nature

11 February 1999 Volume 397 Issue no 6719

Ill-advised 'freedom' of scientific information

The sharing of data by researchers ought to be encouraged. But a compulsion to release raw data and notes in current US openness laws is the wrong way to achieve it, as is a proposed amendment.

The principle of granting maximum public access to government records, as embodied in the Freedom of Information Act (FOIA), is a sound one which has strengthened democracy in the United States, and from which secretive regimes elsewhere in the world have much to learn. However, a new law, passed last October, that would shed similar light on scientific records, threatens to undermine academic research, while contributing nothing to open government.

Like so many of Washington's finest ruses, the new legislation was passed in the dead of night, without hearings or outside consultation. Senator Richard Shelby (Republican, Alabama) had it quietly inserted into last October's unwieldy, 4,000-page omnibus spending act, as a prerequisite for the funding of the White House's small but powerful Office of Management and Budget (OMB). The sponsors of the measure were apparently concerned at the time about the unwillingness of researchers at the Harvard School of Public Health to release raw data behind an epidemiological study of the health effects of small carbon particles ('particulates'), which was used by the Environmental Protection Agency as a basis for regulation.

The act itself says that OMB should amend an existing circular to ensure that "all data" produced under a federal research grant be made available to the public through the procedures established under FOIA. That set off alarm bells in the scientific community, which feared that FOIA requests might be used to obtain scientific data even before publication of research findings — opening the door to the merciless harassment of scientists by hostile third parties.

Last week the OMB issued a draft amendment that would make data accessible under FOIA only after research findings had been published and used by the government "in developing policy or rules" (see page 459). The OMB proposal still casts a wide net, however. A great deal of scientific research is arguably used by the government in that way. The sequestration and re-interpretation of a scientist's notes and computer records after publication may prove to be only marginally less disruptive than it would have been beforehand. Some scientists will avoid controversial fields of endeavour, such as pollution-related research, if the controversy is accompanied by the threat of inquisitions into their records and methods by well-financed special interest groups. Patients and commercial partners may doubt that the exemptions allowed by FOIA will protect their privacy.

The proposed change would also pull the academic research enterprise more closely under the wing of the federal government. The US Supreme Court has properly resisted the notion that academics on federal grants are agents of government, or that they be subject to the bureaucracy which enables government departments to comply with laws such as FOIA. Such subservience to government would quickly stifle the freedom on which the United States has built its scientific strength. That factor seems to have been ignored by Shelby and Trent Lott (Republican, Mississippi), the leader of the Senate, in their rush to legislate.

Universities and scientific societies are hoping that by 5 April, when its public consultation period ends, OMB will receive a loud and clear message from the scientific community about its proposed rule. That message should be that the law needs to be repealed, while acknowledging a need for an enhanced availability of primary data. The development of mechanisms to achieve that, with the full involvement of the scientific community, holds far more promise than the draconian measure which has unfortunately been passed into law. □

Planetary persistence

Debate about labels can be both powerful and pointless.

So Pluto will not be counted among the asteroids and other second-class citizens of the solar system. After weeks of e-mailed arguments among planetary scientists and media reports that mostly milked the episode for laughs, the Small Bodies Names Committee of the International Astronomical Union (IAU) decided last week not to assign Pluto a minor planet number. The smallest of the Sun's nine planets is therefore spared the indignity of what would undoubtedly have been an ill-advised demotion.

The controversy's originator, Brian Marsden, has for years unsuccessfully tried to persuade fellow astronomers that Pluto should be counted as a minor planet. As director of the Harvard Smithsonian Astrophysical Observatory's Minor Planet Center in Cambridge, Massachusetts, he proposed that the upcoming designation of the 10,000th minor planet, whose cataloguing is the centre's responsibility, be given to Pluto — partly as an honour, and also to recognize that the icy planet just as properly belongs to a class of Trans-Neptunian Objects (TNOs) orbiting at the far reaches of the Solar System.

It was unfortunate that the proposal was erroneously linked in some press stories with the work of two IAU committees currently considering a numbering system for TNOs and the scientific definition of a planet, and even more so that some media began reporting that Pluto had already been downgraded. The community felt obliged to respond and, finally, IAU General Secretary Johannes Andersen slammed the door shut by issuing his own statement that the naming committee had squashed the suggestion.

From the beginning, most planetary astronomers never considered the matter controversial in a scientific sense, and will be happy to get back to work. Marsden appears contrite about his fruitless stirring. But his misjudgement was not scientific: the distinctions between Pluto and TNOs appear insignificant and need to be clarified. Marsden merely underestimated astronomers' proprietorial attachment to this lonely object. □