admissions process itself: Some colleges employ such high standards of admissions that even the poorest performers do not "deserve" low grades. (A much better solution to this problem, it seems to me, would be for colleges to abandon the use of local, relative grading schemes and to employ comparable, absolute standards of performance.) In short, rather than obviating the need for evaluation, the use of an open or lottery system in admissions should create a need for more elaborate and improved methods of measuring the student's performance.

The surest way for colleges to avoid any responsibility for *educating* the student is to employ selective admissions: If only the brightest students are admitted at one end, then the high quality of the final product at the other end is virtually guaranteed. What happens in between—the quality of the educational experience itself—need not be of concern since the secondary schools are suitably impressed with the college's high admissions standards, and the employers and graduate schools are suitably impressed with the "high quality of the graduate."

My impression is that professors support selective admissions because they feel that bright kids are more fun (and easier?) to teach. Alumni, legislators, faculty, administrators, and probably many students support it because having only bright students enhances the prestige of the institution. Furthermore, the secondary schools support the track system that results from selective admissions because they see it as a reward or incentive system for motivating their students: "study hard so you can get into a 'good' college." While each of these arguments may have merit, none really has much to do with the *educational* mission of the college. If the principal function of the college is to educate, then the admissions process ought to be designed to sort the students so as to maximize their educational development. Currently, we are woefully ignorant as to how best to do this sorting. If nothing else, even a partial lottery would permit us as scientists to explore the possible advantages of many student-environment combinations other than those that result from current selective admissions policies.

ALEXANDER W. ASTIN
American Council on Education,
1 Dupont Circle,
Washington, D.C. 20036

Element 104: What's in a Name?

In regard to the reported hassle between Berkeley and Dubna physicists over the discovery and nomenclature of element 104 (5 Dec., p. 1254), it seems to me that the Berkeley group would have been wiser and more mature in suggesting that element 104's name remain kurchatovium, the Soviet choice, and in congratulating the Dubna group for *envisioning,* albeit mistily, the element and in turn allowing themselves to be congratulated for *proving the element's existence.*

Arguments over nomenclature are often children's arguments, colored with pettiness, jealousy, or politics. To solve the patronymics problem among the nuclear physicists, I would suggest that each reputable nuclear physics group around the world throw into a world hat the names of two persons deserving the honor of having an element named after them, have a supervised drawing (after eliminating duplicates), and thereby determine the name and the order of naming of any newly discovered element.

L. A. PAGE
National Animal Disease Laboratory,
U.S. Department of Agriculture,
Post Office Box 70, Ames, Iowa

Civil Defense

I wish to protest against the political tone of the review (28 Nov., p. 1131) of the book *Survival and the Bomb—Methods of Civil Defense.* As its title indicates, the book is mainly concerned with the possibilities and methods of civil defense, and these subjects—the ones which justify the review of the book in *Science*—are dealt with very cursorily by the reviewer. As a matter of fact, he disclaims being an expert on them. Instead, the reviewer devotes more than half his discussion to the first chapter, dealing with the rationale of civil defense. The purpose of the review seems to be to demolish the conclusions of this chapter.

It would be inappropriate to attempt, in *Science*, a detailed refutation of the reviewer's objections to the first chapter (written by the undersigned). I may be permitted, though, to make two points, the first general and the second specific. The first point is that practically all of the reviewer's objections to civil defense apply equally well to all defense measures. In fact, if we listen

to Kosygin, we learn that they apply *less* to civil defense than to most other defense measures. He said, in the early days of the missile defense debate, "I believe that defensive systems, which prevent attack, are not the cause of arms race. . . ."

The specific point which I wish to make expresses surprise that the reviewer considers it incredible that the U.S.S.R. would use nuclear blackmail to force us to evacuate Berlin or to withdraw our protection of the Philippine Islands, and thus risk nuclear retaliation, but he does consider it possible that *we* might risk nuclear retaliation by interfering in Eastern Europe. As the chapter criticized by the reviewer points out, even when we had a monopoly of nuclear weapons, and no risk of retaliation was involved, we stood by when Czechoslovakia was occupied soon after the conclusion of the Second World War, when the Hungarian peace treaty was broken, Berlin was blockaded, and so on. If, in the 1860's, a book on railroading was to be reviewed, would the editors have chosen someone unfamiliar with railroading methods but passionately opposed to rapid transportation?

EUGENE P. WIGNER
Princeton University,
Princeton, New Jersey

Open Inspection of CBW

An open letter to President Nixon has been signed by 35 participants in the Conference on Cellular Aspects of Growth and Differentiation in the Nervous System. In it, we urge members of the academic and scientific professions to join us in requesting (i) prompt deployment of the President's directive concerning destruction of offensive chemical and biological warfare weapons, (ii) open inspection of governmental defensive CBW research facilities, and (iii) rapid unclassified publication of defensive CBW investigations. Strong support by scientists for these requests will undoubtedly influence public opinion and the news media toward advocating the destruction of existing CBW stocks. Also, we hope that open publication and inspection of CBW laboratories will provide progress toward multilateral disarmament.

HARVEY R. HERSCHMAN
20774 East Hillside Drive,
Topanga, California 90290