THE INTERNATIONAL CODE OF ZOOLOGICAL NOMENCLATURE: PROPOSALS FOR SUBSTANTIVE AMENDMENTS PUT FORWARD BY THE EDITORIAL COMMITTEE OF THE COMMISSION Z.N.(G.) 182

By The Secretary, International Commission on Zoological Nomenclature

In 1973, at the time of the XVIII General Assembly of IUBS at Ustaoset, Norway, the Commission held a special meeting under Article 11b of its Constitution. It had before it a number of proposals for amendment of the Code, and these were discussed in an open meeting with interested zoologists who were present at the Assembly. It was, however, impossible to take them further, because it was not until the close of the Assembly that IUBS resolved to accept the responsibility for the Commission as successor to the International Congress of Zoology (see Bull. zool. Nomencl. vol. 29: 182).

The President of the Commission (Dr. W.D.L. Ride) therefore set up an Editorial Committee initially consisting of himself and Dr. K.H.L. Key (Australia), Dr. C.W. Sabrosky and Dr. John Corliss (U.S.A.), Dr. G. Bernardi and Dr. J. Forest (France), and the Secretary and Mr. C.W. Wright (U.K.). The Committee met in London in June 1974 to plan its work, which then proceeded by correspondence with meetings during the XIX General Assembly of IUBS at Bangalore, India, in September-October 1976 and in London in May 1977.

The Editorial Committee was mindful of criticisms that the Code left a number of conclusions to inference and has suggested answers to these criticisms. It is also proposing a number of changes in wording and organisation with a view to simplifying and clarifying the Code. Although some of these have led to the re-allocation of provisions to new positions in the Code, they do not involve any substantive changes in meaning. On the other hand, some of the Committee's proposals are of a major character and must be opened to general debate before the Commission can vote on them. These proposals are presented here, not necessarily in their final wording, but in general terms. Comments are invited and should be sent to the Secretary as soon as possible.

Status of the Glossary.- The status of the Glossary in the present Code is nowhere clearly defined, but the implication is that

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it stands outside the Code itself as an informal source of reference. It is clearly desirable that there should be an authoritative set of definitions of the terms used in the Code, itself forming part of the Code. The new status thus given to the Glossary is explained in the Preamble and in Article 86b.

The term “epithet”.- The Committee recommends the adoption of the term “epithet” for the second term of a binomen and the second and third terms of a trinomen. This is because, in the Code as at present worded, the expressions “specific name” and “name of a species” (or “name of a species-group taxon”) do not mean the same thing. Although the Code’s usage dates back to the old Règles, it has confused some people because it is not always clear from the context which meaning is appropriate. The use of “epithet” - with exactly the same meaning as it has in the International Code of Botanical Nomenclature - would remove the confusion by the use of a distinctive term to replace “specific name”.

Publication.- The provisions relating to publication presented particular difficulty, mainly because the existing provisions do not reflect recent advances in printing technology. The methods grouped under the generic term “microform”, and indirect electrostatic methods (including xerography) have brought publication within the reach of any individual or group who can afford the initial capital investment. By the use of computers it is possible to produce several different editions of a work in a single day. It is thus no longer realistic to insist on the “ink on paper” requirement of Article 8 of the Code. The Committee has nevertheless borne certain criteria in mind. First, methods that exploit the latest technologies demand very large capital investments, such as are far beyond the reach of many institutes. In those fields of zoology where illustrations are important, “microform” methods are quite impracticable, for it is not feasible to use numerous readers in comparing illustrations with each other and with specimens (apart from considerations of expense and fatigue), and it is expensive and time-consuming to enlarge such originals to their true size. The results are, moreover, unreliable in quality - a defect found also in indirect electrostatic methods.

The Committee therefore proposes to remove the “ink on paper” requirement from Article 8; to accept microcard and microfiche as valid means of publication under the Code, but to include them among the “undesirable processes” listed in Recommendation 8A; and to add to Article 9 (“What does not constitute publication”) handwritten material, photographs and indirect electrostatic reproductions as such, computer print-outs as
such, acoustic tapes and records as such, and deposit of a document
in a place from which copies can be made and supplied on demand.
Thus the products of the methods banned “as such” will not
themselves be publications - though they can, of course, be used in
the preparation of publications produced by more traditional
methods. The Committee hopes that its proposals will help to
ensure, first, that certain minimum standards of quality can be
maintained and, secondly, that published zoological work shall be
equally accessible to all zoologists without distinction.

Compound epithets.- The present Code was found to be
defective in not stating clearly the difference between available and
unavailable compound epithets (the latter being regarded as
non-binominal). A clause has been added to Article 11g to state
that if the words refer to or represent a single entity, they are
deemed to form an available epithet (provided that the Principle of
Binominal Nomenclature is applied in the work concerned) and are
to be written as one word without a hyphen.

Single combined description of a new genus and a new
species.- Under Article 16a (vi) of the Code, a single combined
description of a new genus and a new species provides an
“indication” for each name, so that new names proposed by that
method after 1930 are technically unavailable. Strong
representations were made to the Committee, with ample
supporting evidence from the literature, urging that this provision
should be repealed on the grounds that many genera established
since 1930 on that basis are widely known and often cited. The
Committee recognises that the strict enforcement of this provision
would cause widespread confusion and therefore proposes an
addition to Article 13b, to allow such generic names to be available
regardless of date. At the same time, it proposes a Recommendation
against the practice referred to.

“Bibliographic reference” as an indication.- Article 16a(i) at
present admits a bibliographic reference to a previously published
description, definition or illustration as an indication. The
Committee proposes that the provision under Article 16a(v),
allowing the citation of an available epithet in combination with a
new generic name to provide an indication for the latter, should be
extended to allow a clear bibliographic reference to such an epithet
also to rank as an indication.

Insertion of a comma between author and date.- The
provision in Article 22 that a comma must be inserted between the
name of the author of a name and its date when they are cited is in
practice ignored by many authors and editors. The Committee
proposes that the mandatory provision be removed and replaced by
a Recommendation that the comma be used.

Greek and non-classical epithets.- The requirement that an adjectival epithet must agree in gender with the generic name with which it is combined causes difficulty with epithets that are not of Latin origin. The Committee therefore proposes an addition to Article 30 to provide that epithets that are or end in Greek or non-classical words, or that are arbitrary combinations of letters, are indeclinable.

Family-group names with incorrectly formed stems.- The Committee proposes the removal of the provision adopted by the Monaco (1972) Congress safeguarding family-group names proposed before 1961 with incorrectly formed stems (Article 29d). In practice it is found to produce more confusion than uniformity, to generate needless cases of homonymy between family-group names, to introduce inconsistency into what is a logical system of construction of names, and to lead to fruitless arguments about "general use". The authority of general rules is weakened if general exceptions are introduced into them; moreover, it is more important to ensure continuity in the meaning of a name than in its precise, and manifestly incorrect, spelling. For any case that can be justified as really serious, resort to plenary action is always possible.

Subsequent spellings.- The Committee feels that the difference between the three sorts of subsequent spellings recognised in the Code should be made clearer. It proposes to separate "corrections" (which are justified emendations, made to correct incorrect original spellings) from "mandatory changes" made to family-group names on a change of status, and to species-group names on a change of gender of the generic name with which they are combined (Article 34) (both these categories take the date and authorship of the original spelling). Unjustified emendations (junior objective synonyms of the names as originally formed) and incorrect subsequent spellings (unavailable names) remain as before.

Correction of diacritic marks.- The Code at present provides that all diacritic marks on letters in scientific names are to be deleted, with the exception of the German umlaut, where ä, ö and ü are replaced by ae, oe and ue respectively. Representations have been made to the Committee that the Scandinavian letters å and ø should be added to these exceptions, the former being replaced by aa and the latter by oe.

The Committee appreciates that the proposed enlargement of the list of exceptions to the simple rule of deletion may cause some disturbance to accustomed usage. It therefore proposes that the rule in question (Article 32c(i) of the Code) should be completed by providing that, where a name bearing any of the German or
Scandinavian diacritic marks referred to has first been corrected by the simple deletion of the mark concerned, it cannot be corrected further. Thus, an epithet proposed to honour a Danish zoologist Müller and already corrected to *mulleri* could not now be further corrected to *muelleri* if the Committee’s proposal is adopted.

Use of "-i" and "-ii" as permissible alternatives.- The Committee proposes the adoption of the substance of a proposal first published in 1971 *(Bull. zool. Nom.* vol. 27: 250-252) that the use of -i for -ii (or vice versa) in the termination of an epithet formed from the genitive of a personal name does not constitute either an emendation or an incorrect subsequent spelling.

Homonymy between names of type-genera.- The present Article 39 merely states that the name of a family-group taxon is invalid if the name of its type-genus is a junior homonym. The Committee proposes to complete the provision (in conformity with the provisions of Article 60) by a statement that such a family-group name is to be replaced by its oldest available synonym in the family-group that is not a junior homonym, or, for want of such a name, by one based on the valid name of the type-genus.

Names published in synonymy.- The Washington (1963) decision to allow availability, under certain conditions, to names first published before 1961 as junior synonyms, created a need not hitherto recognised for provisions for determining the authorship of such names and the types of the taxa they denote. The Committee therefore proposes: (a) a new section in Article 50 to provide that the author of such a name is the person who published it as a synonym, even if he attributed it to some other originator; (b) a new section in Article 67 to provide that the type-species of a genus denoted by such a name is that species (or one of those species) first directly associated with it; and (c) a new section in Article 72 to provide that the type-series of a species-group taxon denoted by such a name is the specimen (or specimens) cited with that name when it was published in synonymy, or, if none was then cited, associated with the name before it was published in synonymy.

Status of the fourth term in quadrinominals.- Notwithstanding the clear statement in Article 5 there is, it appears, confusion in the minds of some zoologists as to the status of the fourth term in a quadrinominal name. The Committee accordingly proposes to add words to Article 45 to show that a new name introduced as an addition to a trinomen is of infrasubspecific rank, and, as such, excluded from zoological nomenclature.

Additions to Article 58.- The Committee proposes to add two new variant spellings to those listed in Article 58 as being deemed identical for the purposes of homonymy between species-
group names: (i) the use of -$i$ and -$j$ for the same Latin letter, and (ii) the use of -$u$ and -$v$ for the same Latin letter.

New term for “type-species”.- The Committee has found that the term “type-species” produces awkward-sounding phrases in some contexts (e.g., “. . . that species is the type-species”). Since the once-familiar term “genotype” was yielded to the geneticists, it cannot now be re-employed in zoological nomenclature, and the Committee has cast about for another term. The term “generitype” might be introduced (note the use of “$i$” as the connective vowel from the Latin “typus generis”; in many words used at the level of the species-group and ending in “type”, “o” is used).

Objective synonymy of the type-species.- The existing Code (Article 67e) provides that, where the name of the type-species of a genus is found to be a junior objective synonym, the senior synonym is to be cited as the name of that species. The Committee finds it objectionable that any provision of the Code should allow a type-species to be cited by a name under which it was not cited at the time of fixation of the type-species. It therefore proposes that this provision be replaced by one requiring that the name of a type-species, if cited, is to be cited first in the combination in which the epithet was made available, and secondly with the valid name for that species. This is intended to apply only to citations as such. Clearly, the valid name of the type-species is to be used in other contexts. (This implies elevating the provision of Recommendation 69c to mandatory status, and the deletion of the Recommendation as such.)

Holotypes.- The attention of the Committee has been drawn to the situation that, in the absence of evidence as to whether a species was based on one specimen or more than one, faces a subsequent author who can find only one original specimen. The suggestion was made that the subsequent author could designate that specimen as the holotype on a provisional basis; if, later, it was shown that the species was based on several syntypes (of which some survived), a new lectotype designation would be in order. The Committee cannot accept that a holotype can be designated except by the original author establishing a species or subspecies in the original publication, and proposes an addition to Article 73a to make that clear; nor can it accept the idea of provisional type-designations. Subsequent authors faced with the situation described above are recommended to assume that syntypes may exist (or have existed) and should designate a lectotype rather than assume that the one specimen before them is the original holotype. We further propose an addition to Article 74 to provide that, where such an author has in fact designated a “holotype”, his action is to
be construed as the designation of a lectotype.

"Multiple type-specimens".- The Committee has recognised the difficulty met by protozoologists in handling and recognising individual type-specimens. It therefore proposes an addition to Article 72 to allow the term "specimen" to include, in the case of protistan eukaryotic organisms assumed to be clonal, a slide containing several individuals mounted together.

Use of the terms "type of a nominal taxon" and "type of a name".- The Committee has considered a proposal that the structure of the Code should reflect the concept adopted in the International Code of Botanical Nomenclature that a type is the type of name. The current Code (1961-64) follows the usage "type of a nominal taxon" and the status quo has been maintained in the draft. Comments are invited on this proposal.

This completes the list of the major modifications to the existing Code proposed by the Editorial Committee. Copies of the draft revised Code, incorporating these and many smaller changes, have been sent to the Commission and may be obtained on request from the International Trust for Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, price £2.50 by surface mail; £5.00 by air mail. A separate of this paper may also be bought for 50p. All prices include postage. The Commission will start to vote on these proposals in February 1979. Any zoologist who wishes his views to be taken into account by the Editorial Committee and the Commission should communicate them to the Secretariat as soon as possible, so that appropriate modifications (including any objections) may be made to the proposals to be communicated to the Commission by that date.