speaking countries, where consequently the number density of astronomers is much higher than in most other places. Scientific productivity is a function of number and density, and it is a testable proposition that more than half of the advances in astronomy come from Anglophone institutions. The triennial reports of IAU commissions are a good place to see this. That is neither chauvinist nor imperialist, only observation. Certainly chauvinism and imperialism exist in astronomy, but we do not have a monopoly on at least the former of these.

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Pecker's point is well taken or—as he might say—à propos. Too many American scientists remain ignorant of much important work done in their fields in other countries and published in languages other than English. But I don't think this ignorance is deliberate or stems from a feeling that anything worthwhile would be published in English. It is rather due to the inability of most younger American scientists to understand any language other than English and the unavailability of reliable translations of foreign journals. . . .

Pending a reversal of the present trend, a reemphasis on knowledge of foreign languages as a prerequisite for admission to graduate work and the availability of reliable scientific translation services to personnel at American universities and industrial laboratories would seem to be the only key for unlocking the wealth of useful information available from scientific literature published in French, German, Spanish, Japanese, and other languages. Scientific and technical translation requires multiple skills and a broad technical and cross-cultural background. Some noted scientists have engaged in it at times in their careers, and it would seem to offer a worthwhile occupation for people with the appropriate linguistic knowledge who have retired from active careers in the sciences and engineering.

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. . . The language and citation problem could easily be solved if scientists around the world recognized that English has become not only truly international (and probably more so than any other language in the history of the world) but also irreplaceable, since many modern scientific terms are in it. A true universality of science can be achieved only when all scientists learn to communicate in one language. For the present this language is English.

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Opportunities for the Handicapped

I commend Shirley M. Malcom on her recent editorial (9 Oct., p. 137) voicing protests against cuts in the National Science Foundation programs designed to increase participation of minorities and women in science and technology. As head of the AAAS Office of Opportunities in Science (OOS), Malcom must be well aware of the present deficiencies in such educational programs for these disadvantaged groups. There is an equally serious need for support of programs to increase opportunities in these same areas for handicapped students, who are also included in the OOS programs. Physically handicapped students encounter problems of access into the professions similar to those of minority students, with barriers to quality education in science and mathematics beginning in the early grades. Let us broaden our perspective and recognize the need to protest cuts in programs for developing the capabilities of all disadvantaged groups that are covered by activities of the OOS.

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I would like to add my concerns to those expressed by Malcom in her editorial of 9 October. The unifying theme of the programs for women and minorities at the National Science Foundation has been the belief that there was a great deal of potential talent being overlooked or discarded simply because certain segments of our population are put into cruel and vicious stereotypes. It was thought that perhaps something could be done to devise methods of tapping this scientific resource.

It is not an easy task. Along with investigating and trying to identify the sociological barriers that must be addressed there is the additional burden of developing programs and facilities capable of furnishing quality science education once individuals break out of the stereotype.

The Physically Handicapped in Science (PHIS) program was one of the minority programs at the National Science Foundation from 1977 to 1980. It was a modest program financially, but its purpose was to encourage physically handicapped students to consider science and science education as possible career options. Ultimately, once the attitudinal barriers had been identified and overcome, a small, self-sustaining pool of science as a career would have been created. Students from this pool then could have fit into existing educational programs and facilities with minimum perturbation. The PHIS program taught us that stereotypes could be broken and that "dealing" with handicapped science students was not distasteful or impossible. Unfortunately, it could not survive the recent budget cuts. It is disheartening to consider that the PHIS and other programs for minorities were cut, not because they were not attaining their goals, but rather because priorities have changed. The priorities of this Administration are centered on technology and defense. Programs to further develop the quality and quantity of the scientific work force are not deemed important.

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The NSF programs referred to in my editorial were those created in response to the Equal Opportunities in Science and Technology Title of the fiscal year 1981 NSF Authorization Act. Minorities, defined for these programs, are those racial/ethnic minorities who are underrepresented in science and engineering careers. Other groups have serious problems of access to science, particularly the physically disabled. Addressing the concerns of the physically handicapped in science continues to be a major focus of the Office of Opportunities in Science. I share the concerns of the authors of these letters for the loss of NSF education programs and for its effect on those seeking access to science—handicapped persons and all others who could, given the opportunity, contribute to the advancement of science.

—SHIRLEY MALCOM

Erratum: In his work probing chromatin with DNAse I, Harold Weintraub (Research News, 13 Nov., p. 775) collaborated with Mark Groudine of the Hutchinson Cancer Center. He did his work using S1 nuclease with Alf Larsen of the Hutchinson Cancer Center, and his work on transformed cells in collaboration with Thomas Graf and Hartmut Berg of the German Cancer Research Center in Heidelberg.

Erratum: In the report "Intraventricular calcitonin inhibits gastric acid secretion" by J. E. Morley *et al.* (6 Nov., p. 671), the bars in Fig. 2 were incorrectly labeled. The two largest hatched bars on the right of the figure should have been labeled TRH, the two smaller hatched bars, TRH + cal.