

## Ornithological Nomenclature: its History and Reason.

by

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So much misunderstanding appears to exist in the minds of field ornithologists as to the rules governing the names of the birds they see, that I have been asked to give some simple explanations of the confusion apparent.

There are at present no rules governing the vernacular names used in connection with birds, as these must necessarily vary according to the usage of the country where the birds live, and the language used by the inhabitants thereof. In order to facilitate intercourse between bird observers in various countries, it has been unanimously accepted that the medium of Latin (a dead language) be used. Consequently, in the older days scientific treatises were written wholly in Latin, whether the writers were English, French or Swedes, as the case might be. As progress was made in mechanical means of locomotion in the last century, scientists became familiar with the vernacular of many countries, and Latin fell more and more into disuse. It may be interposed that at the end of the 18th century a French explorer arrived in a distant and almost unknown country, and was surprised to meet with a Roman Catholic missionary, the only European, but not a Frenchman; I believe Portuguese. They managed to converse in Latin!! Such a possibility to-day is unimaginable.

It was, however, impossible accurately to interpret the vernacular names without the medium of Latin, and so it became

customary to use a Latin phrase defining the object in conjunction with the vernacular. This Latin phrase was taken from one of the older Latin works, and consisted of the first two, three, or more words of the description, and in conjunction was quoted the name of the writer of the book. A brilliant idea came to a Swedish naturalist, though suggested indirectly in earlier works. This was uniformly to use only two Latin words instead of one, two, three or more. The Swede worked this system out for the whole of the natural history of the world, zoological and botanical. He was primarily a botanist, and he introduced a scheme of nomination very little different from some of his predecessors. In zoology also, in some branches, the same idea had been previously used, but never for the whole scheme of nature. Consequently as a basis, the work of Linnaeus became the standard text-book. It was manifestly imperfect, and in many details was inferior to monographic works of earlier date. Such a result was as certain then as now, because the specialist must always surpass in his local study the best endeavour of the general student. Nevertheless, the general work must appeal to a much larger body of users, and become accessible to more workers. Another interposition becomes necessary. It was the custom of the writer, as his book was wholly written in Latin, to use a Latinisation of his name. Thus Linnaeus, although the writer's name was Linne. However, in later years, through the fame of his work, Linne was ennobled, and he then reverted to his original name. Consequently, many workers, like myself, use the Swedish form though others quote the Latinised form. The method of Linne was to use a generic and a trivial name, the whole to form the binomial name of the species. Thus the genus *Corvus* included the bird previously designated with the single name, *Corvus*, and he introduced as the trivial name the word *Corax*, the specific name being *Corvus Corax*: Under the diagnosis he gave references to previous writers, so that identification is possible with those workers, and from them we can trace the bird by means of vernaculars. Only Latin was used by Linne, as his work was technically and truly a "Systema Naturae." Of course, jealousy was certain, and contemporary writers, particularly specialists, openly derided his system and his detail work. This leads us to Brisson, his famous ornithological contemporary, and undoubtedly a far superior bird student. Brisson had been engaged for years in the preparation of an "Ornithology" or a scheme quite novel and most ambitious. When this was nearly complete, Linne's tenth edition of his

*Systema Naturae* was published. Brisson, probably recognising the superiority of the nomination used, and the inferiority of the ornithological work, drew attention to the fact that he disagreed with it, and that his own work was prior in compilation, though later in completion. Brisson had, of course, used the polynomial method of naming his birds as to his species, though grouping them in genera, which, of course, was not novel, but had been more or less in use for years. His work, however, consisted of six volumes with detailed descriptions of the birds in French and Latin, while Linne's birds were compressed into a hundred and fifteen pages of short Latin diagnoses. It was consequently much easier to recognise birds from Brisson's work than from that of Linne, and his work was continually referred to. A twelfth edition of Linne's *Systema Naturae* was brought out, and in that he included the majority of Brisson's species, restricting to them binomial names. As above noted, the polynomial method of nomination consisted of one, two, three or more names. Confusion was later caused by quoting the names consisting of two words as if they had been proposed by users of the binomial method. Though attacked by the polynomialists, the binomial method immediately obtained universal usage, and in a very few years polynomialism became extinct. Writers in every language adhered to the Linnean method, and used only two words for the specific names, accepting the Linnean genera. As, however, Brisson had been a more thorough ornithologist, with more material, he had proposed more genera, and workers accepted some of these, additional to the Linnean ones, following Linne's own example, as he had accepted some in his twelfth edition. Again a complication ensued, as Linne had selected as a generic name a word commonly in use previously in connection with the bird. Brisson had independently done the same, and while in some instances the usage of both coincided, in others disagreement occurred, through there being two or more names previously in use by different workers.

New species were continually being recognised by students in every country, the "*Systema Naturae*" and the "*Ornithology*" indicating the species known. These were described by the discoverers, and as intercourse was slow and difficult, it soon became known that the same species had been independently named by two different people. At once the earnest ornithologist recognised the right of priority, and used the name given by the earliest discoverer, even when it had not been published first. Thus priority became customary, and has so been main-

tained until the present day. Yet, in every decade, some faddist has, from ignorance of the history as well as the reason of the use, railed against the recognition of priority, proclaiming the right of custom; but priority is the custom, and has always been since the days of Linne. When travel and literature increased largely, it became impressed upon all the scientific writers that only absolute acceptance of priority would enable definite recognition of birds throughout the world, and this was continually urged. Just one hundred years ago British ornithologists urged this fact, and as usual opposition came from a small coterie of non-scientific men, who desired to name the bird according to their own ideas of the suitability of the name selected. Thus the Goat-sucker does not merit its name, though custom had so named it. A latin equivalent, *Caprimulgus*, had been used by Linne, and was commonly in use, irrespective of its merits, as it was customary. One of the Englishmen, demurring to this name as unmerited, sought to improve it by substituting *Nyctichelidon*; this was similarly objected to by another, who proposed *Phalaenivora* as more appropriate; while a third recommended *Vociferator*. This was leading to absolute chaos, so that the leading scientists felt compelled to draw up a scheme of rules to govern zoological nomenclature. It will be thus seen that it was through disregard of custom, i.e., priority, that the Nomenclatural Laws became a necessity. This brings us down to the year 1842, from which year we date them, custom previously being the law.

The British Association for the Advancement of Science appointed a Committee to deal with the transgressions of custom and initiate a series of Rules which would be acceptable to working scientists, though faddists might still demur. It should be noted that it was considered necessary for the advancement of science that laws should be made. The secretary of the Committee was named Strickland, and from correspondence and conversation with the leading scientists in the world he drew up a set of Rules, and when these were corrected and assented to, they were published, and have provided the basis of all subsequent Rules. A short name was commonly used, though not official, viz.: "The Stricklandian Code," and it is possible that some readers may have considered this an arbitrary effort of an individual instead of an official resume of the opinions of the world's scientific leaders.

It is to be regretted that, with the same perversity that is still seen, certain individuals, jealous at not being consulted, deliberately attempted to belittle the code and its users. Never-

the less, it was used by the best workers for many years, but unfortunately many well-situated workers, through carelessness as much as malice, neglected to conform to the Rules. Of course, such ill-considered work suited the opponents who jibed at the Rules, and one well-known ornithologist suggested and employed the name which he considered had been used by the majority of writers up to his time, in direct contravention to the usage of priority. It is remarkable that none of his selections have been upheld save where priority coincided with his approval. However, the misuse of names, in conjunction with opposition, led to the reconsideration of the Rules, and in every reconsideration priority has been successfully shown to be absolutely necessary. In matters of detail alterations have been made but in the eighty years since the preparation of the Rules there has been no real amendment. The only important one was the recognition of the date of the beginning of binomial nomenclature. In 1842 a majority decided that 1766, the date of Linne's twelfth edition, should be accepted as the starting point, but exceptions were allowed. Consequently, after years of usage, these exceptions were standardized by reversion to 1758, the date of Linne's tenth edition, and the one in which he first and fully introduced the binomial system. The earlier Rules included means of altering names not classically correct, and this has been a source of trouble, many workers desiring to impress their classical knowledge at the expense of ornithology, but now this has practically been abolished. Of course, international jealousy was certain to cause interference, and while accepting the basis of the British Rules, other nations sought to provide improvements. Thus the French Zoologists, arguing that a Frenchman had anticipated Linne in introducing the binomial system in botany, and that other specialists had also used more or less binomial names in their works, decided that such workers should be considered. American workers, with no very ancient history to call upon, early determined upon the necessity of fixing the Stricklandian Code. Other countries had also details they desired to get acknowledged, and consequently as divergence was imminent International Laws were considered necessary. After discussion, these were fashioned, and are now in use. It soon became obvious that with the multitude of workers in every land, great importance must be given to the technical nomination of animals discussed, especially when the anatomy and morphology were considered. Again anatomists and morphologists were the most careless workers in conjunction with names; they were

more interested in dissecting, neglecting the fact that their work is useless if their beast be wrongly identified. These continually argue that names mean nothing; yet all the time are desirous of establishing knowledge. Knowledge without names is chaos, and this fact has now been recognised. To attend to the technical difficulties that arise in connection with some names, an International Commission was appointed, and the Commission states an opinion upon debatable points, and these opinions are later considered by International Congresses, and become Laws.

The above short resume has outlined the development of our present nomenclatural laws, and it may help if more particular attention is given to a few points, such as the Law of Priority. The mere mention of the word priority in connection with names published long ago appears to cause irritation to some men who, in their own discoveries, endeavor to snatch days for the sake of priority. The unreasonable attitude is inexplicable, and a prioritarian should be consistent. I have noted that a British ornithologist endeavoured to select the best established name without recognising priority, and dismally failed; now we have an Australian claiming priority for a certain work because it was the standard, though well aware of his uncomfortable position in the fact that the work was so expensive and scarce as to be available only to a few workers. This is the more inconsistent because in his later, more popular, and easily accessible handbook, the author had changed a large number of names on the score of priority alone. It has been proved by usage and custom that only absolute priority is acceptable. If any opponent will but reasonably consider the matter, he will find it the only real solution. As instance, a bird is discovered in Australia, and described in the *Victorian Naturalist*. A few weeks afterwards the same bird is named with a coloured plate in the "Ibis." The latter work circulates all over the world, while the former does not. Is it justice that the writer in the "Ibis," or the first discoverer, should have the better claim? The Law of Priority enables the local writer to get his due. It is unfair to claim that the coloured plate of the better situated worker should be the standard, and that the hard working field naturalist should be ignored; yet this is being advocated indirectly by a well-known Australian.

Personally, I have advocated, and always will do, the absolute right of the first discoverer, irrespective of his greatness or the size of his work. Another instance: I have just discovered that a writer named John Cotton published a List of

Birds of the Upper Goulburn, Port Phillip, New South Wales, in the Tasmanian Journal of Natural Science, Vol. III. No. 5, July, 1848, p. 361, *et seq.*, and there named on p. 362 *Anthochaera Rodorhyncha*, differentiating it from *Acanthagenys Rufogularis* Gould. This appears to have been overlooked by all Australian as well as British ornithologists, and refers to the bird I recently named *Acanthagenys Rufogularis Cygnis*. By the use of the Law of Priority I immediately use Cotton's name, and give him the credit for his discovery, though seventy years late. Would Australians be pleased were I to ignore it, and continue the use of my own name? I think not.

It seems to have been overlooked by the Australian opponent of the Law of Priority that it is as old as the binomial system and is the custom, and that the objectors who cite custom as their object are ignorant of what custom is. The Law of Priority is based on custom, and on the custom of one hundred and sixty years.

*Genus splitting.*—This is the most debatable subject in connection with ornithological nomenclature, and a few words may be given to it. Birds do not show well-defined differential features, as they have so much uniformity in development. Consequently, very minor characters are used for separating groups, and, moreover, no great stress can be laid upon the development of any one organ. The older ornithologists, endeavouring to classify birds, selected one organ alone, and naturally created groups of unequal value and incongruous components. Endeavouring to rectify such errors, many more groups became necessary, and as each student worked at a group, he accepted minor characters still as important, until apparently a superfluity of generic groups were existent.

Casual students then interfered, and without as careful examination lumped again, once more associating dissimilar entities. Recently all the more exact school have endeavoured to reconcile the two by means of close, detailed criticism of every organ, as well as consideration of the life history and evolution of the forms. In order to arrive at a perfect system, it is necessary to dissociate all the "lumped" genera, and then, as the knowledge of evolution increases, to reform these split genera into natural groups, according to the evolution and development of the species.

It is a remarkable fact that all specialists, "lumpers" in the beginning of their studies, become "splitters" as they study more closely the development of the forms. "Lumpers," it

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may be remarked, can never advance scientific knowledge, because they ignore features which the specialist discovers to be very important. It is comparatively easy to associate birds which have been separated when the features are proved to be superficial, and not of evolutionary import. How difficult it is to correct errors in the "lumping" methods, is seen in the Hawks where Suschkin, by osteological study, indicated families where species had been tardily admitted. A recent "lumper" has given as his characters of a genus "same as indicated for family," yet he gives in his distribution of the family, "Australasia," where, up to the present, since the days of Latham and Vieillot, the genus has NOT been recorded. From such a diagnosis it is obvious that his genus is an incongruous mixture, and unworthy of acceptance. When the split genera are reassembled successfully, I do not think there will be much to concern us in ornithological nomenclature.

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