serious shortcomings of this approach have since been frequently pointed out (*4*). The other proposed method was that of Hennig (*5*) who said that one should not classify by establishing groups of organisms by similarity but that one should simply recognize branches of the phylogenetic tree. Again and again in his writings, Hennig warns against using degrees of similarity or difference. Hence, he clearly based his ordering system on one criterion only, that of being on the same branch of the phylogenetic tree. Naturally, species on a given branch have certain characters in common, so-called synapomorphies, and are similar to each other in that respect. However, most branches are highly heterogeneous, and the stem groups of such branches are often far more similar to stem groups of sister taxa than to the crown groups of their own particular branch (clade). Thus Hennig's scheme clearly violates the second of Darwin's criteria. In order to discriminate the methodology which uses two criteria from the newly proposed phenetic and Hennigian systems, it is now necessary to refer to the two-criteria methodology as Darwinian classification. It has, of course, Padian notwithstanding, nothing to do with Linnaean downward classification.

Both Darwinian classifications and Hennigian systems are valid approaches to ordering. If one is only interested in phylogeny, then, by all means, one should use the Hennigian system. But, as Darwin has said so rightly, phylogeny alone does not provide a classification. The Darwinian approach which groups together similar organisms is indispensable for ecological researches, and furthermore, as pointed out by several recent authors (*6*), it provides more information than the Hennigian ordering system.

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Padian makes the valuable points that Linnaeus' system of classification (*1*) has nothing to do with Darwin's systematic efforts and therefore that "Hennigian (cladistic)" systems of classification should not be contrasted with something called "Darwinian (Linnaean)." The record needs to be set straight, however, regarding Padian's argument that Linnaean classification is a vapid formalization of Aristotelian taxonomy with no underlying philosophy. Although Linnaeus' system had long been replaced by better ones by the time Darwin did his taxonomic work (which was much more limited in scope than Linnaeus'), Linnaeus, like Darwin, was interested in the origin of new forms, which is why he became fascinated with hybridization. The problem of finding a natural system, reflecting affinities of genera and orders, occupied Linnaeus already in the 1730s (*2*). In his *Philosophia botanica* (*3*), Linnaeus proposed 63 "natural orders" of seed plants, largely corresponding to our families. A diagram [reproduced in (*2*)] based on lecture notes by one of Linnaeus' pupils depicts the affinities among these orders as perceived by Linnaeus. It is remarkably similar to the phylogenetic trees in cross section popularized by R. Dahlgren and his students in the mid-1970s [for example, (*4*)]. In the spirit of Aristotelian logic, Linnaeus searched for the essence of a species, for example, in its flower characters, instead of using overall similarity; yet there was room for variation, as we can perceive from the breadth of his species concept and through statements in the *Philosophia botanica* (*2*). As B. Jonsell has suggested (*2*), Linnaeus may even have had some influence on the development of modern ideas on evolution through his work on the Economy of Nature (*5*), which discusses warfare (competition) between species. Darwin read Linnaeus, and while *Homo sapiens* L. heads the table in the *Systema Naturae*, he is immediately followed by the monkey.

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Corrections and Clarifications

In the article "Genetic testing set for takeoff" by Rachel Nowak (News & Comment, 22 July, p. 464), Helix was cited as the source of information for the accompanying table describing genetic testing (p. 466). The information in the table regarding mutational mechanism, cost, and market size came from sources identified by Helix who were contacted separately.