The Meteorological Societies of London

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In the Monthly Magazine (a magazine of "literature, science and belles-lettres") for 1 February 1823 (Vol. 55, p. 70), the Editor expressed surprise that a meteorological society had not been formed. Mr James Tatem of Harpenden, Hertfordshire, shared this surprise. In a letter dated 20 February 1823, published in the Monthly Magazine for 1 April 1823 (Vol. 55, p. 207), he wrote as follows:

"Among the numerous societies established in London for the encouragement of the arts, the improvement of the sciences, and the diffusion of knowledge, it had often excited my surprise, that a Meteorological Society had not been formed; it was therefore with very great pleasure I found that you had experienced similar feelings. Allow me, therefore, to call the attention of the meteorologists of the metropolis, and its vicinity, to the propriety of forming such a society, which I have no doubt might be easily effected, and would be ably supported. Of the increased interest which meteorological subjects have lately obtained, the latter numbers of your Miscellany are sufficient evidence; and the improvement of the science would be the necessary result of the association of persons either skilled in or attached to it. Placed under the management of an active committee, and patronized, as it would most probably be, by some of the first characters in the country for rank and talent, the society must flourish; and there can scarcely be a town or large village in the kingdom which would not afford a correspondent, who would be willing to transmit his observations to the society; and thus many phenomena, which had been observed by some retired would become publicly meteorologist, known, and receive the attention which might be due to them. Through the numerous tables which would be obtained by REPRODUCED FROM Weather November 1993 Vol.48, No.11, pages 364-372

these means, the temperature, dryness, or humidity, of different places, would be more accurately known, and the observations would be rendered of more value, if made (under the recommendation of the society) with instruments of the same construction, and under circumstances as nearly similar as possible. From registers thus formed, the meteorologist would receive information and pleasure, the man of science amusement, and the valetudinarian benefit, by being able to select a residence where the climate suited his constitution – a thing of no small consequence, and no little difficulty in the variable temperature of our native isle."

A Meteorological Society is formed

It has long been assumed that Tatem's letter served to bring about the meeting which was held at the London Coffee House on 15 October 1823, though it appears that he was not among those present, a distinguished company which included Luke Howard, FRS, the pioneer of meteorology who is probably best remembered for his essay *On the modifications of clouds* (Howard 1803). At the meeting, convened "to take into consideration the propriety of forming a Meteorological Society" (Symons 1881), the chair was taken by Dr George Birkbeck and the following resolutions were agreed:

- " 1. That the formation of a Society to promote the advancement of Meteorology have the cordial approbation of this meeting.
- 2. That a Society be formed to be called 'The Meteorological Society of London'.
- 3. That the business of this Society shall be conducted by a President, Vice-Presidents, Treasurer, Secretary and Council; and that the number of Vice-Presidents and members of the Council be determined at a subsequent meeting.

- 4. That Mr. Thomas Wilford be requested to officiate as Secretary to this Society (pro tempore), and that he be authorised to send a printed summons to attend the next meeting to each person who shall become a subscriber.
- 5. That an annual subscription of two guineas be paid in advance by every member of this Society.
- 6. That those gentlemen present who are inclined to become members of this Society do now send their names to the Secretary to be enrolled.
- 7. That a Committee of three members be appointed in conjunction with the Secretary to draw up an account of the Society's proceedings this evening.
- 8. That scientific men throughout the United Kingdom be solicited to cooperate with this Society and to transmit communications to it; and that this Society will always be ready to receive meteorological observations from the cultivators of science throughout the various quarters of the globe.
- 9. That no other qualification be required to constitute eligibility to this Society than a desire to promote the science of Meteorology. 10. That after the next meeting the election be by ballot upon the proposition of three, and that a majority of members decide.
- 11. That this meeting do adjourn to the 12th of November next, to meet at the same place and hour [8 p.m.]."

The meeting duly took place, "in pursuance of the resolutions agreed to on October 15, and was very numerously and respectably attended" (Symons 1881). Several new members were admitted and Officers were appointed, namely Dr George Birkbeck (President), Dr Henry Clutterbuck (Treasurer) and Mr Thomas Wilford (Secretary). The eight Council Members included Luke Howard, Thomas Forster and John Frederic Daniell. Forster was a naturalist and astronomer who had published a number of meteorological works, most notably Researches about atmospheric phænomena (Forster 1813); Daniell was the inventor of the cell and hygrometer which bear his name and had recently published his Meteorological essays and observations (Daniell 1823).

The third meeting, held on 14 January 1824, was the first to focus upon the science of meteorology. A paper by the blind botanist and mathematician John Gough on the vernal winds of the north of England was read (Gough 1839) and, to quote Symons, "the Committee appointed by the Council to consider the report upon the best means of establishing correct and complete series of Meteorological Observations presented their preliminary report". In this report, the Committee recommended that "immediate measures be taken to procure correct registers of comparable observations from different parts of Great Britain and its colonies, as well as from other parts of the world, with instruments graduated to the common scales." "To effectuate this purpose with advantage", they considered it "absolutely necessary that the Meteorological Society of London should set the example of the requisite precision by establishing a Meteorological Observatory in the metropolis, or its vicinity."

Further meetings were held on 11 February, 10 March, 14 April and 12 May 1824, and scientific papers were read at all of them. Resident and corresponding members were admitted, and honorary members too, among them Sir John Leslie (Professor of Natural Philosophy in the University of Edinburgh), Dominique-François Arago (Professor of Analytical Geometry in the École Polytechnique, Paris), Joseph-Louis Gay-Lussac (Professor of Physics at the Sorbonne), Jean-Baptiste Biot (Professor of Physics in the College of France, Paris), Marc-Auguste Pictet (Professor of Natural Philosophy in the University of Geneva), Friedrich Wilhelm Bessel (Director of the Königsberg Observatory) and Jean Christian Oersted (Professor of Natural Philosophy in the University of Copenhagen).

In view of the initial enthusiasm and activity, it is surprising that the meeting on 12 May was the last of a scientific nature for over 12 years. During these years, there was Society activity only in the summer and autumn of 1832, when several meetings were held, all concerned with financial matters. At one of them, Birkbeck was appointed Treasurer, following Clutterbuck's resignation. Why the Society languished is a matter for speculation, though it has been suggested by Symons (1881, 1900) that the move of

Luke Howard from Tottenham to his Yorkshire residence near Pontefract was a key factor. It may have been, too, that Birkbeck became pre-occupied with his work in the London Mechanics' Institution, founded in 1823, and with his endeavours to establish such institutions in many other places in the United Kingdom (Kelly 1957).

The period 1836-43

The Society was revived in the autumn of 1836, following the publication of several letters and articles in Loudon's Magazine of Natural History, some written by James Tatem, others by a Mr W. H. White, who subsequently served for many years as Secretary of this and a later Meteorological Society of London. The letters and articles dwelt, as Symons (1881) put it, "on the desirability of meteorological observers combining for the purposes of mutually promoting the advancement of the science". White did not appear to know of the existence of the original Society and even Tatem was not sure that the Society still existed, saying in one of his letters, quoted by Symons, "I was or am a Member of the Meteorological Society founded in 1823", whereupon he received a letter from Birkbeck, who informed him that "The Meteorological Society of London has not been dissolved; but has only sunk into a state of rest, not from the want of pecuniary means to effect the objects of the Society, as some have imagined, but, apparently, from a want of zeal in some of the members to carry into effect various important objects."

At the first meeting, held on 15 November 1836, Mr Charles Shearman was appointed Treasurer and Mr White succeeded Thomas Wilford as Secretary (the latter now a resident of Madeira). In addition, rules governing the admission of members were approved and Dr Birkbeck read a paper by Professor H. W. Dove of Berlin "On the various winds and their causes". Dr Birkbeck remained President until March 1839, when he was succeeded by Lord Robert Grosvenor. Mr White remained Secretary throughout the period the Society was active (1836–43). Dr John Lee, FRS, succeeded Mr Shearman as Treasurer in March 1839 and was, in turn, succeeded by Mr J. W. G. Gutch

in March 1841. (See Fig. 1 for extracts from the Minutes of Council for that period.)

From November 1836 to May 1843, meetings were held regularly. At most of them, scientific papers were read (nearly 50 in the 1836–37 session alone), and many were published in the Transactions of the Meteorological Society (Smith, Elder and Co., 1839, price two guineas) or in the Quarterly Journal of Meteorology and Physical Science (E. Lumley, 1842 and 1843, edited by J. W. G. Gutch, price three shillings each). Reports of meetings appeared in the Society's Proceedings, which were published for Sessions 1838–40, 1840–41 and 1841–42; and a review of all meetings during 1836–43 can be found in "The history of English meteorological societies, 1823 to 1880" by Symons (1881).

According to the "Laws and Regulations" (published in the *Transactions*, pp. 157–163), there were three classes of membership: "Members, or those persons residing in the British Islands already elected", "Associates, or those persons co-operating with the Society, but residing out of the British Islands" and "Honorary Members". The annual subscription was one guinea and Life Membership cost ten guineas. In addition, for those elected after the Annual Meeting in March 1839, there was an entrance fee of one guinea.

By early 1843, there were 64 Members, 59 Associates and ten Honorary Members, the ten being Sir John Herschel (London), Luke Howard (Pontefract), Andrew Crosse (Taunton), John Dalton (Manchester), Dominique-François Arago (Paris), Jean-Baptiste Biot Marie-Armand-Pascal (Paris), D'Avezac-Macava (Paris), Lambert-Adolphe-Jacques Quetelet (Brussels), Jean Christian Oersted (Copenhagen) and Heinrich Christian Schumacher (Altona). Of the Associates, a number were distinguished scientists, among them Heinrich Wilhelm Dove (Berlin), Robert Hare (Philadelphia), William C. Redfield (New York), Elias Loomis (Ohio), Charles Piazzi Smyth (Cape of Good Hope) and a former Council Member and Vice-President, Sir John Ross (since 1839 Her Majesty's Consul in Stockholm). Sir John Herschel was also a former Council Member (1838–41), though it appears that he, like Ross, never attended a Council meeting.

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Fig. 1 Extracts from the Minutes of the Council of the Meteorological Society, 1839-40

The Members included the celebrated writer, critic and artist John Ruskin, who was elected in December 1836, at the age of 17. Only five months later, on 9 May, he was elected a Member of Council but deemed it "due to the Society to state that being now occupied to the full extent of his powers and time at Oxford, he would be totally inefficient as a member of Council" (letter to the Society from his father, John J. Ruskin, 1837). He was now an undergraduate at Christ Church, following matriculation in October 1836. Nevertheless, he was able to attend the Society meeting held in London on 14 February 1837 and at it read a paper (never published) "On the formation and colour of such clouds as are caused by the agency of mountains".* Also in 1837, he submitted "a few remarks on the present state of the Science of Meteorology and on the incitements to its pursuit, with a slight sketch of the general object of the Meteorological Society" (letter from Ruskin to the Society, 1837). The "remarks" were subsequently published in the Transactions (Ruskin 1839).

The Society of 1836–43 called itself by various names. Sometimes, its name was "The Meteorological Society of London", as in the published review of the session 1840–41, entitled *Proceedings of the Meteorological Society of London*. In the Laws and Regulations, though, and on the title page and on page vii of the *Transactions*, its name was, simply, "The Meteorological Society". This was the name used, too, in the loyal addresses sent to Queen Victoria and Prince Albert in April 1840 to congratulate them on their marriage. All eight issues of the *Quarterly Journal* were "published

under the immediate sanction and direction of the Meteorological Society of Great Britain" (to quote the title pages), and the Annual Report of the Council read at the Anniversary Meeting on 8 March 1842 also referred to the "Meteorological Society of Great Britain". It appears likely that the latter name was adopted towards the end of 1841, though nothing to this effect was recorded in the Society's publications or in the Council Minutes. The preferred designation remained Meteorological Society of Great Britain until at least October 1843, when the *Quarterly Journal* was last published.

The Society led a somewhat nomadic life. From 1836 to 1839, meetings were normally held at the Mechanics' Institution, Southampton Buildings (near Chancery Lane). In May 1839, despite financial difficulties, the Society rented rooms at 25 Bartlett's Buildings, Holborn, a property owned by a Council Member, Mr J. W. Green. The following year, "in consequence of Mr Green's leaving Bartlett's Buildings" (Council Minutes, 14 April 1840), the Society was forced to move, this time taking rooms of the Botanical Society at 20 Bedford Street, Covent Garden. In 1841, the Meteorological Society's Finance Committee "resolved that the necessary notice be forthwith given to the Botanical Society declining the further occupation of the Rooms at present held by this Society" (Finance Committee Minutes, 16 March 1841). Acting upon this resolution, the Society duly gave notice that they would "give up the possession of the Rooms at midsummer next" (Finance Committee Minutes, 26 March 1841). There must have been a change of plan, though, given that the Society continued to occupy the rooms until June 1842, when rooms were taken at 17 Old Bond Street.

At the Annual Meeting on 8 March 1842, Lord Grosvenor reported that the financial state of the Society was "wearing a much more satisfactory and healthy aspect than it did on the last Anniversary Meeting" (Grosvenor 1842). Only one year later, however, the Society was "struggling with difficulty to maintain its ground" (Gutch 1843). In a statement signed by the President and Treasurer and sent to Members in February 1843 (copy in the possession of the Royal Meteorological Society), the problems were explained thus:

^{*} In a letter to his father, Ruskin (1837) mentioned this paper. With reference to the weather predictions of astrologers, he suggested, somewhat superciliously, that "the Society would be much better employed, instead of listening to anticipations which never will be realised, and prophecies which the weather takes good care not to fulfil, in ascertaining the causes and effects of phenomena which have actually taken place, or in perusing such scientific and interesting communications as one which I sent in to Mr White, and which he says in a note he will have great pleasure in laying before the Society at their next meeting."

"In the year 1839, the Council was induced to publish an elaborate volume of Transactions, at a great expense. This proceeding speedily produced a result from which the Society now suffers, viz., a debt of £150, which has ever since operated as a clog upon its movements, and paralysed all its exertions. £90 have, however, been paid, leaving a deficit of £60 upon the debt incurred, to which must be added other liabilities to the extent of £90, making a total of £150, and which the Council are most anxious should as early as possible be discharged. When this can be accomplished, the Society will be unfettered and enabled to pursue its course uninterruptedly; the present number of subscribing Members being amply sufficient to discharge all current expenses, and contribute towards the publication of the many valuable documents in their possession."

To help relieve the Society from its difficulties, particularly to ensure continued publication of the Quarterly Journal, every Member was asked to donate one guinea. "Should this not succeed", Members were informed, "an appeal should be made to the Scientific world for such assistance as it may think the objects of the Society merit", and "should the anticipations and wishes of the Council be unfortunately disappointed, it will become their painful duty to declare to their constituents, that from want of funds the Society must suspend its meetings at the close of the session, 1843, until the friends of Meteorological Science can be reassembled under more fortunate auspices."

Alas, the response from Members was disappointing. Furthermore, the President and Council of The Royal Society were unable to accede to the Meteorological Society's request for assistance in the form of permission "to reduce and publish in the Quarterly Journal all or any such Tables and Meteorological communications as are not designed for publication in the Royal Society transactions".* The last meeting was held on 9 May 1843, with Mr George Leach, Vice-President, in the Chair. The Society was not, however, dissolved, and the story does not end here.

The period 1848-50

Another Meteorological Society of London was formed in 1848 (see Fig. 2), its founders all prominent members of the previous Society, namely Lieutenant R. J. Morrison, RN, Mr P. L. Simmonds, Mr W. H. White and Mr L. P. Casella. Their "preliminary meeting" (as it was called in the minutes) was held on 2 June 1848 at Casella's home, 23 Hatton Garden, with Morrison in the Chair. At the ensuing meeting, on 10 August 1848, Morrison was elected President, Casella Treasurer and White Secretary; Simmonds was appointed a member of Council. The Council Minutes (in the possession of the Royal Meteorological Society) contain nothing to suggest that Morrison and the others were reawakening a dormant Society. No reference was made to any previous society, and the Minute Book states that the Meteorological Society of London was formed, not re-formed, on 2 June 1848.

According to the Constitution drawn up at the preliminary meeting, the objects of the Society were "to spread a knowledge of Meteorology, and to obtain information as to the causes which operate in producing changes and modifications in the condition of the atmosphere." These are, of course, laudable objects. However, White "entertained astrometeorological views" (to quote Symons 1900) and Morrison was the foremost astrologer of his day (his pseudonym was Zadkiel†). Thus, we may expect to find that the new Society was inclined towards astrometeorology, bearing in mind the

^{*} The Royal Meteorological Society possesses a copy of the letter sent by Mr Gutch to the President and Council of The Royal Society. It is dated 14 March 1843. The response can be found on page 413 of the Royal Society Minutes of Council 1832—46, Volume 1, in the minutes of the Council meeting held on 4 May 1843.

[†] In Jewish rabbinical lore, Zadkiel was the archangel associated with the planet Jupiter. In Roman mythology, Jupiter was predominantly a sky god and, as such, the originator of all atmospheric changes. Zadkiel was also the pseudonym of William Lilly, a seventeenth century astrologer, whose Introduction to astrology Morrison republished as The grammar of astrology. He was very much a disciple of Lilly.

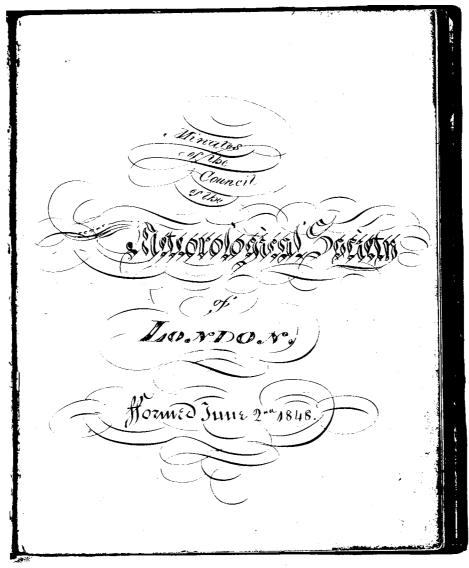


Fig. 2 Opening page of the Minutes of the Council of the Meteorological Society of London, formed in 1848

suggestion of Symons (1881, 1900) that the astrometeorological tendencies of White, Morrison and others were largely responsible for the failure of the previous Society. There is, though, nothing in the Council Minutes of that Society or in the reports of Society meetings published in the *Quarterly Journal* to support the suggestion of Symons. The most significant factor in bringing about the failure appears to have been lack of funds. In fact, the Society formed in 1848 was, if anything, preoccupied with meteorological observations and tabulations of them. The minutes of its Council meetings do not reveal any astrometeorological tendencies.

Morrison was re-elected President at the Anniversary Meeting held on 18 September 1849 and chaired the Council meetings held on 9 October and 13 November. Thereafter, there is neither mention of him in the Council Minutes nor explanation for his absence. In the period December 1849 to September 1850, when the Society was dissolved, a vice-president, Mr Samuel Homersham, chaired all but one of the meetings. For the president of a society to disappear so abruptly without explanation or tributes must be considered unusual. It is conceivable that the Officers and Council made Morrison unwelcome, but there is no evidence to support this suggestion. Whatever

the truth of the matter, the days of the Society were numbered.

A momentous meeting took place on 3 April 1850 at Hartwell House, near Aylesbury. Ten gentlemen with an interest in "the advancement of the aërostatical branch of physics" (Symons 1881) met to form a Society, "the objects of which", to quote the minutes of the meeting, "should be the advancement and extension of Meteorological Science, by determining the Laws of Climate and of Meteorological Phenomena in general". The society was called the British Meteorological Society and it still exists today, as the Royal Meteorological Society.

The Meteorological Society of London first acknowledged the existence of the new society at its Council meeting on 10 July 1850, when, in the words of the minutes, there was a discussion "on the propriety of dissolving the Society, and recommending the Members to join the British Meteorological Society". A vice-president, Mr John MacGregor, agreed to meet Mr James Glaisher, Secretary of the British Meteorological Society, to discuss the recommendation and "to hear his repost". At the Council meeting on 14 August, chaired by Mr MacGregor, it was resolved that a letter be sent to each Member. It read as follows:

"At the last Special Meeting of the Council it was Resolved to have the Opinion of each Member on the following proposition. It appears that a new Society has lately been formed under the name of 'The British Meteorological Society', and that their objects are the same as our own, and from the influence and number of its Members, there appears every prospect of their carrying out the objects of the Society. It is therefore Proposed that the Meteorological Society of London should be forthwith dissolved after its affairs are settled; and that the Members be recommended to join the British Meteorological Society, and that the Papers, Tables, &c collected by the Meteorological Society of London be handed over to the British Meteorological Society. If the majority of our Members should be of the same opinion the proposition will be immediately carried into effect."

The letter was signed by Mr W. H. White, Secretary, "By order of the Council".

At the Council's final meeting, held on 5 September, with Mr Homersham in the chair, the Meteorological Society of London was "declared to be Dissolved". After that, Mr White wrote two letters to Mr Glaisher, both dated 10 September 1850. As the minutes of the British Meteorological Society's Council record (meeting held on 17 September), one was merely a covering letter with a copy of the circular that had been sent to each member, together with a list of the members and their addresses. The other formally notified Glaisher that the Meteorological Society of London had been dissolved.

This is still not the end of the story, for at the meeting of the British Meteorological Society's Council held on 10 December 1850 a letter from Mr J. W. G. Gutch was read, "relative to the Books and Papers now in his hands, belonging to the London Meteorological Society" (as it was put in the minutes). He offered "to deliver them up to the British Meteorological Society upon receiving authority from Lord Robert Grosvenor as President of the former Society to do so".* At the Council meeting held on 22 April 1851, it was reported that Mr Gutch had obtained the authority of Lord Grosvenor and advised that the books and papers in his possession were contained in two large cases. Soon afterwards, the books and papers were duly delivered and Mr Gutch was reimbursed the sum of £2. 10s. 0d. for postage and carriage. The Meteorological Societies of London were no more.

Acknowledgement

The author is grateful to Mr Robert Ratcliffe for rediscovering and drawing to his attention the Council Minutes of the Meteorological Society of London that was formed on 2 June 1848.

^{*} Mr Gutch was never a member of the Society formed in 1848. This is not surprising, given a remark he passed in a letter to Glaisher, read at the Council meeting held on 14 January 1851. In the letter, Mr Gutch "wishes the Society every success and recommends the keeping out of the Society all charlatans, and Zadkiels"!

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