politans, the mean age is the same (129×10^6 compared with 133×10^6, respectively) (*13*). However, if one uses mean known ages of families for each of the pelecypod stations (*14*), the regression of age (millions of years) on unsigned latitude has a slope of 0.39, which differs from 0 with a probability of more than 0.99. The source of the remaining data, for Cretaceous planktonic foraminiferans, is not given, although the graphs as presented do support the thesis.

The ratio used to show that Permian brachiopods decrease in diversity poleward, does so merely analytically. The ratio is of Tethyan (tropical) endemics to cosmopolitans. Obviously the proportion of tropical endemics is greatest in tropical regions, since the class is defined by its distribution. It is merely surprising that some "Tethyan endemics" occur more than 70°N. The problem of variable sample size, which the ratio was meant to offset, is best controlled directly even if new samples must be collected.

Explanation and application of climatic differences in evolutionary rates must depend on the existence of such differences and these have not yet been adequately shown. Stehli (*10*) has unpublished results for recent foraminiferans that seem best interpretable by this hypothesis, however.

LEIGH VAN VALEN

Department of Anatomy,
University of Chicago,
Chicago, Illinois 60637

References and Notes

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2. P. J. Darlington, Jr., *Zoogeography* (Wiley, New York, 1957).
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4. I exclude Australia and New Guinea because of their isolation and poor known fossil record, and the south temperate faunas of South America and Africa because of their dominance by tropical families and because of the major climatic differences from the north temperate region [P. J. Darlington, Jr., *Biogeography of the Southern End of the World* (Harvard Univ. Press, Cambridge, Massachusetts, 1965)].
5. A. S. Romer, *Vertebrate Paleontology* (Univ. of Chicago Press, Chicago, ed. 3, 1966). This is the latest mainly reliable source and includes a few data even now unpublished by their own authors.
6. P. S. Martin and H. E. Wright, Jr., Eds. *Pleistocene Extinctions: The Search for a Cause* (Yale Univ. Press, New Haven, 1967).
7. Distributional data for regionally extinct families are from primary sources or recent reviews by regional or systematic specialists. I may have overlooked a few records, especially for tropical Asia and Africa.
8. The families in parentheses are those I regard as probably considerably older than their first records. The numbers i–vi refer to faunas: (i) Malayan, (ii) Indian, (iii) African, (iv) South American, (v) North Eurasian, (vi) North American. When preceded by "p" these are postglacial records of regionally extinct families. The references below document earliest records other than those in Romer (*5*). The earliest ages I use are coded as follows: A, Pleistocene (including Recent); B, late Pliocene; C, early Pliocene; D, late Miocene; E, Middle Miocene; F, early Miocene; G, late Oligocene; H, Middle Oligocene; J, early Oligocene; K, late Eocene; L, Middle Eocene; N, late Paleocene; P, Middle Paleocene; Q, early Campanian. Didelphidae (iv, vi) Q (*15*), (Caenolestidae) (iv) M, Tupaiidae (i, ii) P (*3*), (Macroscelididae) (iii) J, (Galeopithecidae) (i) A, Erinaceidae (i–iii, v) K, Talpidae (i, ii, v, vi) K, Soricidae (i–vi) K (*16*), Tenrecidae (iii) L (*17*), (Chrysochloridae) (iii) F, (Pteropodidae) (i–iii) A (*18*), (Rhinopomatidae) (i–iii) A, (Emballonuridae) (i–iv) J, (Noctilionidae) (iv) A, (Nycteridae) (i–iii) A, (Megadermatidae) (i–iii) J, Rhinolophidae (i–iii) K, Hipposideridae (i–iii) L, (Phyllostomatidae) (iv) J, (Desmodontidae) (iv) A, (Natalidae) (iv) A, (Furipteridae) (iv) A, (Thyropteridae) (iv) A, (Vespertilionidae) (i–vi) J, (Molossidae) (i–vi) G, (Loridae) (i–iii) F, (Tarsiidae) (i) A (*19*), (Callithricidae) (iv) G, (Cebidae) (iv) G, (Cercopithecidae) (i–iii) F, Pongidae (i–iii) J, Hominidae (i–vi) D, Aplodontidae (vi) K, Sciuridae (i–vi) J, Echimyidae (iv) J, Chinchillidae (iv) J, Dasyproctidae (iv) J, Dinomyidae (iv) F, Caviidae (iv) D, Hydrochoeridae (iv) C, Erethizontidae (iv, vi) J, Cricetidae (ii–vi) J, (Muridae) (i–iii, v) D, Dipodidae (iii, v) G, Zapodidae (v, vi) G, Geomyidae (vi) H, Heteromyidae (iv, vi) J, Gliridae (iii, v) L (*20*), (Platacanthomyidae) (i, ii) A, (Seleviniidae) (v) C, Spalacidae (v) C, Rhizomyidae (iii) H, Castoridae (v, vi) J, (Thryonomyidae) (iii) A (*21*), (Bathyergidae) (iii) F (*22*), (Hystricidae) (i–iii, p–v) E, (Anomaluridae) (iii) F (*22*), (Pedetidae) (iii) F, (Dasypodidae) (v, vi) N (*23*), Glyptodontidae (p–iv) L, Megalonychidae (p–iv, p–vi) F (*24*), (Megatheriidae) (p–iv, p–vi) G, (Bradypodidae) (iv) A, Mylodontidae (p–iv, p–vi) J, (Myrmecophagidae) (iv) F, Manidae (i–iii) J, (Ochotonidae) (v, vi) H, (Leporidae) (i–vi) K, Canidae (i–vi) K, Ursidae (i, ii, iv–vi) H, Otariidae (iv–vi) F, (Odobenidae) (v, vi) D, Procyonidae (iv, vi) J, Mustelidae (i–vi) J, Phocidae (v, vi) E, Viverridae (i–iii) K, Hyaenidae (ii, iii, p–v) E, Felidae (i–vi) K, (Orycteropodidae) (iii) F, Platanistidae (ii, iv) F, (Procaviidae) (iii) J, Gomphotheriidae (p–iv, p–vi) J, (Mastodontidae) (p–vi) F, Elephantidae (i–iii, p v, p–vi) F, Dugongidae (i, ii, v) L, (Trichechidae) (iii, iv) F, Macraucheniidae (iv) N, Toxodontidae (p–iv) J, Equidae (iii, p–iv, v, p–vi) M, Tapiridae (i, iv, p–vi) J, Rhinocerotidae (i–iii, p–v) J (*25*), Suidae (i–iii, v) J, Tayassuidae (iv, p–vi) J, Anthracotheriidae (p–i) L, Hippopotamidae (p–i, p–ii, iii, p–v) B, Camelidae (iv, p–vi) K, (Tragulidae) (i–iii) F, Giraffidae (iii) F, Cervidae (i, ii, iv–vi) F, Antilocapridae (vi) E, Bovidae (i–iii, v, vi) H.
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11. G. G. Simpson, *Major Features of Evolution* (Columbia Univ. Press, New York, 1953).
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13. My total percentage for the cosmopolitans is only 91, which suggests an inaccuracy in the graph. Any real effect may be related to better sampling of cosmopolitans, as is true for temperate mammals.
14. Data given by F. G. Stehli, personal communication, as mean ages.
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18. I provisionally exclude *Archaeopteropus* from the Pteropodidae. Like *Icaronycteris*, it has high-cusped teeth and an ungual phalanx on the second digit of the manus, and it may be referred to the Microchiroptera at least pending better knowledge of its shoulder. However, body size is large and the talonid of a cheek tooth is small. The Miocene record of *Roussettus* refers to the megadermatid microchiropteran *Miomegaderma* [C. Gaillard, *Bull. Soc. Linn. Lyon* **7**, 110 (1928)]; the earliest known record of the Pteropodidae is therefore Pleistocene.
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26. The regions are bounded as follows. Malayan: Asia south of China and east of Burma, plus Sumatra, Java, Borneo, and the Philippines; Indian: India, Pakistan, and Nepal; African: the region between the Rift Valley, the Atlantic, 10°S, and the Sahara; South American: the region north of 10°S; North Eurasian: the region north of 45°N; and North American: the region north of the mouth of the Ohio River.
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Enzyme Nomenclature: New Edition Planned

The Joint IUPAC-IUB Commission on Biochemical Nomenclature (CBN) decided in 1968 to include enzyme nomenclature within its field of work. After considering the report *Enzyme Nomenclature: Recommendations (1964) of the International Union of Biochemistry on the nomenclature and classification of enzymes, together with their units and the symbols of enzyme kinetics* (Elsevier, New York, 1965), CBN decided, at its 1969 meeting, that the time was appropriate for a revision and an extension of this report. It has therefore set up a committee which has been asked to work toward a revision of *Enzyme Nomenclature,* including the addition of newly described enzymes, by 1971. The convener of the committee is Professor E. C. Webb, Department of Biochemistry, The University of Queensland, St. Lucia, Brisbane, 4067 Australia. It would be helpful to the committee if all biochemists who have suggestions concerning the addition of enzymes that are omitted from the existing report, concerning errors in the existing report, or concerning improvements in the existing names would send them directly to Professor E. C. Webb as soon as possible and preferably before 31 March 1970.

O. HOFFMANN-OSTENHOF

Chairman, IUPAC-IUB Joint Commission on Biochemical Nomenclature

Note

1. Further information can be obtained from Dr. Waldo E. Cohn, Biology Division, Oak Ridge National Laboratory, Oak Ridge, Tennessee. Dr. Cohn is secretary of CBN and director of the NAS-NRC Office of Biochemical Nomenclature.

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