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Linguistic diversity in a new agenda for equity in science

Ivan Couée^{a,1}

Graves et al. (1) have presented a thorough analysis of how inequalities that have historically developed and are pervasive in science affect “racial, ethnic, gender, identity, ability, and other types of diversity,” with negative effects on minority scientists themselves, on the science community as a whole, and eventually on the quality of science. They argue that there is “no agenda-free science” and that the organization of science may reflect hidden or biased agendas (1). On that basis, they advocate an agenda that would transform the access and success of minority scientists in the different fields of science (1). While they explicitly mention a great variety of minority situations that should be taken into account in this agenda for science equity, the issues of lesser-used languages, of linguistic minorities, and linguistic inequality in science are completely left out (1).

On one hand, many good reasons may be invoked for the practicality and usefulness of a common-language science world, as occurs today with English as a result of numerous historical, sociological, and cultural factors. On the other hand, the huge scale of English language use in the scientific literature indicates that issues of linguistic diversity constitute a blind spot in science. However, the pressures and threats on the diversity of the ~7,000 extant languages and their associated cultures are alarming (2, 3), with a vulnerability that may be greater than that affecting biodiversity (3). Moreover, the dynamics of that vulnerability (2–5) involves at least in part limitations of educational potential, limitations of cultural recognition, barriers to progress and success, and psychological situations of shame and self-blame, all of which feature as major drivers of the spread of minority inequality in science (1).

For the same reasons and same constraints as those described by Graves et al. (1), the extreme degree of linguistic

inequity that prevails in science is bound to affect the diversity and the quality of science as well as public trust in science. Moreover, this linguistic inequity is bound to exacerbate all of the other kinds of racial, ethnic, and cultural inequities. Finally, the situation of English language hegemony implies that linguistic inequity in science may have far-reaching consequences on a large proportion of world population, as it may affect not only the speakers of small, endangered, and less-commonly-used languages but also the speakers of numerous commonly used languages.

I wish to argue that the agenda for equity in science advocated by Graves et al. (1) should include measures and incentives that promote linguistic diversity in the access to science education and scientific research and in the prestige that is associated with the science endeavor and science publications. Moreover, their proposals (1) may well be relevant to the promotion of linguistic diversity in science. As a readily achievable example, universities and research organizations could foster inclusive outreach in lesser-used languages, whereby scientists hailing from minority language communities could highlight their participation in both the global science world and the linguistic diversity world.

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