

古生物属的命名兼论高级分类 群名称结尾的统一

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国际动物和植物命名法规 (Stoll et al., 1961; Stafleu et al, 1978) 中的规则和荐则需要不断修改, 因为它们的可行性只能通过实践才能检验。

为了避免属名的粗制滥造, 本文作者极力主张古生物工作者在提出新属名时应注意以下

一些问题:

1. 提订复合生物名称的命名者不要选用异源词。专有名词(非古典来源的人名、地名)不要和希腊或拉丁语构词成分相复合构成生物名称。

2. 指明地质时代、借用地层名词的属名, 有

表 I 古生物复合属名的统一字尾

Uniform endings of compound generic names in palaeontology

原生动物门 (Protozoa)		无颌类和盾皮鱼纲 (Agnatha and Placodermi)	-aspis*
铃纤虫亚目 (Tintinnina)	-tintinnus	龟鳖目 (Chelononia)	-chelys, -mys
海绵动物门 (Spongiaria)	-spongia	恐龙类 (Dinosaur)	-saurus
古杯动物门 (Archaeocyatha)	-cyathus	鳄目和槽齿目 (Thecodontia and Crocodalia)	-suchus
腔肠动物门 (Coelenterata)		鸟纲 (Aves)	-ornis
珊瑚纲 (Anthozoa)	-phyllia*	哺乳纲 (Mammalia)	-therium
层孔虫目 (Stromatoporida)	-stroma	兔形目 (Lagomorpha)	-lagus
锥石目 (Conulata)	-conularia	啮齿目 (Rodontia)	-mys
节肢动物门 (Arthropoda)		长鼻目 (Proboscidea)	-odon
球接子目 (Agnostida)	-agnostus	马形亚目 (Hippomorpha)	-hippus
介甲目 (叶肢介类 Estherian)	-estheria	灵长目 (Primates)	-pithecus, -anthropus
腕足动物门 (Brachiopoda)		植物界 (Plantae)	
正形贝目 (Orthida)	-orthis	甲藻门 (Pyrophyta)	-dinium
戟贝亚目 (Chonetidina)	-chonetes	轮藻门 (Charophyta)	-chara
石燕目 (Spiriferida)	-spirifer	真蕨纲和种子蕨纲 (Pteridophyta and Pteridospermopsida)	-pteris
软体动物门 (Mollusca)		叶子 (leaves)	-phyllum
鹦鹉螺亚纲和菊石亚纲 (Nautiloidea and Ammonoidea)	-ceras	木材 (woods)	-xylon
棘皮动物门 (Echinodermata)		孢子囊和孢子叶穗 (sporangia and strobili)	-strobis, -stachys
海林檎纲 (Cystoidea)	-cystis	种子 (seeds)	-carpus, -spermum
海蕾纲 (Blastoidea)	-blastus	孢子 (spores)	-spora
海百合纲 (Crinoidea)	-crinus	花粉 (pollen)	-pollis
笔石动物门 (Graptolithina)	-graptus	几丁虫 (Chitinozoa)	-chitina
脊索动物门 (Chordata)		遗迹化石 (Ichnofossils)	-ichnus
鱼纲 (Pisces)	-ichthys	足印 (footprints)	-pus

* 带星号者的结尾是本文提出来的

表 II 动物分类群名称的统一结尾
Uniform endings of the names for animal taxa

分类等级	国际动物命名法规	Stenzel (1950)	Rohdendorf (1977)	本 文
超门 Superphylum			-ozoides	
门 Phylum			-ozoa	
亚门 Subphylum			-ozoina	
次门 Infraphylum			-ozoincs	
超纲 Superclass			-odea	
纲 Class			-oda	
亚纲 Subclass			-ona	
次纲 Infraclass			-ones	
部 Cohort			-iformes	-ares*
超目 Superorder		-ica	-idea	-idea
目 Order		-ida	ida	-ida
亚目 Suborder		-ina	-ina	-ina
次目 Infraorder			-omorpha	-oides*
超科 Superfamily	(-oidea)	-icae		-acea
科 Family	-idae	-idae		-idae
亚科 Subfamily	-inae	-inae		-inae
族 Tribe	(-ini)	-idi		-ini
亚族 Subtribe		-ini		-idi

括号内的结尾,根据国际动物命名法规只是建议,而不是强制性的;带星号者的结尾是本文提出的。

时很容易引起误解。

3. 属名的含义和词源有助于人们去记忆其主要性状和语法性别。属名的创建者应该阐明学名的词源。

假如在一篇地层学文章中有相当多的属名是地质学家所不熟悉的,那末要确定其生物归属就要花费大量的查找时间。为此,很多作者提出修改目前命名系统的意见 (Needham, 1910, 1911; Felt, 1934; Herrera, 1960), 比如建议在属名前后增添前缀、后缀, 或使用符号、字母或数字, 来标明该属所隶属的目和纲。一个彻底的改革方案是建议用单名系统来取代双名系统 (Michener, 1964)。大多数分类学家对于这些方案都未给予认真的考虑。但是, 随着信息储存和检索以及计算机程序设计需要的增长, 十分可能使分类学家迟早必须采用一些性状编码或机械符号来鉴定属种。

假如复合词属名的字尾在相同的生物类群中是统一的, 读者就能便捷地识别其分类位置。统一字尾也不容易因异物同名而被预先占

用。更重要的, 这一用法还可使属名带有象征性的方程式化。

本文提出如下一些原则作为遴选统一属名字尾的准则: 1) 用词要尽可能简短; 2) 选用和该属所隶属的高级分类群名称极其相似的词, 特别是那些只是最后几个字母有差异的词; 3) 选用的词能表明这一类群某一明显性状; 4) 选词独特, 先前未曾用于其它类群。

虽然没有规则来控制复合属名字尾的统一, 但在古生物学中一些惯例已获得广泛使用, 现列如表 I。表 I 中具星号的字尾是本文作者特别推荐的, 目的在于防止与其它类群相混淆 (张永铭, 1983)。

超科以上分类群名称的结尾, 国际动物命名法规未作任何规定。Stenzel (1950) 为控制亚族到超目名称的结尾, 提出了一个临时性的安排方案。Rohdendorf (1977) 将统一结尾扩展到纲级和门级。

本文主要根据对目前用法的分析, 试图提出一个简便的从亚族到部的高级分类群名称的

统一结尾方案(表 II)。结尾-*acea*, 虽然未被国际动物命名法规所采用, 但它却经常用于超科的名称。部以上名称的辨识比较容易, 因为这些等级上的名称为数不多。再者, 如果纲级和门级名称的结尾要统一, 一些极其常见的名称(如 *Mammalia*, 哺乳动物纲)也要变更。

在所有建议的结尾中, 只有两个结尾(见表 II, 带星号)是本文首先提出的。结尾-*oides* 用于次目名称, 源自希腊形容词, 例如 *bryoides* (象苔藓的), 其结尾-*oides* 有“相似”的含义。结尾-*ares* (单数-*aris*) 用于部, 导源于拉丁语第一、第二变格法形容词, 如 *stellaris* (星状的), 其结尾-*aris* 具有“属于”的意义。

本文初稿经美国哥伦比亚大学马维骅教授, 南京地质古生物研究所穆恩之教授审阅, 并

提出宝贵意见, 作者谨致谢意。

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(1984 年 9 月收到)

NAMING A FOSSIL GENUS WITH NOTES ON UNIFORM ENDINGS OF NAMES FOR HIGHER TAXA

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Summary

The Rules and Recommendations of the International Codes of zoological and botanical nomenclatures require frequent revision, since their practicability can be tested only by application.

In order to avoid random coinages, the present writer strongly urges that the palaeontologists proposing a new generic name should pay special attention to the following conditions:

a) While proposing a compound name, the nomenclators should not choose hybrid names, nor combine proper names (nonclassic personal and geographical names) with Greek or Latin elements to form compound names.

b) Sometimes generic names indicative of geological ages or stratigraphical terms are

rather misleading.

* c) Since the knowledge of the meaning and origin of a generic name helps the memory of its main characters and grammatical gender, the author proposing a generic name should explain its derivation at the same time.

If there are a considerable number of generic names in a stratigraphical paper with which a geologist is not familiar, it will require much time-consuming research work to determine their biological attributions. For this reason, several authors have proposed modifications of the present systems, such as to add various prefixes or suffixes to the generic names, or use symbols, letters or figures to indicate the order and class of organisms to which the genus belongs. A more radical pro-

posal was put forward for the replacement of a binominal system by a uninominal system, but most taxonomists have not taken these schemes into serious consideration. However, in order to meet the steady need for easy information storage and retrieval and computer programming, it seems quite possible that taxonomists will sooner or later have to adopt some mechanical systems of identifying coded characters or symbols for genera and species.

With the standardized terminations of compound generic names in the same group of organisms, one could easily recognize their systematic positions. These standardized terminations are not apt to be pre-occupied on grounds of homonyms. Even more important, such a practice can turn the generic names into symbolic formulations.

The following suggestions serve as a guide to the selection of standardized terminations for compound generic names: a) use very short words as many as possible; b) use words very much alike in the formation of names for higher taxa to which the genera belong, especially those different only in their final letters; c) use words which can show a distinctive character of the group; and d) use words which are unique and have not been used for any other groups before.

Although there are no rules governing the uniform endings of compound generic names, certain practices in palaeontology have come into wide use. These terminations are listed in Table 1; some of them with asterisks are specially recommended by the present writer in order to prevent confusion with other groups.

Endings for the names above the rank of

superfamily are not governed by the *Zoological Code*. Stenzel had proposed a provisional arrangement to govern the endings of names ranking from subtribe to superorder, while Rohdendorf extended the uniform endings into the class-group and phylum-group names.

Mainly based on an analysis of current practices, the present writer attempts to propose a simple and convenient scheme of the endings of names for higher taxa ranking from subtribe to cohort as shown in Table 2. The ending *-acea*, although not recommended by the *Zoological Code*, is frequently used for the names of superfamilies. It is not so difficult to recognize names above the rank of cohort, because there are not many names at these levels. Moreover, some exceedingly common names (e.g. *Mammalia*) would be changed if the endings of class-group and phylum-group names had been made uniform.

Of all the proposed endings, only two endings, *-oides* and *-ares* (with asterisks in Table 2) are put forward for the first time in the present paper. The ending *-oides* used for the names of infraorder is derived from the adjectives of Greek origin such as *bryoides* which means "moss-like", with the suffix *-oides* indicating "resemblance"; the ending *-ares* (sing. *-aris*) for the cohort comes from the adjectives of Declensions I and II in Latin such as *stellaris* which means "starry", with the suffix *-aris* meaning "belonging to".

The first draft of the paper was read through by Professor Allen W. H. Be (Columbia University) and Professor Mu En-zhi (Nanjing Inst. Geol. & Palaeont.). Here the writer wants to express his gratitude for their valuable advice.