## OPINION 72

## HERRERA'S ZOOLOGICAL FORMULE

SUMMARY.—Designations of animals, according to the system proposed by Herrera in the case submitted for Opinion, are formulæ, and not names. Accordingly they have no status in Nomenclature, and are therefore not subject to consideration under the Law of Priority. No author is under obligation to cite these designations in any table of synonymy, index, or other list of names.

STATEMENT OF CASE.—W. Dwight Pierce submits the following case for opinion:

Herrera, in 1900, proposed to prefix all zoological generic names with a syllable to indicate class, and to terminate them with "us" or "s," and to place behind them certain initials further to assist in locating the genus: *Insapis mellifica* (I, Hy, A).

DISCUSSION.—The foregoing case was submitted, for consideration and report, to the International Commission on Entomological Nomenclature, from the Secretary (Karl Jordan) of which the following report has been received:

The case, though based on insects, is of a general nature, and therefore one for the Commission to deal with. It has been submitted to European Entomological Committees only. Ten members have given their opinion. All agree as follows:

According to Herrera's own showing, the names of the genera are Apis, Musca, Otus, etc. If any of these names should be preoccupied, the formulæ Insmuscas, Insbombyxus, etc., cannot be considered as replacing preoccupied names. If Herrera has published such a formula as a title for a new genus (INSEXUS), EXUS should be regarded as the name of the new genus. In quoting literally from the work of Herrera, the formula "Insbombyxus" should be placed between inverted commas, "...": "Insmuscas" domestica, without the initials following in Herrera's formula. If the quotation is not literal, Musca, Bombyx, etc., should be used.

K. J.

The Secretary to the International Commission on Zoological Nomenclature concurs in general with the foregoing report, but invites attention to certain features of the case submitted.

In principle, according to the premises submitted, the designations by Herrera are of essentially the same kind as the designations by Rhumbler, 1910, Zoologischer Anzeiger, pp. 453 to 471, and Verhandlungen des VII Internationalen Zoologen-Kongresses, zu Graz, 1910 (published 1912), pp. 859 to 874.

The following case is an example which illustrates Rhumbler's system:

Pachynodon reverendus Amegh. Eupachnodontos èreverendos A. m!! = fossiler Ungulate aus dem östlichen Südamerika.—E = Säugetier; u = Ungulat.

It has long been a principle in zoological nomenclature that a name is only a name. For instance, the Code of Nomenclature adopted by the American Ornithologists' Union, 1892, pp. 21-22, contains the following:

PRINCIPLE V.—A name is only a name, having no meaning until invested with one by being used as the handle of a fact; and the meaning of a name so used, in zoological nomenclature, does not depend upon its signification in any other connection.

REMARKS.—The bearing of this principle upon the much desired fixity of names in Zoology, and its tendency to check those confusing changes which are too often made upon philological grounds, or for reasons of ease, elegance, or what not, may be best illustrated by the following quotation:

"It being admitted on all hands that words are only the conventional signs of ideas, it is evident that language can only attain its ends effectually by being permanently established and generally recognized. This consideration ought, it would seem, to have checked those who are continually attempting to subvert the established language of zoology by substituting terms of their own coinage. But, forgetting the true nature of language, they persist in confounding the name of a species or [other] group with its definition; and because the former often falls short of the fulness of expression found in the latter, they cancel it without hesitation, and introduce some new term which appears to them more characteristic, but which is utterly unknown to the science, and is therefore devoid of any authority. If these persons were to object to such names of men as Long, Little, Armstrong, Golightly, etc., in cases where they fail to apply to the individuals who bear them, or should complain of the names Gough, Lawrence, or Harvey, that they were devoid of meaning, and should hence propose to change them for more characteristic appelations, they would not act more unphilosophically or inconsiderately than they do in the case before us; for, in truth, it matters not in the least by what conventional sound we agree to designate an individual object, provided the sign to be employed be stamped with such an authority as will suffice to make it pass current."

(B. A. Code, 1842)

These words, which in the original lead up to the consideration of the "law of priority," seem equally sound and pertinent in connection with the above principle of wider scope.

Regeln für die wissenschaftliche Benennung der Thiere zusammengestellt von der Deutschen Zoologischen Gesellschaft, 1894, p. 5, paragraph 5c, states:

<sup>&</sup>lt;sup>1</sup>Linnæus says on this subject: "Abstinendum ab hac innovatione quæ numquam cessaret, quin indies aptiora detegerentur ad infinitum."

c. Ein Name darf nicht verworfen oder geändert werden etwa aus dem Grunde, weil er "nicht bezeichnend" ist oder weil seine Bildung "unter Missachtung philologischer Sprachregeln" erfolgte oder "weil er zu lang ist, schlecht klingt" und so weiter; doch sind fortan derartige fehlerhafte Wortbildungen, z. B. hybride Wörter, zu vermeiden.

Es darf z. B. der Name *Oriolus persicus* L. nicht etwa deshalb geändert werden, weil es ein amerikanischer, in Persien nicht vorkommender Vogel ist, oder *Voluta lapponica* L., weil es eine indische, in Lappland nicht vorkommende Schnecke ist. Auch Artbezeichnungen mit gleichem Art- und Gattungsnamen sind daher zulässig, z. B. *Buteo buteo*, *Arctus arctus*.

Article 32 of the International Code reads as follows:

A generic or specific name, once published, cannot be rejected, even by its author, because of inappropriateness. Examples: Names like *Polyodon*, *Apus*, *albus*, etc., when once published are not to be rejected because of a claim that they indicate characters contradictory to those possessed by the animals in question.

Rhumbler's proposition was discussed informally by several of the members of the Commission at the Gratz meeting, and their interpretation was to the effect that the designations suggested by Rhumbler represented formulæ and not names, hence that they had no status whatever under the Code.

Were these to be accepted as names, they could not be changed in case it was discovered later that they had been given erroneous prefixes designating classification. Further, the prefix Eu would lead to confusion because of such names as Eustrongylus—a nematode, not a mammal (E) ungulate (u).

It is obvious that the formulæ in question suggested by Rhumbler and by Herrera would not be clear to readers unless they had constantly at hand the keys to these formulæ. Accordingly, in general usage it would be impossible for the average reader clearly to recognize which portions of the formulæ represented generic names and which portions designated classification, or whether a formula or a name were present (cf. *Eustrongylus*) and this confusion would be increased by changes in the classification. The result would be a chaotic condition in Nomenclature, in which it would be impossible for the average reader to orientate himself.

If, on the other hand, the entire combination of letters and punctuation marks adopted were accepted as the technical name, the combinations resulting from change of names depending upon change of knowledge in respect to classification and distribution would be such as to outweigh any possible advantage that could be gained by recognizing the combinations as names, since as names they would not be in this case subject to emendation.

Finally, the propositions made by Rhumbler and Herrera have never been adopted in the International Code, and the only paragraph in the Code which, in the most liberal interpretation, could be cited in favor of these designations is Article 8, Recommendation k, which provides that one may take as generic names:

Words formed by an arbitrary combination of letters. Examples: Neda, Clanculus, Salifa, Torix.

Recommendation k, however, was written without any consideration of cases such as are proposed by Rhumbler and Herrera, and the formulæ in question are admittedly not arbitrary combinations of letters.

In view of the foregoing premises, the Secretary recommends that the Commission adopt as its Opinion the following:

Designations of animals, according to the system proposed by Herrera in the case submitted for opinion, are formulæ, and not names. Accordingly they have no status in Nomenclature, and are therefore not subject to consideration under the Law of Priority. No author is under obligation to cite these designations in any table of synonymy, index, or other list of names.

Opinion written by Stiles.

Opinion concurred in by 14 Commissioners: Allen, Apstein, Bather, Blanchard, Dautzenberg, Handlirsch, Horváth, Hoyle, Jordan (D. S.), Jordan (K.), Monticelli, Skinner, Stejneger, Stiles.

Opinion dissented from by no Commissioner.

Not voting, 4 Commissioners: Hartert, Kolbe, Roule, Simon.

Bather: The whole matter seems to be still simpler than this elaborate Opinion (with which I entirely agree), viz., Herrera and Rhumbler were merely making proposals of a general nature; they were in fact proposing a new scheme of nomenclature. Their proposals were not accepted and we have nothing to do with their suggested examples.

Jordan (D. S.): By all means discourage this sort of thing. Monticelli: Perfettamente d'accordo.