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Genomics and taxonomy for all

Principles of access to public and private databases are often contentious, and a proposal in this issue will no doubt spark more debate. Meanwhile, Nature is taking a small step towards a database for taxonomists.

rguments about access to published data reached a peak of intensity when the draft sequence of the human genome was published in February last year. They resurface from time to time, and this week Ari Patrinos and Dan Drell make the case for allowing industry to restrict access as a trade-off for making valuable data publicly available (see page 589). Increased public access to private data is desirable, but Nature continues to believe that restricted access to data that we publish is in general inappropriate (see *Nature* 409, 745; 2001), particularly where public projects and databases exist. But it is surely right that the research community should consider these alternative proposals, and we encourage responses.

Many areas of biology have community databases and others are being developed for microarrays and brain imaging, for example. However, there is one core area of biology that is too often overshadowed but that also needs to take steps to provide greater access to its immense store of knowledge and annotation: taxonomy, the formal nomenclature and description of organisms.

Without taxonomy, nobody would be sure of the identity of the organisms they were interested in, or whether they belonged to the same or different species as the organisms studied by others. Without taxonomy, there would be no meaningful genome projects, and medical science, for one, would be seriously compromised. Without taxonomy, there could be no systematics, the related but distinct business of arranging species' names into an order that reflects their evolutionary relationships. Without taxonomy, we could not begin to understand biodiversity and the related issue of conservation. For a variety of reasons, some of them self-inflicted — recently explored

by Charles Godfray (Nature 417, 17-19; 2002) — taxonomists have a poor image among other biologists. Taxonomy is starved of funds, whereas the arms of biology that rely fundamentally on it attract both money and publicity.

The great fragmentation of taxonomic publication has contributed to taxonomy's parlous state. Taxonomy would benefit from a highprofile, centralized repository of nomenclature. Nature is now taking a small step towards that end, requiring that authors of papers featuring new taxonomy should file this information with a recognized institution. We have set up such an arrangement with the Linnean Society of London, which is the oldest body in the world concerned with taxonomy, and which maintains the library and collections of Carl Von Linné (Linnaeus), who founded the modern system of taxonomy in the eighteenth century. From 1 August 2002, the authors of any paper containing the formal nomenclature and description of species that has been accepted in principle by *Nature*, shall be required as a condition of acceptance to send a preprint to the Linnean Society of London, Burlington House, Piccadilly, London W1J 0BF, UK or an electronic version by e-mail to john@linnean.org. Deposition shall be voluntary for papers accepted in principle before 1 August 2002.

Another ill that besets taxonomy is the inability of taxonomists to forge united initiatives. This is why our action as a journal is unilateral. Nevertheless, it is our hope that other journals will adopt the same policy, encouraging the future development of an instantly accessible electronic archive with agreed standards. And, as with genome sequence databases, if several recognized institutions decide to host taxonomy databases that *Nature* can support, so much the better.

Remove barricades! Preserve culture!

Congratulations to French publications for their pragmatic approach to language. Other institutions should follow suit.

resident John F. Kennedy struck the right note when in 1963 he famously endorsed freedom by declaring "Ich bin ein Berliner". But foraying into a foreign language carries its perils, confronted daily by many of the millions of scientists for whom English is not the mother tongue. The English lingua franca of science is often resented as Anglo-Saxon cultural imperialism; a recent cartoon in a French newspaper summed up this sentiment portraying George W. Bush on his European voyage as "Ich bin ein Hamburger".

Every language is rich, with unique and untranslatable treasures of vernacular and elegance. No surprise that the British royal family continues to express its motto "Honni soit qui mal y pense" in the language of Molière rather than the clumsy translation "Shame to him who thinks ill of it". Or take Petits Débrouillards, a scheme to teach French children hands-on science. It could translate as 'little inventors' or even 'little smart-arses', but English cannot capture its sense of bricolage encapsulating simultaneously notions of backyard science, improvisation and invention.

Leaving aside its sometimes farcical attempts to prevent the anglicisms that are part of natural gene flow between languages, the Francophone world — 160 million people in 49 different countriesin particular deserves félicitations for its historic determination to preserve its language and culture. Is it now capitulating? Last month, Le Monde created une tempête by publishing a weekly supplement of articles from The New York Times and, s'il vous plaît, in English. This week, the Académie des Sciences decided that its Comptes Rendus would in future give "a preference" to articles in English (see page 581). But these moves are simply *pragmatique*. *Le Monde* rightly argues that its supplement gives readers a different perspective on world events, that the writings of *The New York Times* journalists are best expressed in their original language, and that over half its readers understand English. The academy is simply acknowledging *la realité* that using English is the only way to get read more widely.

Such lingual *pragmatisme* should not displace expressive and subtle discussion about science in native languages. But it needs to permeate all research organizations wishing to attract international talent. It is encouraging that many of Europe's young scientists now speak two or more languages. The British are the continent's laggards: over two-thirds speak pas un mot d'une langue étrangère. Irritatingly to non-Anglophones, UK and US scientists don't suffer for such philistinisme: the international spoken language of science is English, however broken.