Franz de Waal just wrote an interesting post at 3 Quarks Daily. He is currently in Japan to promote his latest book The Age of Empathy and he writes about cultural differences among scientists: Although Japanese scientists were, he says, far ahead in the '60s, their research was not taken seriously by their Western colleagues:

"Kinji Imanishi was the first to insist that observers give their animals names and follow them for years so that they understand their kinship relations. His concepts are now all around us: every self-respecting field worker conducts long-term studies based on individual identification, and the idea of cultural transmission in animals is one of the hottest topics of today. But that is now: at the time, all Imanishi got was ridicule.

In 1958, he and his students toured American universities to report their findings. They encountered a great deal of skepticism about the ability of mere humans to distinguish between all those monkeys, which all look alike. Weren't the Japanese grossly overestimating the social lives of their monkeys, and who said that monkeys could tell each other apart even if human observers said they could? Also, what about the humanizing inherent in giving names to animals: hadn't they heard that scientists need to keep their distance?"

De Waal points out the role of linguistic factors:

"The lack of credit for the Japanese approach (most treatments of animal culture either forget to mention Imanishi or, worse, claim that the studies of potato-washing were naive and ill-conceived) can be partly attributed to the language barrier. It is just hard for non-English speakers to make themselves heard in an English-speaking world.

Since English is not my native tongue, I am familiar with the effort involved in writing and speaking another language — even though my native Dutch is probably the closest another language can come to English. Scientists from other places have to make ten times the effort. English itself is of course not the problem: It is not better or worse than any other language. The problem is the attitude of native English speakers.

Naturally, you speak your own language faster and better than any other. This can make it impossible for those who are not native English speakers to keep up at international meetings. It is worse on those occasions when an English speaker doesn't pull any punches while debating with a scientist whose English is poor.

I have seen it happen often. The English speaker rises from the audience, articulates a penetrating question, sometimes with a joke mixed in, and barely takes the time to listen to the clumsily phrased reply of his opponent. Since English speakers dominate every discussion, they form a class of great minds strutting around in the secure knowledge that no one will challenge them."

When I read de Waal's post, I could not help but agree with him. It is tough being a non native speaker in the scientific world. Science is about competition: You compete for people's attention, for grants, for publications, etc. and you always find yourself at a disadvantage with English speakers (of course, I should add that since my own native language gave to English half of its vocabulary – and the most abstract part – I am not the most disadvantaged). And of course, the bigger is the role of language, and the bigger is the handicap. As a matter of fact, the majority of French psychologists and almost the totality of French anthropologists still publish in French. But the phenomenon also exists in "harder" science. I was told recently by a friend of mine, that French biologists publish fewer reviews, stick more to their models or their statistical analysis and rarely make use of any rhetoric trick.

As a non native English speaker, I have always felt that this situation was unfair. Of course, I know, it's not the fault of English-speaking people if their language plays this pivot role. There are similar situation in other domains such as sex, race or any kind of handicap: Advantaged people are not responsible for their advantage and therefore they do not have to compensate. However, there is another argument developed by Louvain philosopher Philippe van Parijs:

"Al and Bo grew up learning different mother tongues. At some later stage, Bo learns Al's, while Al does not learn Bo's. They can now communicate with one another. Not quite on an equal footing, of course-Al tends to have the upper hand in any argument they might have with one another and in any competition in which they might have to take part using the shared language-but nonetheless with significant benefits, both material and non-material, accruing to both. So far, therefore, so good enough-except perhaps that the cost of producing this benefit, though enjoyed by Al with greater comfort and with the bonus of some pleasing by-products, is borne entirely by Bo. Is this nothing to worry about, as Bo freely chose to learn Al's language? Or is it fair, on the contrary, that Al should make a substantial contribution towards this cost and, if so, at what level?"

What about science? There are probably twice as many non native English speakers in science as native speaker. This means the minority of native speakers enjoys the benefits of working in a much bigger scientific community without paying the costs of building this community (except may be when they struggle to understand their foreign colleagues….). Of course, one may replies that no one force non-English speaker to learn English. But is that simple? Van Parijs take the following example (which I really like, having lived for a while in shared houses).

"Some years ago, I spent a number of months, together with my family, living with my father-in-law. After a while, one feature of our common life started bothering me: as soon as any amount of dust or crumbs became visible, my father-in-law got the vacuum-cleaner out of the cupboard to get rid of them. As a result, all the cleaning was done long before we reached the threshold which would have triggered me into doing the cleaning myself, and my standards of cleanliness were more than met without my ever doing any work for it. No power relationship or altruism was involved, or at least needed to be. Yet the structure of the situation was such that I systematically benefited from my father in-law's toil without contributing myself in any way to the public good he produced. Even on the generous assumption that I was not responsible for any of the crumbs, this seemed unfair to me, and to restore my peace of mind (and enhance the probability of remaining welcome?) we soon struck an explicit deal involving some compensatory performance-toilet cleaning, if I can trust my memory."

I do not know if linguistic justice could be applied in science and whether it would be a good thing to do. But I am curious to know what readers, both English native and non native speakers, think about this.

(Thanks to Jean-Baptiste André for drawing my attention to de Waal's post.)