

SCIENCE

Published by the **American Association for the Advancement of Science (AAAS)**, *Science* serves its readers as a forum for the presentation and discussion of important issues related to the advancement of science, including the presentation of minority or conflicting points of view, rather than by publishing only material on which a consensus has been reached. Accordingly, all articles published in *Science*—including editorials, news and comment, and book reviews—are signed and reflect the individual views of the authors and not official points of view adopted by the AAAS or the institutions with which the authors are affiliated.

The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objectives are to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to improve the effectiveness of science in the promotion of human welfare, to advance education in science, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.

Membership/Circulation

Director: Michael Spinnella
Deputy Director: Marlene Zendell
Member Services: Rebecca Dickerson, *Manager*; Mary Curry, *Supervisor*; Pat Butler, Helen Williams, Laurie Baker, *Representatives*
Marketing: Dee Valencia, *Manager*; Jane Pennington, *Europe Manager*; Hilary Baar, *Associate*; Angela Mumeke, *Coordinator*
Research: Renuka Chander, *Manager*
Business and Finance: Jacquelyn Roberts, *Manager*; Robert Smariga, *Assistant Manager*
Administrative Assistant: Nina Araujo de Kobes
Science Member Services
 Marion, Ohio: 800-347-6969;
 Washington, DC: 202-326-6417
Other AAAS Programs: 202-326-6400

Advertising and Finance

Associate Publisher: Beth Rosner
Advertising Sales Manager: Susan A. Meredith
Recruitment Advertising Manager: Janis Crowley
Advertising Business Manager: Deborah Rivera-Wienhold
Finance: Randy Yi, *Senior Analyst*; Shawn Williams, *Analyst*
Marketing: John Meyers, *Manager*; Allison Pritchard, *Associate*
Traffic Manager: Tina Turano
Recruitment: Terri Seiter, *Assistant Manager*; Michael Sweet, *Production Associate*; Debbie Cummings, Celeste Wakefield, Rachael Wilson, *Sales*
Reprints Manager: Corrine Harris
Permissions Manager: Arlene Ennis
Sales Associate: Carol Maddox

PRODUCT ADVERTISING SALES: East Coast/E. Canada: Richard Teeling, 201-904-9774, FAX 201-904-9701 • **Southeast:** Mark Anderson, 305-856-8567, FAX 305-856-1056 • **Midwest:** Elizabeth Mosko, 312-665-1150, FAX 312-665-2129 • **West Coast/W. Canada:** Neil Boylan, 415-673-9265, FAX 415-673-9267 • **UK, Scandinavia, France, Italy, Belgium, Netherlands:** Andrew Davies, (44) 457-838-519, FAX (44) 457-838-898 • **Germany/Switzerland/Austria:** Tracey Peers, (44) 270-760-108, FAX (44) 270-759-597 • **Japan:** Mashy Yoshikawa, (3) 3235-5961, FAX (3) 3235-5852
RECRUITMENT ADVERTISING SALES: US: 202-326-6555, FAX 202-682-0816 • **Europe:** (44) 0223-302067, FAX (44) 0223-302068 • **Australia/New Zealand:** Keith Sandell, (61) 02-922-2977, FAX (61) 02-922-1100
 Send materials to *Science* Advertising, 1333 H Street, NW, Washington, DC 20005.

Information for Contributors appears on pages 37–39 of the 7 January 1994 issue. Editorial correspondence, including requests for permission to reprint and reprint orders, should be sent to 1333 H Street, NW, Washington, DC 20005.
Internet addresses: science_editors@aaas.org (for general editorial queries); science_letters@aaas.org (for letters to the editor); science_reviews@aaas.org (for returning manuscript reviews); membership@aaas.org (for member services); science_classifieds@aaas.org (for submitting classified advertisements)

LETTERS

Space Station, a.k.a. "Project Vampire"?

It is becoming increasingly evident that a large space station—U.S. or international—has taken on a political life of its own without any substantive purpose remotely commensurate with its cost. Within the prevailing budgetary climate, it is virtually certain that continuation of the development of a space station will diminish our progress in space science, space applications, and aeronautics.

Faced with this expectation, a colleague has suggested a descriptive name for the space station program—Project Vampire—a term with at least three appropriate meanings. First, it refers to the mythical creature that sucks the blood from innocent victims (the scientific community) while they sleep. Second, the short form "vamp" means a seductive female who victimizes gullible males (members of the Congress and the general public without distinction as to gender). Third, the word "vampire" might be considered an acronym for the Van Allen-Memorial Permanently Inhabited Research Emporium, in honor of this writer's persistent and, thus far, unheeded criticism of the space station development.

James A. Van Allen

Department of Physics and Astronomy,
 University of Iowa,
 Iowa, City, IA 52242-1479, USA

Ordering Organisms

How curious that Ernst Mayr (Letters, 10 June, p. 1519) should taxonomize the systems for ordering organisms into "Darwinian" (Linnean) and "Hennigian" (cladistic). Darwin had no use for Linnaeus' method, as his letters to G. Waterhouse in 1843 clearly show (1).

Most authors say it is an endeavour to discover the laws according to which the Creator has willed to produce organized beings—But what empty high-sounding sentences these are—it does not mean order in time of creation, nor propinquity to any one type, as man.—in fact it means just nothing. According to my opinion, (which I give everyone leave to hoot at ...) classification consists in grouping beings according to their actual relationship, ie their consanguinity, or descent from common stocks. ... All rules for a natural classification are futile until you can clearly explain, what you are aiming at. (Italics in the original)

Hennig's system (cladistics) is concerned with order of time in "creation" as well as strict propinquity of descent, which the Linnean system is not. The Linnean system has no underlying philosophy, as Linnaeus' contemporary critics pointed out (2). Darwin did not invent cladistics, but these and other documents show that he would have been more sympathetic to Hennig's views than to Linnaeus' vapid formalization of Aristotelian taxonomy.

The occasion for Mayr's letter was a Random Samples item (25 Mar., p. 1688) that appeared to group the Permian synapsid *Cotylorhynchus* among the mammals. It is not a mammal and not a mammalian ancestor, and this question has nothing to do with cladistics or Linnaeus. Most of the mammalian characteristics Mayr discusses in this respect cannot even be determined in fossils. Contrary to what Mayr says, *Cotylorhynchus* is not (and never was) a reptile, but a synapsid; it does not belong to the "Pelycosauria," which Mayr italicizes as if it were a genus or species; "Pelycosauria," unless rigidly circumscribed to *Dimetrodon* and a few other forms, is not even a monophyletic taxon.

If Mayr thinks that "both systems of classifying are legitimate," he might try to get a National Science Foundation grant to taxonomize using the Linnean system. Meanwhile, Darwin's name should not be invoked to endorse a system that he regarded as an abhorrent convention.

Kevin Padian

Department of Integrative Biology,
 University of California,
 Berkeley, CA 94720, USA

References

1. A. Desmond and J. Moore, *Darwin: The Life of a Tormented Evolutionist* (Warner, New York, 1991), pp. 310–311.
2. D. Hull, *Darwin and his Critics* (Harvard Univ. Press, Boston, 1973).

Gap Junctions and Intercellular Communications

In their report "Unidirectional coupling of gap junctions between neuroglia" (12 Nov. 1993, p. 1072), Stephen R. Robinson *et al.* report that the low molecular weight dyes Lucifer yellow and biocytin pass readily from astrocytes to oligodendrocytes (in the myelinated band of rabbit retina), but rarely pass in the other direction. As a possible