3) The grade criterion in graduate should not be the object of our concern; rather we should be concerned with selecting those individuals who will make significant contributions to their field.

These points do indeed represent problems to consider in the prediction of graduate school performance, but clearly they are problems that exist whether we use the college GPA as a predictor, or standardized tests (which, it should be obvious from my affiliation, would earn my endorsement), or any other predictor. It does appear that Schagrin is aiming at the wrong target.

So much for misdirected criticism. But what distresses me most about Schagrin's letter is his willingness "to use the number of hairs on a student's head divided by his weight. . . if that were to be an effective predictor." The prediction of academic performance involves moral and ethical responsibilities as well as statistical precision, and to adopt a blindly empirical approach to prediction, as Schagrin suggests, without regard for its social consequences is to turn our backs on these responsibilities. Let's come right down to it: If skin color is a good predictor of academic performance—and the purely empirical results observed by many investigators indicate that it is—should it therefore be used to select graduate school students?

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Gaps in the Graduate Training of Students from Abroad

I should like to add to the sensible letter by R. R. Ronkin (3 Jan.) regarding the problems of foreign Ph.D. students in the United States and their subsequent work in their home countries. As an American teaching abroad, I have had some experience placing students from the University of Malaya in universities in the United States, Canada, Britain, and Australia. The three specific areas of supplementary training suggested by Ronkin are certainly well taken: identification of research problems, maintenance skills, and basic administrative techniques.

Also, I have found that a student is occasionally awarded a fellowship to work in an advanced country which stipulates study in an area different from that desired by the student and by his own institution and homeland. Recently two students in our school of biological sciences were awarded scholarships, one to a university in country A, and the other to a university in country B. The awards should have been reversed. Country A required study in a field in which the first student was unfamiliar, and country B made the award for study which was unsuited to its grantee but would have furthered the work of the first student. These awards were both generous and difficult to secure. For those reasons, each student reluctantly agreed to accept them, even though the studies were different from their original work, and different in fact from that desired by their home institution.

Such anomalies are probably accidental, but they reflect other oversights made by the awarding committees of universities in advanced countries. Why, for example, do they insist that these students pursue highly applied training programs, even including those superior students who show promise of becoming skilled and independent research scientists? Developing countries need technicians and technologists, but also they need a superstratum of scientists who can work in pure science.

To cite one example, it is virtually impossible to find broadly-trained ecologists who can cope with all the aspects of land-use, as well as agriculture, in developing countries. There are great gaps between our knowledge of forestry, forest ecology, and forest resource management in the North American or European regions and its application to tropical rain forests. A newly-trained forester cannot uncritically apply in his tropical homeland, for example, the "monoculture" system which may work well in temperate areas, but is not necessarily suitable for the tropics. We need here more broadly trained and creative scientists who will begin original research instead of assuming that his knowledge of the management of pure stands of conifers, for instance, is all that is needed in order to utilize and preserve the dipterocarp forest, which is rich in species, but with an ecology largely undetermined.

Money is not the only requirement of the smaller and poor countries; their students must be trained to fill these very special technical and scientific basic needs.

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