his fellows', known familiarly as 'Gussy', and presenting an imposing figure, 'stout and tall', with 'a superb dome-like forehead' and 'very short-sighted eyes peering forth through gold-rimmed spectacles'.³¹ The 'Second Statement of Council' of the new university, published in November 1828, as the first lessons got underway, described De Morgan's duties, which were to teach three classes of students for a total of sixteen hours a week.³² In common with all the other professors, De

27 See Ashton, *Victorian Bloomsbury*, pp. 46–49.

28 Ashton, *Victorian Bloomsbury*, pp. 45–46, 50–51.

29 London, UCL Special Collections, 'University of London Annual General Meeting of Proprietors, held on Wednesday, the 27th of February, 1828', pp. 4–5.

30 See Adrian Rice, 'Inspiration or Desperation? Augustus De Morgan's Appointment to the Chair of Mathematics at London University in 1828', *The British Journal for the History of Science*, 30:3 (1997), 257–74, p.261.

31 Bellot, p. 80, quoting Thomas Hodgkin's account of 1901.

32 London, UCL Special Collections, 'Second Statement of the Council of the University of London, explanatory of the Plan of Instruction', p. 10.

Morgan was to be paid in part out of the fees paid by his particular students. Though Brougham and his friends had confidently predicted a total student body of 2,000 from the start, the first session, 1828--29, disappointingly attracted only 641; the hoped-for figure of 2,000 was only achieved over eighty years later.³³ De Morgan was luckier than some of his colleagues, particularly those teaching foreign languages; his classes attracted nearly 100 students, according to his wife Sophia, writing after his death.³⁴ In 1832 the highest-paid professors, those teaching medicine, earned up to £700, while the professors of English, philosophy, and German were paid £30, £21 and £11.10s respectively. De Morgan did better, but never earned more than £500 in a year.³⁵

Though some of the new appointees belonged to the Church of England—the ‘godless’ college had decided to accept teachers as well as students who professed all faiths and none—many were heterodox or privately agnostic. De Morgan was such a man. He was a theist and looked warmly on Unitarianism, but never adopted any particular creed, calling himself a ‘Christian unattached’. He was principled enough to reject the idea of taking his MA and becoming a fellow at Cambridge, so moved to London after graduating in 1827 and entered Lincoln’s Inn, intending to study law.³⁶ At this time he resided with his mother at 25 Hatton Garden, near the Inns of Court; from 1828 to 1832 he lived, still with his mother, in Bloomsbury, first at 90 Guilford Street, on Foundling Estate land, then from 1832 to 1837 at 5 Upper Gower Street, a few doors south of the university. Here their neighbours were the family of William Frend, a mathematician who, like De Morgan, had graduated with distinction from Cambridge—in his case as second Wrangler in 1780. Frend had subsequently taught mathematics and philosophy at Cambridge while also officiating as an Anglican priest in two nearby parishes. On questioning his orthodox faith and becoming a Unitarian in 1787, he resigned his parish livings and was dismissed from his tutorship—though not his fellowship—at Jesus College. Frend published an anti-war pamphlet in 1793, just as Britain and France went

33 See Harte and North, *The World of UCL*, pp. 42, 45.

34 Sophia De Morgan, *Memoir*, p. 30.

35 Bellot, p. 179.

36 See Leslie Stephen, ‘De Morgan, Augustus (1806–1871)’, rev. I. Grattan-Guinness, *Oxford Dictionary of National Biography* (Oxford: Oxford University Press, 2004), version 25 May 2006.

to war. For this he was tried by the university authorities and in 1794 was dismissed. After moving to London he wrote books on maths and other subjects and joined radical associations in their protests against William Pitt's repressive government in the 1790s.³⁷ In 1837 the like-minded Augustus De Morgan married Frennd's oldest daughter, Sophia, and they started their married life at 69 Gower Street, further down the long Gower Street, near the British Museum.³⁸

What exactly were these Bloomsbury streets like when De Morgan came to live in the area? The building boom, which had begun in the 1790s with the development by James Burton and others of the Duke of Bedford's land in the west and the open land on either side of the Foundling Hospital to the east, was far advanced in the eastern part of Bloomsbury by the late 1820s.³⁹ Two large residential squares, Brunswick Square and Mecklenburgh Square, were planned to flank the hospital building. The first, Brunswick Square, was developed on the west side by James Burton between 1795 and 1802. Its spacious houses and central shared garden accommodated respectable families, including those who held senior offices at the Foundling Hospital itself. The other square, Mecklenburgh, on the east side of the hospital, was built a decade later, between 1810 and 1825.⁴⁰

Guilford Street, where De Morgan and his mother settled at No. 90 in 1828, lies just south of the Foundling Hospital and runs from west to east from the edge of Russell Square (the largest square on the neighbouring Bedford Estate) to Gray's Inn Road, the eastern boundary of both the Foundling Estate and Bloomsbury itself. The houses here, also built by Burton, were completed in 1797. When De Morgan lived there in the 1820s and 1830s, Guilford Street was both respectable and interestingly modern in its mixture of inhabitants. It was home to many professional men and their families. There were artists and architects like the engraver George Shephard, who lived here from 1821 to 1842,

37 See Nicholas Roe, 'William Frennd (1757–1841)', *Oxford Dictionary of National Biography* (Oxford: Oxford University Press, 2004).

38 See Chapter 9 of this volume for a study of De Morgan's wife and family. For a list of De Morgan's addresses with dates, see London, UCL Special Collections, De Morgan MS ADD 7, f. 156.

39 For the history of the Foundling Hospital, see Gillian Pugh, *London's Forgotten Children: Thomas Coram and the Foundling Hospital* (Stroud: Tempus, 2007).

40 For a detailed account of Bloomsbury's streets, squares, and buildings, see the UCL Bloomsbury Project website.

and the architect Charles Reeves; a large number of lawyers—Guilford Street being a short walk from the Inns of Court—and many doctors, including for a time Thomas Wakley, the founder and first editor of *The Lancet* in 1823, as well as physicians who worked either at University College Hospital from its opening in 1834 or at one of the many specialist hospitals in nearby Queen Square.⁴¹

As for Gower Street, it was inhabited by artists, architects, antiquaries, scientists, many lawyers and even more doctors. Among the early professors at the university in the late 1820s and early 1830s, both De Morgan and Panizzi lived in Gower Street (Panizzi at No. 2, Gower Street North from 1828 until he moved into lodgings inside the British Museum in 1837). Andrew Amos, professor of English Law, lived in Burton Crescent (named after its architect-builder), and Galiano lived at 19 Marchmont Street on the Foundling Estate.⁴² Some of the supporters of the university also lived in the area. One of them, Brougham's friend the lawyer James Loch, had a house in Bloomsbury Square. (Brougham himself lived in Mayfair, near Berkeley Square.) By mid-century the Post Office Directories record mainly professional men and their families in Gower Street, including several keepers of departments in the British Museum; the dentist James Robinson, who conducted the first operation under anaesthetic (ether) in Britain in 1846; the parents of the painter John Millais; and from 1839 to 1842 Charles Darwin and his wife Emma.⁴³

The plan from the beginning was for the university to have its own teaching hospital. This was achieved in 1834; twelve years later, in December 1846, two days after James Robinson had used ether to extract a tooth, the first surgical operation using anaesthetics in Europe was performed at the university by the combative professor of Clinical Surgery, Robert Liston, who asked his invited audience to time the operation, and who proceeded to amputate his patient's leg in twenty-five seconds.⁴⁴ The hospital was unusual in England, being a proper teaching hospital attached to a university. In Oxford and Cambridge, anatomy was taught, but intending doctors had to spend time in one of

41 UCL Bloomsbury Project.

42 Information on these addresses comes from the Book of Admissions to the Reading Room in the British Museum Central Archive.

43 See the UCL Bloomsbury Project website: Gower Street.

44 See Bellot, pp. 164–66.

a number of London's private schools, where surgeons and physicians associated with the old-established hospitals, St Thomas's, Guy's and St Bartholomew's, taught for large fees. Once again, Scotland offered an example which the Gower Street university and hospital were keen to follow. Edinburgh University had established its own medical school in 1736, and between them the four Scottish universities had produced nine-tenths of all medical graduates in Britain between 1750 and 1800.⁴⁵ It was hardly surprising that most of the medical professors appointed by Brougham's committee in 1828 came from Edinburgh.⁴⁶

Needless to say, the English 'establishment', in this case the celebrated surgeons and physicians who earned a second salary in the private medical schools of London, objected to the idea of a teaching hospital which would take away some of their students. *John Bull* rose up again in 1829, taking advantage of the recent scandal in Edinburgh, where the notorious pair of body-snatchers, Burke and Hare, had murdered tramps in order to sell their bodies to Professor Robert Knox for the purposes of teaching dissection. An Edinburgh skipping song soon did the rounds:

Up the close and down the stair,
But and ben with Burke and Hare.
Burke's the butcher, Hare the thief,
Knox the boy who buys the beef.⁴⁷

John Bull joined in with an article in January 1829 suggesting that 'Stinkomalee' might be responsible for the disappearance of prostitutes from the area 'for the purposes of dissection ... here as well as in Scotland'.⁴⁸ De Morgan, known by family and students for his light-hearted verses and comic caricatures, including self-caricatures, composed a witty response of his own, set to the tune of the Scottish song 'Comin' through the rye':

45 R. A. Houston and W. W. J. Knox, *The New Penguin History of Scotland from the Earliest Times to the Present Day* (London: Allen Lane in association with National Museums of Scotland, 2001), p. xlvi.

46 See James Fernandez Clarke, *Autobiographical Recollections of the Medical Profession* (London: J. & A. Churchill, 1874), pp. 299, 314–15.

47 See Ashton, *Victorian Bloomsbury*, p. 108. 'But and ben' refer to the inner and outer rooms in a simple two-roomed dwelling.

48 Ashton, *Victorian Bloomsbury*, p. 109.

Should a body want a body
 Anatomy to teach,
 Should a body snatch a body,
 Need a body peach?⁴⁹

In these early years the university struggled to make ends meet; donations were drying up, student numbers remained low and professors were justifiably dissatisfied with their low salaries. The answer was to open a school on the university's grounds in Gower Street; the same principles of freedom of belief as those of the parent institution would apply, and there was every reason to suppose that boys taught at the new school would in many cases automatically continue to the university itself. The school would—and indeed did—save the university from failure. Brougham was undoubtedly behind an editorial in *The Times* on 29 September 1829 which painted a disingenuously rosy picture of the state of affairs on Gower Street. It began cleverly:

The London University has been so successful in the ends which it proposed, and has so triumphantly answered in practice the objections made to its foundation, that its distinguishing principle is not likely to be long confined to one kind of academical establishment. That characteristic being the union of public education with private residence or domestic superintendence, appears equally well adapted to a great day-school for the education of the better classes as to a College or University.

The editorial was careful not to denigrate the 'great classical day schools' already existing in many British cities, while explaining that the principles of the new school attached to the University of London would mirror those of that institution, in particular the fact that the school would be attended entirely by day pupils, not boarders.⁵⁰ The reason for stressing this fact was made clear in the prospectus for the school. It was the question of religion and religious teaching, which was already causing problems in the university and would be liable to become even more difficult when boys rather than young men were at issue. As before, Christians and non-Christians alike were eligible to apply, and it was vital to make it clear that, 'as the School is to be strictly a Day School,

49 See A.M.W. Stirling, *William De Morgan and his Wife* (London: Butterworth, 1922), p. 33.

50 'Editorial', *The Times*, 29 Sept. 1829, p. 2.

parents or guardians will have the opportunity of superintending the religious education of the boys as they may think proper. In this point the Teachers of the school are bound not to interfere'.⁵¹

As with the university, the school syllabus was wider than that of existing schools; the boys, aged 8–15, were to be taught English, arithmetic, Latin, and writing in their first two years, with Greek, French, German, history, geography and drawing added from the third.⁵² The school opened on 1 November 1830 with fifty-eight pupils. It was located in a house rented by the university at 16 Gower Street. In less than two years space was found on the university premises, where the boys also had a playground which was the subject of a fine engraving by George Scharf in 1833. Scharf lived in Francis Street, close to Gower Street, and his two sons, George junior—later to become the first secretary of the National Portrait Gallery—and Henry, were among the first pupils to enrol at the University of London School (later renamed University College School).⁵³ Other boys were the sons of proprietors and supporters like William Wilkins, Isaac Lyon Goldsmid and George Birkbeck, and of course those of the first professors, including Andrew Amos and the flamboyant Dionysius Lardner, professor of natural philosophy and astronomy, who lectured to large audiences on the steam engine, among other subjects.⁵⁴ In due course De Morgan sent his sons William (born in 1839) and George (born in 1841) to the school. William had his father's artistic talent, becoming a celebrated designer and potter, while George, who inherited his father's mathematical genius, became co-founder of the London Mathematical Society in 1865.⁵⁵

During his time at University College, which lasted—though not continuously—from the beginning in 1828 until 1866, De Morgan was a striking teacher. He was loved for his wit and jokes and feared for his impatience with late arrivals, two of whom got up a petition in 1838 to complain about his habit of locking the doors of the lecture room five

51 See H. J. K. Usher, C. D. Black-Hawkins, and G. J. Carrick, *An Angel Without Wings: The History of University College School 1830–1980* (London: University College School, 1981), p. 12.

52 Usher et al., *An Angel Without Wings*, pp. 13–14.

53 See Ashton, *Victorian Bloomsbury*, pp. 97, 103. The original Scharf engraving is in the UCL Art Museum.

54 Ashton, *Victorian Bloomsbury*, pp. 84, 102–03.

55 For more on De Morgan's children, see Chapter 9 in this volume.

minutes after the start. They pointed out that they had paid in advance for entry to the lectures and that it was difficult for students who lived some distance away always to be punctual.⁵⁶ The same uprightness and independence which had prevented him from staying on at Cambridge after graduating because of his unorthodox religious beliefs caused him to resign twice from the university. The first time was early on, in 1831, when the professor of anatomy, Granville Sharp Pattison, was dismissed for incompetence. De Morgan and the impecunious but honourable Friedrich Rosen resigned in protest at the university's highhanded treatment of Pattison.⁵⁷ Having returned, with characteristic generosity, when his successor in the chair of mathematics drowned in 1836, De Morgan taught vigorously until 1866, when he resigned for a second time over the controversy which attended the efforts of the leading Unitarian minister James Martineau to acquire the chair of philosophy.⁵⁸

As might be expected, De Morgan was a supporter of the movement for the higher education of women, which naturally had its origins in Bloomsbury. In 1849 the wealthy dissenter Elizabeth Reid took a house in Bedford Square and opened her Ladies' College (later renamed Bedford College and integrated as a constituent college of the University of London). She could not offer full degrees, nor could she staff her college with women, of course, as none had yet been educated to higher educational standard, so she asked some of the professors at University College to walk down Gower Street and teach her girls and young women, which a good number agreed to do. Among them was De Morgan, though he left in 1850, claiming pressure of work. He had been keen to advise Mrs Reid and her committee, telling them 'never [to] begin by drawing up constitutions. They are sure to prove clogs on the wheel. Let the work begin in good earnest, and with no needless machinery.'⁵⁹ No doubt he had in mind the problems and arguments that had bedevilled the university in its first years. It was he who drew up a draft prospectus for the Ladies' College, in which it was firmly stated that 'no question whatsoever is to be asked as to the religious opinions of a pupil, nor is

56 London, UCL Special Collections, College Correspondence, Petition dated 22 March 1838; quoted in *College Correspondence*, p. 318.

57 See Ashton, *Victorian Bloomsbury*, pp. 50, 66.

58 Ashton, *Victorian Bloomsbury*, pp. 52, 66.

59 See S.E. De Morgan, *Memoir*, pp. 26–27.

any pupil to be required to attend any theological lectures which may be given'.⁶⁰

After a forty-year career in academia and scholarly publishing, De Morgan died in 1871, aged 64. Though he had moved his family in 1844 to a larger house in Camden, he continued to be a prominent Bloomsbury figure all his life. He had been one of the youngest and brightest of all the pioneering individuals who found their way in the late 1820s to the new university, and he was one of the longest serving. Bloomsbury, as E. V. Lucas wrote, contained the British Museum at its 'heart', Gower Street as its 'aorta', and was noted as a place where 'bookish men' and people of all faiths and none could live, work and study. It had no greater representative in the nineteenth century than the brilliant, independent-minded Augustus De Morgan.

Bibliography

- Arnold, Dana, *Rural Urbanism: London Landscapes in the Early Nineteenth Century* (Manchester: Manchester University Press, 2005).
- Ashton, Rosemary, *Victorian Bloomsbury* (New Haven and London: Yale University Press, 2012). <https://doi.org/10.12987/yale/9780300154474.001.0001>
- Bellot, H. Hale, *University College London 1826–1926* (London: University of London Press, 1929).
- Clarke, James Fernandez, *Autobiographical Recollections of the Medical Profession* (London: J. & A. Churchill, 1874).
- Davis, Eliza Jeffries, *The University Site, Bloomsbury* (Cambridge: Cambridge University Press, 1936).
- De Morgan, Sophia Elizabeth, *Memoir of Augustus De Morgan* (London: Longmans, Green, 1882).
- Dickens, Charles, *The Posthumous Papers of the Pickwick Club* (London: Chapman & Hall, 1837).
- Harte, Negley, and John North, *The World of UCL 1828–1990*, rev. edn (London: University College London, 1991).
- Hobhouse, Hermione, *Thomas Cubitt: Master Builder* (London: Macmillan, 1971).

⁶⁰ See Ashton, *Victorian Bloomsbury*, p. 224.

- Houston, R. A. and W. W. J. Knox, *The New Penguin History of Scotland from the Earliest Times to the Present Day* (London: Allen Lane in association with National Museums of Scotland, 2001).
- Lucas, E. V., *A Wanderer in London*, rev. edn (London: Methuen, 1913).
- Melikan, R.A., 'Pains and Penalties Procedure: How the House of Lords "Tried" Queen Caroline', *Parliamentary History*, 20:3 (2001), 311–32. <https://doi.org/10.1111/j.1750-0206.2001.tb00380.x>
- Olsen, Donald J., *Town Planning in London: The Eighteenth and Nineteenth Centuries*, 2nd edn (New Haven and London: Yale University Press, 1982).
- Peacock, Thomas Love, *Crotchet Castle* (London: T. Hookham, 1831).
- Pugh, Gillian, *London's Forgotten Children: Thomas Coram and the Foundling Hospital* (Stroud: Tempus, 2007).
- Rice, Adrian, 'Inspiration or Desperation? Augustus De Morgan's Appointment to the Chair of Mathematics at London University in 1828', *The British Journal for the History of Science*, 30:3 (1997), 257–74. <https://doi.org/10.1017/s0007087497003075>
- Roe, Nicholas, 'William Frend (1757–1841)', *Oxford Dictionary of National Biography* (Oxford: Oxford University Press, 2004). <https://doi.org/10.1093/ref:odnb/10169>
- Slater, Michael, *Charles Dickens* (New Haven and London: Yale University Press, 2009). <https://doi.org/10.12987/9780300165524>
- Stephen, Leslie, 'De Morgan, Augustus (1806–1871)', rev. by I. Grattan-Guinness, *Oxford Dictionary of National Biography* (Oxford: Oxford University Press, 2004). <https://doi.org/10.1093/ref:odnb/7470>
- Stirling, A. M. W., *William De Morgan and his Wife* (London: Butterworth, 1922).
- Tames, Richard, *Bloomsbury Past: A Visual History* (London: Historical Publications, 1993).
- University College London, UCL Bloomsbury Project (2011), www.ucl.ac.uk/bloomsbury-project.
- Usher, H. J. K., C. D. Black-Hawkins, and G. J. Carrick, *An Angel Without Wings: The History of University College School 1830–1980* (London: University College School, 1981).