The early endeavours by Hugh Edwin Strickland to establish a code for zoological nomenclature in 1842–1843

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Abstract. Hugh Edwin Strickland (1811–1853) in 1837 published a preliminary set of 22 rules relating to established nomenclature and providing guidance in the formulation of names. Hoping to make such rules mandatory, he opted to gain the support of the British Association for the Advancement of Science. In September 1841, he drafted a first code to be circulated among scientists at home and abroad to garner support and finalise the terminology. On 11 February 1842, the Council of the British Association appointed a committee to discuss zoological nomenclature. This committee of 16 people met a few times in April 1842 to discuss the text of the rules, resulting in a second draft printed in May 1842. This document was discussed at the annual meeting of the British Association in Manchester on 28 June 1842, without a clear result on the suitability of the rules. Strickland argued to members of Council that his report should be printed in the main section of the annual proceedings, where in fact they appeared in 1843. This was the first general printing of the rules of nomenclature, which later became known as the Strickland Code.

Introduction

In 1842, at the annual conference of the British Association for the Advancement of Science in Manchester, a report was read advocating guidelines to stabilise zoological nomenclature. It was presented by Hugh Strickland on behalf of a small committee and constituted the first steps towards a set of rules, which later became generally known as the Strickland Code for Zoological Nomenclature. This paper traces the genesis, development and outcome of Strickland's endeavours to change the ways in which naturalists dealt with the increasing number of species in the animal kingdom. It is an expansion and revision of the historical information published in Rookmaaker (2010), largely based on a study of primary documents available in the Museum of Zoology, University of Cambridge (UMZC).

Hugh Edwin Strickland (1811–1853) had wide-ranging interests encompassing all branches of natural history including geology, palaeontology and zoology, with emphasis on ornithology. During his relatively short life, cut short by a freak railway accident, Strickland studied in Oxford, toured Asia Minor, helped to start the Ray Society, wrote a book on the extinct dodo, actively participated in the conferences of the British Association for the Advancement of Science (BAAS) and published about 264 papers. In 1845 he married Catherine Dorcas Maule (1825–1888), the second daughter of the famous naturalist and author, Sir William Jardine (1800–1874). They lived at Apperley Court near Deerhurst, Gloucestershire, when Strickland started his career as Deputy Reader in Geology at the University in Oxford in 1850. Strickland

was an active collector especially of birds, both British and foreign. After his sudden death, his life and writings were set out by Jardine (1858).

Strickland's scientific legacy passed to the University of Cambridge in several stages. His collection of birds (about 6006 skins of 3117 species) was donated by his wife Catherine in 1867, his scientific library of over 400 volumes was added in 1875, while his extensive scientific correspondence was presented in 1892. The latter collection, known as the 'Strickland Archive' and preserved in UMZC, contains 3246 items traditionally divided into five sections (Rookmaaker, 2010). References made to these documents below are given in the format 'N-000', with 'N' indicating the section on nomenclature, which has 182 items ranging in date from 1841–1883.

First thoughts on nomenclature

Ornithology ranked high among Strickland's interests. He amassed an impressive collection of local and foreign birds, outstanding in quantity as well as quality. He felt it was imperative that all birds were accurately named and that the specimens were arranged in a logical or natural order. He studied the available literature from around the globe to find the information needed to assist his ongoing task. Like any zoologist studying a particular group of organisms in his time, he found that authors liberally bestowed and altered scientific names, resulting in a bewildering duplication of names and an expanding synonymy. When he read a short note by the unidentified S.D.W. (1834) advocating a change of the name of the 'bullfinch' in favour of 'coalhood', supposedly more descriptive or appropriate, he quickly drafted a reply for the Magazine of Natural History. Strickland (1835) emphatically argued against such so-called arbitrary and unlicensed alteration of established names. He wanted names to be unique and unalterable, rather than appropriate, and suggested that 'priority seems to be the universal law for the adoption of specific names' (p. 40). He knew that his personal opinion would remain unheeded unless 'an authorised body could be constituted, to frame a code of laws for naturalists, instead of the present anarchical state of things, in which everyone does that which is right in his own eyes' (p. 37). He expanded these views during the next few years in a series of short papers (Strickland, 1837a, b, 1838a, b), partly in response to critical remarks by William Ogilby (1838), as recently reviewed by McOuat (1996, 2001a) and Dayrat (2010). Strickland (1837b) provided a general set of 22 rules, first relating to established nomenclature stating the right of the discoverer of a species to name it, secondly providing guidance on how to formulate names properly. He then needed to find an established scientific body to formalise these regulations and make them binding for future scientists.

The *Proposed Plan* of 1841

His first choice was the British Association for the Advancement of Science (BAAS), during that period the most prestigious, influential and national forum for scientists from all disciplines. He was an active participant of their annual meetings from 1837 onwards and served on Council in 1840 and 1841 (BAAS 1842, pp. vii, x). First he needed to discover how much support or opposition he could encounter. Hence he sought advice from William Jardine in July 1841, probably shortly before the BAAS meeting scheduled to take place in Plymouth at the end of the month: 'I have some

thoughts of moving in the Zoological Section at Plymouth for the appointment of a Committee to prepare a set of regulations with the view of establishing a permanent system of zoological nomenclature. I should be glad to have your opinion on the subject. The plan which I propose will not interfere with zoological classification, in which everyone must in the present state of the science be left to please himself' (letter reproduced in Jardine, 1858, p. clxxv; the original is not in the Archive).

Jardine's response, now lost, must have been favourable. Strickland went to the conference in Plymouth well prepared to launch his appeal and to defend his set of rules. It is not clear if the need to streamline nomenclature was actually discussed during any of the scheduled plenary or sectional meetings in Plymouth. There is no trace of any resolution or grant relating to Strickland's project either in the official Report published in 1842 or in the more current and comprehensive reviews in the Athenaeum, the main contemporary news magazine for literary and scientific news. However, Jardine (1858, p. clxxv) recalled that in Plymouth 'its general necessity [was] acknowledged, and after some opposition it was moved that a Committee be appointed.' The same course of events might be inferred from a draft in Jardine's hand (N-088) of a motion carried at the 1841 meeting to appoint a committee. Obviously Jardine and Strickland lobbied among the delegates at the time of the meeting, but from all available evidence it appears unlikely that there was in fact any formal progress in Plymouth. Jardine could have known that his memory was faulty when he wrote his memoir of Strickland's life in 1858, because the draft of a motion put his name forward to chair the committee (other members proposed were Jenyns, Westwood, Henslow, Ball, Taylor and Strickland). In fact, Jardine never participated in any committee on zoological nomenclature in the 1840s, probably due to his residence being too distant from London.

Apparently undeterred by the lack of a resolution during the BAAS meeting of 1841, Strickland (with the silent encouragement of Jardine) went ahead and drafted a set of rules to govern zoological nomenclature. Dated September 1841, this was printed as a small pamphlet of 15 pages (by Richard and John E. Taylor, Red Lion Court, Fleet Street, London), entitled *Proposed plan for rendering the nomenclature of zoology uniform and permanent* (N-089; fig. 1). Here Strickland explained that 'it is proposed at a future period to submit the following scheme to the consideration of the British Association for the Advancement of Science. Previously, however, to doing so, it seems desirable to mature the plan as much as possible, by obtaining the opinions of eminent zoologists in various countries . . . '

According to Sclater (1878, pp. 25–27), following a list prepared by Mrs Catherine Strickland, this first draft of the rules was circulated among 213 naturalists and societies, both local and foreign. The Strickland Archive includes a number of lists of those receiving drafts of the rules of nomenclature, respectively with 43 names (N-090 – for first draft, dated September 1841), 186 names (N-154, undated), 38 names (N-155, undated) and 32 names (N-120 – for second draft, May 1842), but their chronology and scope are unknown. Despite these efforts, only eight written replies concerning the contents of this first draft of September 1841 are present in the Strickland Archive, from John O. Westwood (12 October 1841, 22 February 1842), Edward H. Bunbury (1842), William E. Shuckard (1842), John S. Henslow (1 March 1842), Charles Darwin (17 February 1842, cf. Burckhardt & Smith 1985, p. 311), John Richardson (1 March 1842), Leonard Jenyns (16 March 1842), William J.

Broderip (25 April 1842) and Charles Lucien Bonaparte (20 January 1842, cf. Jardine 1858, p. clxxvi).

The Council of the BAAS

With most responses supportive and agreeable to the wording of the text, Strickland decided to move ahead and prepare for the next annual BAAS meeting. On 22 December 1841 Strickland enquired from the General Secretaries of the BAAS (Roderick Murchison and Edward Sabine) if the Council had the power to appoint a committee, which could then prepare a report to be discussed at the general meeting, thereby gaining a year in the proceedings (N-093). Sabine replied on 24 December that Council would not object as long as Strickland could provide a list of people willing to be part of this new committee (N-095). During the next few months therefore, Strickland circulated his *Proposed Plan* of September 1841 and asked a number of scientists if they would be willing to participate. References to the formation of the committee were found in letters from Henslow, Westwood, Richardson, Broderip and Jenyns written in the first months of 1842.

When the Council met again in London on 11 February 1842, Strickland was prepared and obtained permission to continue his work. Sabine reported in the minutes of this meeting that 'With a view of securing early attention to an important subject, the Council requested the following Gentlemen, who were represented as willing to set together for the purpose to consider if the rules by which the nomenclature of Zoology might be established on a uniform and permanent basis, and to report thereon to Section D, at the meeting at Manchester: – Mr. Darwin, Prof. Henslow, Rev. N. Jenyns, Mr. Ogilby, Mr. J. Phillips, Dr. Richardson, Mr. Strickland reporter, Mr. Westwood' (Minutes read to the BAAS meeting in Manchester on 22 June as reported in the *Athenaeum* of 25 June 1842; cf. also BAAS 1843, pp. 105–106).

This committee first met on 28 April 1842 in the rooms of the Zoological Society, 57 Pall Mall (N-112). It was decided to co-opt another five members to the committee, to make a total of 13, adding Bell, Broderip, Smith, Waterhouse and Yarrell. The last named acted as chairman, while Strickland remained the reporter. In the second meeting of the committee, held a week later on 5 May 1842 at Yarrell's house in London, the text of the first draft was discussed and revised. Only five committee members could be present at the time (Yarrell, Ogilby, Waterhouse, Westwood, Strickland, see N-113), and another three members were invited to join: Owen, Shuckard and Whewell, making a total of 16 (Table 1).

A second draft of the rules was printed in May 1842, again by Taylor in London, entitled *Proposed Report of the Committee on Zoological Nomenclature. For the use of the members of the Committee* (16 pages, N-119; fig. 2). This second printed pamphlet was distributed to at least 32 people (N-120). Comments were received from 12 persons, i.e. William E. Shuckard (24 June 1842), Charles Darwin (31 May 1842, cf. Burckhardt & Smith 1985, p. 320), Leonard Jenyns (26 May 1842), William J. Broderip (5 May 1842, 17 August 1842), Robert Ball (2 May 1842), William Buckland (30 May 1842), Alexander Keyserling (June 1842), William Thompson (6 June 1842), John Phillips (9 June 1842), George R. Waterhouse (12 June 1842), Louis Agassiz (18 June 1842, cf. Jardine 1858, pp. clxxix—clxxxvi) and James Sowerby (29 June 1842).

Table 1. Persons associated with the committees of zoological nomenclature (alphabetical order), 1841–1843

	1841 July Proposed draft	1842 Feb Council BAAS	1842 Apr 28 Committee	1842 May 5 Committee	1842 June Meeting BAAS	1843 Report signatories
Ball, Robert, 1802–1857	×					
Bell, Thomas, 1792–1880			×	×		
Broderip, William John, 1789–1859			×	×	×	×
Darwin, Charles Robert, 1809–1882		×	×	×	×	X
1	×	×	×	×	×	
Jardine, William, 1800–1874	×					
Jenyns, Leonard, 1800–1893	X	X	×	×	X	×
Ogilby, William, 1808–1873		×	×	×		
Owen, Richard, 1804–1892				×	×	×
Phillips, John, 1800–1874		X	×	×	X	X
Richardson, John, 1787–1865		×	×	×	×	×
Shuckard, William Edward, 1802–1868				×		×
Smith, Andrew, 1797–1872			×	×		
Strickland, High Edwin, 1811–1853	×	×	×	×	×	X
Taylor, Richard, 1781–1858	X					
Waterhouse, George Robert, 1810–1888			X	×		X
Westwood, John Obadiah, 1805–1893		×	X	×	X	×
Whewell, William, 1794–1866				X		
Yarrell, William, 1784–1856			X	×		×

The Manchester BAAS meeting in 1842

The next major step was to present the findings of the Committee to the scientists assembled at the BAAS meeting in Manchester in June 1842. The meetings of the BAAS were usually attended by close to a thousand scientists. This required a rigid structure of the proceedings, where reports and papers were read either to the general assembly or to smaller groups called sections. Section D was set aside for botany and zoology. The course of the proceedings of the conference, which lasted from 22 June to 29 June 1842, is best followed, as was usual for those unable to attend, in the accounts supplied by a reporter of the *Athenaeum* (1842). During the general assembly on the 22nd, Sabine as secretary read the minutes of Council, which included the appointment of the committee on zoological nomenclature earlier in the year.

In the meeting of Section D on Tuesday 28 June, Strickland had a chance to read the committee's report, which 'was followed by a discussion on the propriety of printing it in the next volume of the Transactions of the Association, as it contained so much that was only matter of opinion, and as time had not been afforded for collecting generally the opinions of zoologists on the subject. The question was eventually referred to the committee [of the Section], as a matter of business' (Athenaeum, 1842, p. 690). Jardine (1858, p. exciii) provided a more personal view of the discussions: 'after being read and explained, as far as time and circumstances would allow, it encountered an opposition that was scarcely expected, couched in a spirit of prejudice, and almost jealous animosity, which was discreditable to the discontents, no matter what their opinions might be. But in all this, the opposition never assumed a definite form; and it is remarkable that among all the correspondence, and in all the discussions, we have scarcely a dissentient voice on the general question, and that the objections and criticisms lay almost entirely in the impropriety of making such radical changes as those proposed appeared to be, and in the difficulty of getting the 'plan' worked out and adopted. Some modern inventors of names felt sorely the criticism of their views and compositions, which many of the clauses exposed; and although no reference was made individually, or possibly could have been allowed in a report of the kind, and sanctioned by such authority, yet oversensitive minds took many of the clauses as aimed at themselves, hence the almost acrimony of some of the observations in the Manchester discussion. But these very circumstances caused their fall, and prevented any distinct motion being made for either censure or delay; and the report, after being well thrashed, was left in the hands of the Committee.' It appears that John Edward Gray (1800-1875) of the British Museum was one of the more prominent people opposed to the introduction of the rules (McOuat, 2001b).

The issue had already taken up too much time of the conference to be given a further hearing. The four members of the committee present in Manchester had in fact prepared a final version of their report ready for final consideration, but they did not get a further chance to present this (N-134: Strickland to Waterhouse, 11 July 1842). On the final day, Wednesday 29 June 1842, the committee of Section D resolved (a motion moved by Richardson and seconded by Owen), 'that the Committee of the Section of Zoology and Botany have too little time during the Meeting of the Association to discuss a Report on Nomenclature, and therefore remit to the special Committee appointed to draw up the Report, to present it on

their own responsibility' (Strickland, 1843a, p. 106). At the same time, a grant was provided in order 'that Mr. H.E. Strickland, Mr. C. Darwin, Professor Henslow, Rev. L. Jenyns, Mr. J. Phillips, Dr. Richardson, Mr. J.O. Westwood, Professor Owen, Mr. Broderip, be a Committee for printing and circulating their Report on Zoological Nomenclature, with the sum of 10 £ at their disposal for the purpose' (BAAS 1843, pp. xx, xxiii).

The first printing of the Rules

The reception of the propositions on zoological nomenclature at the Manchester meeting was rather less enthusiastic and supportive than Strickland would have wished. The reporter of the *Athenaeum* even mentioned that it was a 'personal opinion', which was exactly the impression that Strickland so emphatically tried to avoid. He could publish his views in any of the natural history journals at the time, but the rules needed the backing of a scientific organisation to have any chance of succeeding in stabilising nomenclature. He had persuaded the Council of the BAAS to appoint a committee of eminent scientists, who revised and lend credence to the text of the propositions. He was not now about to lose the momentum, knowing that otherwise the proposals would not receive a second hearing.

After the BAAS Council had met again in early August 1842, Strickland heard through John Phillips that it was the intention to print the 'rules' in the proceedings of section D, rather than in those of the plenary meetings. All Reports of the BAAS meetings were divided into two parts, the first with the general contents presented by the Council, followed by the second with papers presented to the sections and submitted under the auspices of the sectional officers. The distinction is trivial in hindsight, but Strickland knew that it would substantially increase the status of the 'rules' if readers would have the impression that it had the backing of the BAAS as an institution. As during the 1842 conference the reading of the 'rules' had been referred to a session of section D, Strickland could be reasonably sure of publication, but not necessarily in the main section. Hence, he wrote to Sabine (N-138) and Lankester (N-141) in early August to clarify the issue. Sabine, as the executive of the BAAS Council, explained in a letter of 17 August (N-139) that Section D failed to pass a special resolution to recommend the printing of the 'rules' in the proceedings, hence the Council's dilemma. Lankester, in his reply of 20 August (N-142), stated that Section D had meant to allow printing of the 'rules' as long as it was done under the sole responsibility of the authors.

Strickland then wrote back to Sabine (20 August 1842, N-146) that he had never heard of a distinct resolution by one of the sections to print a report. Besides, a grant of £10 had been approved to ensure circulation of extra copies of the 'rules' after it had been printed in the proceedings. Sabine, who knew the rules of the BAAS obviously better than anybody else, further elucidated (23 August, N-147) that a special resolution was necessary because the 'rules' were not the result of an action by the Section, rather were presented by a committee appointed by Council. However, if there would be a preface to state that the responsibility of the contents of the 'rules' rested with the authors rather than the Association, and if the matter would be addressed by Council, he would not object to its insertion. Fortunately, Strickland was personally known to most of the council members and his opinions were highly regarded.

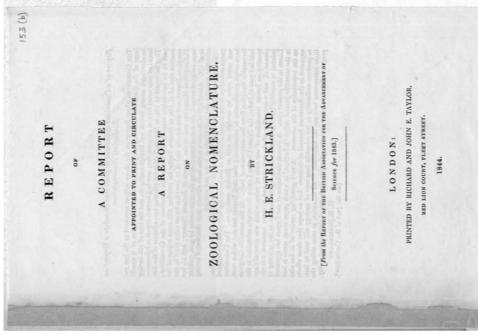
All persons who are conversant with the present state of Zoology must be aware of the great detrinent which the science satisfies from the requested and uncertainty of its nonecleture. We do not here refer to those diversities of the instance of the science statisfies of language which arise from the various methods of dessification of our knowledge. So long as naturalists differ in the views which they are disposed to take of the natural admittee of animals there will always be diversities of classification, and the only way to arrive at the true system of nature is to allow perfect liberty to systematists in this respect. But the evil complained of its of a different character. It consists in this that when naturalise are agreed as to the characters and limit respect. But the evil complained of its of a different character. It consists in this that when naturalise are agreed as to the characters and limit of an individual group or species, they still diagree in the appellations by which they distinguish it. A genus is often designated by there or from and a specie by twice that number of precisely equivalent synonyms; and in the absence of any rule on the subject, the naturalist is wholly at a lose what nonredature to adopt. The consequence is, that the co-alled commonwealth of science is becoming as well as by geographold limits. If a largelst accounting readening and the feet that the hin conversant with the resistence. If he proceeds thence contained readening or Pressis, he is again at a less: bewelled everywhere a midst the containor or pressis the is again at a less what comments and to order the reconcern of the grant of the containor of pressis as the state is the second of the continued of the containor of the surface. If he proceeds thence contained is the single of the second of a continued readener in that the confusion of pressis he is again at a less: bewelled everywhere a midst the theory of pressis he is again at a less; bewelled everywhere a midst the theory of a continued readener in that A COMMITTER having been appointed by the Conneil of the British Association to consider of the rules by which the Nomenchature of Zoology may be established on a uniform and permanent basis, thay beg leave to report, that an outline of the proposed code of rules having been drawn up and printed, copies of it were sent to many eminent zoologists at home and abroad, who were requested to favour the Committee with their observations and comments. Many valuable suggestions were obtained from this source, and the Committee having given their best endeavours to maturing the plan, beg now to submit if to the approval of the British Association under the title of a PROPOSED REPORT OF THE COMMITTEE ON ZOOLOGICAL PROPOSED PLAN FOR RENDERING THE NOMENCLATURE ZOOLOGY UNIFORM AND PERMANENT. [For the Use of the Members of the Committee.] NOMENCLATURE.

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printed in May 1842 Fig. 2. (right). Title-Committee (UMZC, page of the second Proposed Report of Strickland Archive, draft of the 'rules' Nomenclature. For the Committee on London, entitled members of the the use of the by Taylor in Zoological

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the 'rules' as a pamphlet Committee appointed 'to established on a uniform which the Nomenclature consider of the rules by page of the reprint of and permanent basis' entitled Report of a (UMZC, Strickland Fig. 4. (right). First of Zoology may be Archive, N-153b).

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Report of a Committee appointed 40 to consider of the rules by which the Nomenclature of Zoology may be established on a uniform and permanent basis."

"Resolved,—That (with a view of securing early attention to the following important subject) a Committee consisting of Mr. C. Dawwin, Prof. Hensolve, Rev. L. Jewayn, Mr. W. Ogilly, Mr. J. Phillips, Dr. Richardson, Mr. H. E. Strickand (reporter), Mr. J. O. Westwood, be appointed, to consider of the rules by which the Nomenclature of Zoology may be established. [Minute of Council, Feb. 11, 1842.

ON ZOOLOGICAL NOMBNOLATURE.

Although the documents give no further insight in the decision-making process, Strickland's manoeuvring was obviously successful, as the 'rules' were printed in the main section of the Report of the 1842 Manchester meeting, which appeared in 1843 (BAAS 1843, pp. 105-121; fig. 3). The text is prefaced by the relevant resolutions and the work of the committee is emphasised. The authority under which it was issued is left unnoticed, thereby obviously leaving an impression that the contents were in fact approved by the BAAS. The report was dated 'June 27, 1842' (the date of final composition, not that of the reading) and signed by Strickland, Phillips, Richardson, Owen, Jenyns, Broderip, Shuckard, Waterhouse, Yarrell, Darwin and Westwood. The actual date of distribution of the Report of the Manchester meeting of the BAAS is unknown, but it is likely that it was available in March 1843 at the latest, because it was reprinted in Jardine's Annals of Natural History for April 1843 (Strickland 1843c) and in Taylor's London, Edinburgh and Dublin Philosophical Magazine and Journal of Science for August 1843 (Strickland 1843d). In these two periodicals, the 'rules' were credited to a committee 'appointed by the British Association for the Advancement of Science,' exactly how Strickland intended it to be written.

The 'rules' were also reprinted (probably in 1843) as a small pamphlet entitled Report of a Committee appointed 'to consider of the rules by which the Nomenclature of Zoology may be established on a uniform and permanent basis' (Strickland, 1843b; N-153b, fig. 4). It has 17 pages, like the version printed in the BAAS Report, but the type-setting and breaks in pages are not identical. In the pamphlet, the following text is printed above the title: 'Presented by the British Association for the Advancement of Science, to [blank]'. There exists a separate title-page, detached from the pamphlet (N-153b), where Strickland is given as the author and the publisher is provided: 'London: Printed by Richard and John E. Taylor, Red Lion Court, Fleet Street. 1844.' The pamphlet was printed and circulated according to the directions issued at the Manchester meeting using the grant of £10. Soon there were translations into French, a reprint in an American journal, and discussions among Italian scientists (Daryat, 2010; Minelli, 2008).

The reception of the Rules

The real battle still had to be fought. Strickland had done all he could to draft the rules and recommendations, to select interested and eminent scientists to constitute a committee, to receive the backing of an eminent society like the British Association for the Advancement of Science and to get his work in print and circulated both at home and abroad. He provided a platform for discussion and revision, he had sown the seeds. Now it was up to working scientists to follow his lead and put the directives into practice. Change could only come slowly. Charles Darwin, for instance, although one of the signatories of the 'rules', confessed to find 'the rules very useful; it is quite a comfort to have something to rest on in the turbulent ocean of nomenclature, (& am accordingly grateful to you) though I find it very difficult to obey always' (Darwin to Strickland, 29 January 1849; N-168). Jardine (1866, p. 267) gave a fair summary of the acceptance of the 'rules' during the first twenty years in saying that 'zoological nomenclature has not improved. Whether it is from the rules and recommendations not being sufficiently well known, or from an idea that no one has any right to interfere with or make rules for others, many gentlemen appear to

cast them away, and do not recognise them at all, while others accept or reject just what pleases themselves'.

Strickland's 'rules' were restructured and reprinted in the 1860's, again under the auspices of the BAAS (Jardine 1866).

New rules of course take time to be disseminated and to become accepted. It is in the interest of all taxonomists to base their work on a nomenclature which is up-to-date and stable. Perhaps British naturalists in the nineteenth century could have embraced Strickland's Code with more fervour and unanimity. Many of them, and their colleagues in other parts of the world, did take heed of the important propositions suggested by Strickland. This paved the way to the foundation of the International Commission on Zoological Nomenclature in 1895 (Melville, 1995) and the publication of the new editions of the Code of Zoological Nomenclature.

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