in its pages? Indeed there must be "truth in advertising, even for science projects," as Voss and Koshland propose. We would go further: There must be truth in advertising, even *against* science projects.

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*Response*: When the particle physics community set forth its SSC plans in 1984, the Central Design Group advertised a price tag of between $2.7 and $3 billion [B. Schechter, *Phys. Today* **39**, 29 (April 1986)]. This is the figure that the SSC's promoters used to sell the project and build its momentum. As for final cost, there are no grounds for confidence that the SSC's cost escalation would have stopped at even $12 billion. In regard to operating costs, note that the SSC was offered as a qualitatively different endeavor, beyond anything tried before. A simple extrapolation from Fermilab to the SSC is misleading. We stand corrected on the figure for the LHC's cost, which still leaves it a good deal cheaper than the SSC. Far from expressing indifference to the "elementary nature of particles," our editorial supported high energy physics as an international effort, in large part because of the extraordinary cost of its instruments.

*—David F. Voss and Daniel E. Koshland Jr.*

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## Mathematical Development and Language

A study of ours, featured in Random Samples of 29 October (p. 651), suggested that the faster pronunciation of Chinese number words relative to that of English number words was one factor leading Chinese kindergartners to use more sophisticated counting strategies to solve simple addition problems than their American peers, and therefore provided the Chinese children with an early edge in basic arithmetic (*1*). Mary S. Erbaugh (Letters, 24 Dec., p. 1957) suggests that our conclusion was not justified because numbers take longer to pronounce in Japanese and Russian than in English, yet Japanese and Russian children outperform American children in mathematics. Erbaugh is absolutely correct that children in Japan and Russia substantially outperform American children in mathematics. However, mathematical development is influenced by a confluence of factors, including instruction and cultural attitudes, as well as some linguistic factors (*2*). Articulation rates for number words would only be expected to strongly influence performance on tasks that involved number counting, such as using counting strategies to solve simple arithmetic problems. They would not be expected to strongly influence performance on other types of mathematical tasks. Even for those items where number word pronunciation rates might be important, overall exposure to these items will probably be the best predictor of cross-national achievement differences in the long term. We suspect that the relatively poor mathematical development of American children is most strongly related to the low valuation placed on mathematics by American culture (*3*). Cultural values influence the quality and quantity of children's exposure to mathematics at home and at school. The linguistic influences we focused on appear to be one influential factor, but we do not believe they are the only one, nor did we say so in our study.

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1. D. C. Geary *et al.*, *Cognit. Dev.* **8**, 517 (1993).
2. D. C. Geary, *Children's Mathematical Development: Theory and Application* (American Psychological Association, Washington, DC, in press).
3. H. W. Stevenson and J. W. Stigler, *The Learning Gap* (Summit, New York, 1992).

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## Smallpox Virus Stocks: More Votes

David Baltimore's letter about smallpox virus stocks (7 Jan., p. 13) is an excellent example of the scientist's approach to fundamental ethical and social policies.

For years there has been gentlemanly, and half-muted, debate among scientists concerning whether or not to destroy the last remaining cultures of the smallpox virus. This might seem to be a simple scientific matter, but it is of the highest ethical significance. Suppose that the debate had taken place in 1940, and the United States had destroyed its last virus. What might

Hitler have done? Or, tomorrow, what might Zhirinovsky do if he comes to power? This is not a matter for gratification of scientific curiosity, or for melancholy musings over the last jewel on Earth. Where might a Commander of the Faith, a Dr. Strangelove, or a lowly technician, concerned about population explosion or his loneliness, have the power to kill or disfigure 500 million people by the simple act of infecting one single person (himself?) with smallpox virus? Who knows? The person most ready to do further studies with it might be the first to die.

This is not a matter for debate. Destroy the virus, now.

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If it is decided to destroy the smallpox virus stocks, I propose that it be done on 14 May 1996, the 200th anniversary of Edward Jenner's immunization of Jim Phipps. I believe that Jenner's experiment has led to the saving of more lives than any other single event in the history of humankind!

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### Corrections and Clarifications

In the Random Samples item "HHMI cuts cardiologist loose" (26 Nov., p. 1369), press reports of the controversy surrounding Bernado Nadal-Ginard, chief of cardiology at Boston's Children's Hospital, were inaccurately summarized. There has been no accusation that $4 to $5 million is "missing" from a retirement fund he oversaw. According to press reports, the state probe into the fund resulted because colleagues of Nadal-Ginard thought he had cashed out an unusually large amount from the fund in 1992.

The name of co-author T. Tsuda was misspelled in the 28 January technical comment "Alzheimer's disease and possible gene interaction" by P. St George-Hyslop *et al.* (p. 537) and on page 447 of the table of contents in the same issue.

In the Random Samples item "Processing the new Coke fiasco" (3 Sept., p. 1271), Samuel Leven's name was misspelled.