Kudos to Gina Kolata for leaving the "honey" and the "dear" in her quotes from Decherd Turner of the University of Texas. Seeing just how those terms look in print is a more effective consciousness-raising device than a full article on sexism would have been.

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Mormon Church Policy

In discussing the appointment of David Gardner to the position of president of the University of California (News and Comment, 18 Mar., p. 1301), R. Jeffrey Smith mentions that the Church of Jesus Christ of Latter-day Saints (Mormons) bars blacks from the priesthood; this is no longer the case.

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Evolution Debate

I agree with Richard E. Grant (Letters, 11 Mar., p. 1170) that ancestor-descendant relationships cannot be objectively recognized in the fossil record (*1*). I suggest, however, that the debate over phyletic gradualism versus punctuated equilibrium be viewed as a debate over the distribution of rates of evolution; that is, over the tempo of evolution, not the mode of evolution as Grant suggests. Viewed in this light, there are at least three separate and distinct questions to be investigated: (i) whether the punctuational tempo is prevalent in the fossil record, as Gould and Eldredge suggest (*2*); (ii) whether punctuations are roughly equivalent to speciation events; and (iii) given that punctuations mark speciation events, whether speciation is the dominant mode of macroevolutionary change. Thus, the punctuational model of the tempo of evolution is distinct from, although perhaps related to, the previous models of differing modes of speciation cited by Grant ("saltation," "allopatric speciation"). Furthermore, the choice between gradualism and punctuated equilibrium need not "always . . . devolve to a matter of personal preference." Even if ancestor-descendant relationships cannot be objectively recognized, data obtained from the fossil record, such as origination and extinction rates of species, species durations, and aggregated changes in entire faunas (*3*) can be analyzed and may shed light on the question of the predominance of punctuationalism or gradualism. Likewise, study of the possible, and even most probable or common, mechanisms of evolution and speciation (for example, the genetics, molecular biology, and behavioral biology of extant organisms) may shed light on the question of the most common tempo of evolution.

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References

1. R. M. Schoch, *Nature (London)* **299**, 490 (1982).
2. S. J. Gould and N. Eldredge, *Paleobiology* **3**, 115 (1977).
3. S. M. Stanley, *Macroevolution: Pattern and Process* (Freeman, San Francisco, 1979); S. J. Gould, *Science* **219**, 439 (1983).

Intellectually it seems to me to be quite unnecessary to point out that arguments about modes of evolution are "philosophically intractable," but the contention that they are "pseudoquestions" is a "personal preference." One of my most memorable undergraduate experiences occurred when a curator at the British Museum of Natural History stopped by the library desk where I was researching a particularly erudite issue in coelenterate phylogeny, a topic to which he had made several contributions. In my youthful naïveté, I expressed frustration that we would never know the answer. Firmly but gently he pointed out that the significance and usefulness of debate in evolutionary matters lies, not in "getting the answer," but in the continual reevaluation of old data, the questioning of old ideas and assumptions, and the incorporation of new data. I happen to disagree with the punctuation model but, in confirmation of the sage advice I received a quarter of a century ago, I have gained a great deal from considering the arguments that have been posed pro and con. One should not miss the opportunity to explore and appreciate the latest blooming in the desert of dogma.

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Erratum: In the report "Cloud droplet deposition in subalpine balsam fir forests: Hydrological and chemical inputs" by G. M. Lovett *et al.* (24 Dec., p. 1303), two errors appeared in Table 2 on page 1304. The cloud deposition of SO_4^{2-}, incorrectly reported as 275.8 kg ha^{-1} $year^{-1}$, should have been 137.9 kg ha^{-1} $year^{-1}$. The percentage of the sum contributed by clouds, reported as 81 for SO_4^{2-}, should have been 68.