

French universities

Laying down the laws

A NEW law for the French universities and *grandes écoles*, the first since the "democratic" reforms that followed the troubles of 1968, is working its difficult way through the French Senate. Since the Senate is profoundly conservative, and the architect of the new law — minister of national education Alain Savary — is "profoundly liberal" (according to one of his advisors), the passage is proving stormy.

Moreover, all might have gone better if M. Laurent Schwartz, renowned professor of mathematics at the Ecole Polytechnique in Paris, had not seen fit to publish a few weeks ago a book with the provocative title *To Save the Universities* (by implication, to save them from Savary). This has armed senators with useful facts — but, say its detractors, it is misleading about the true nature of Savary's law.

The problem may lie more in what the law leaves out, and leaves undefined, than in what it puts in. Take the "selection" of students for example. Lecturers are often appalled at the size of unselected first-year classes; Savary would increase them, regarding the first year as "orientation". He abhors "selection". But because of the realities of space limitations at the universities another clause in the law allows selection to take place in the second year, as it does now. To find the room to avoid selection it would be necessary to create new para-university institutes, whose students are "selected" or "oriented" towards them; these are recommended by M. Schwartz, but their foundation is also implied by M. Savary and his law. The two sides, in this as in many cases, use different rhetoric but arrive at the same conclusions.

Another point at issue is the question of "decrees", and their relation to research. Schwartz wants to protect research; so does Savary. But Schwartz claims that Savary's law ignores the subject. In fact the law is about education, and the true place of research is to be defined in a forthcoming decree. The decree, (a law defined by government independently of parliament) will define the rights and duties of university staff and will, say ministry officials, put great emphasis on the role of research. A recent, interim decree appeared to increase the teaching duties of professors and lecturers greatly, and made no distinction between the two categories; but, says the ministry, the full decree on rights and duties will allow a professor or lecturer to trade off teaching duties against research or administration time, and since these vary among categories there will be an effective variation of teaching load. The real question now to be resolved, says the ministry, is who will decide, and by what means, who can trade teaching for research and by how much.

Robert Walgate

India in Antarctica

Science — and politics — on ice

INDIA'S Antarctic ambitions continue to prosper. On 15 September, P.K. Basu, Secretary of the Indian Ministry of Mines, told the Central Geological Programming Board in Calcutta that a third scientific expedition to Antarctica is scheduled for 1983–84. Like the previous expeditions, it will carry out multidisciplinary scientific research and will again include geoscientists of the Geological Survey of India.

India's first foray to Antarctica began at Goa in December 1981 (see *Nature* 295, 640; 1982). The *Polar Circle*, an ice-breaker chartered from Norway, took the 21-man Indian team led by Dr S.Z. Qasim of the Department of Ocean Development to the Antarctic, where it landed on 9 January 1982 in the sector claimed by Norway. Logistical problems reduced the length of the stay from the planned 25 to 10 days, but a wide range of scientific observations was carried out. The expedition returned in February 1982, when Mrs Indira Gandhi, the Prime Minister, told the *Lok Sabha* (Lower House in Delhi) that "the main objective was to study the meteorology and other conditions of Antarctica, which are believed to control the monsoons" and to influence the climate of the Indian Ocean region.

To this end, an unmanned solar-powered weather station, *Dakshin Gangotri* (Southern Ganges), was established at 70° 45'S 11° 38'E in order to provide a continuous record over one year on a cassette to be retrieved by a second expedition. A further objective was to test the suitability of Indian equipment at sub-zero temperatures, while a significant discovery along the way was a sea-mount (named inevitably as Indira Mount) at 53° 22'S 48° 03'E, where it extended a line of sea-mounts already reported by the Soviet Union.

The second and much larger expedition of 28 scientists followed, and a third is planned, to prepare the ground for a permanent manned Indian scientific station to be established in 1985.

Clearly these expeditions reflect a natural desire to learn more about the relatively unknown Antarctic continent, which is thought to interrelate with various aspects of the Indian climate, geology and so on. In this respect, India is complementing the work of other nations, and particularly of the Scientific Committee on Antarctic Research (SCAR); in fact, the Antarctic Treaty of 1959 was designed largely "to promote international co-operation in scientific investigation in Antarctica" through the removal of political and other obstacles to research.

A further motive is the prestige attached to Antarctic research. Mrs Gandhi, whose personal enthusiasm played a major part in mounting the Antarctic project, implicitly admitted as much when she told the *Lok*

Sabha in February 1982 that the expeditions offered "one more proof, if such be needed, that Indian scientists and technologists have the capability to undertake the most hazardous and complex tasks . . . In undertaking this advanced work India has now joined a select band of countries".

Inevitably, however, other motives have been imputed to India, partly because, in Antarctica, it is difficult to disentangle scientific from political and economic considerations. Thus scientists have sometimes been regarded as political instruments, in the same way that increases in support for scientific research by the British Antarctic Survey have appeared to some to be more a political consequence of the Anglo-Argentine dispute over the Falklands than a result of a cool appraisal of the scientific possibilities.

In the past two decades, India has been the most articulate critic of the exclusivity of the Antarctic Treaty. India has argued that Antarctica should be treated as the common heritage of mankind, so that all countries should have equal rights to share in Antarctic decision-making and resources. India has thus been seen as a threat to the survival of the Antarctic Treaty system. During 1982–83, this threat seemed to increase not only because of India's two expeditions to Antarctica but also because of the interest shown by developing countries in a United Nations-based alternative to the Antarctic Treaty. Over the past year, for example, Dr Mahathir, the Prime Minister of Malaysia, has advocated the creation of a new Antarctic regime in the UN General Assembly (on 29 September 1982) and the Non-Aligned Summit Meeting in New Delhi (8 March 1983).

In the face of pressure from the non-aligned movement the UN General Committee agreed on 21 September 1983 to place Antarctica on the agenda of the current session of the General Assembly. Hitherto, the United Nations has steered clear, or rather has been steered clear, of Antarctica, but events there and at the Non-Aligned Summit suggest that Antarctica may become yet another focus for North–South controversy.

In this context, the intentions of India, one of the leading members of the non-aligned movement, proved a major pre-occupation of the Antarctic Treaty powers until, in August 1983, India astounded most observers by its accession to the Antarctic Treaty. (Accession entails acceptance of the treaty's principles.) India also applied for consultative party status — the right to participate in decision-making which is open only to those countries "active" in Antarctic research — and its application was approved by a special meeting of the consultative parties held in