

LETTERS

sented as a law, in a mathematical format. This is not a flaw of the theory, but rather an idiosyncrasy of the field.

A theory that cannot explain significant data sets published in the peer-reviewed literature inevitably falls out of favor and is replaced by a better theory. So far, evolution has repeatedly, since the mid-19th century, stood the test of time. Creationism, which is not a credible theory, should not be taught in our classrooms. Evolution must be taught, along with the data that both support and contradict the theory. A robust theory has nothing to fear from contradictory data; on the contrary, explaining confusing data strengthens a theory and leads to advances in science. Giving students all the facts will allow them to see the excitement and power of the scientific method.

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German Universities

Wolfgang Zeman writes (Letters, 23 Aug., p. 1029) about German universities having "large sums of public funds to provide [to] the students," which is "a hefty subsistence." However, only a small group of students in Germany obtains this help. The great majority see nothing of these funds because of the severe criteria one must meet to receive them. The long period that German students are in the university is probably because many must work while studying. Also, Germany does not have more students than other countries; the percentage of students in the population is about the same as elsewhere. The "egalitarian concept" is right, because everyone has the right to study. So it was progress when tuitions were abolished.

Zeman also states that "medical schools were opened to anybody," but since ancient times every German student has needed to pass the *Abitur* or a comparable exam to enter any university.

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Stuart Brody (Letters, 23 Aug., p. 1029) incorrectly implies that German scientific faculties from 1933 until after World War II were made up mostly of "lesser talents" or opportunists. It is correct, however, that some formerly Nazi professors were wrongly put in office under the post-World War II government of Konrad Adenauer. In fact,

most scientific faculties at most German universities seem to have tried to protect themselves and their subject matter from political interference as much as possible. The ability to do this, and success at it, varied. It was probably most difficult in biological sciences, because the Nazis believed in a biologicistic reductionism. As to whether good science was done, although German science was clearly substantially and severely weakened by the expulsions, there seems to have been a continuity of scientific tradition among those scientists remaining. The prejudice that only under democratic-republican forms of government can good science be done has a long and honorable heritage going back at least to David Hume. But it is that prejudice which led politicians in the United States to believe in 1945 that they could keep the secrets of atomic weaponry from the Russians.

Finally, Adolf Hitler was never "installed by elections" or elected in any way. In fact, in the last election (6 November 1932) before Hitler became chancellor (30 January 1933), the Nazi party actually lost votes and seats in parliament from their previous high the preceding July. While, after the November elections, they were the largest party in the Reichstag, the communists and the social democrats between

them controlled far more votes. Hitler was appointed chancellor by the aged president Paul von Hindenburg, influenced by his son Oskar and by former chancellor Franz von Papen. In March 1933, after being in power for 6 weeks, Hitler engineered another election, and even then the Nazi party failed to obtain more than 50% of the vote.

In making historical points, scientists need to treat historical facts with as much respect as they give to scientific facts.

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Letters to the Editor

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