maps are freely available abroad and form part of a global system? For example, the US Army Map Service has covered the whole of India, including the mountainous regions, on maps on a scale as large as 1:25,000. Detailed maps of the western Karakoram glaciers have been published in Italy (1:500,000 scale) and Germany (1:450,000 scale).

These restrictions hamper the efforts of many people, agencies and institutions engaged in developmental work and scientific research. Earth scientists are specially hampered because numerous regions in the restricted zone happen to be geologically important. They cannot easily obtain the standard 1:50,000 scale topographic sheets — not to speak of sheets on a larger scale — that are normal for geological mapping and other investigations.

Another arm of the Government of India, the National Remote Sensing Agency (NRSA), freely sells detailed imageries not only covering India but also adjoining territories; these include areas that fall under Sol 'restricted' categories. These imageries have a resolution of 5.2 to 5.8 m. This means that objects even as small as a truck on the ground can be identified. Also, the height of any topographic feature or object can be calculated therefrom, making the prohibition of depicting contours on maps of certain domains redundant. On the other hand, the largest standard topographic sheet produced by Sol is on the 1:250,000 scale with contour interval of 10 m. This shows only broad topographic features, and even a small village is depicted not larger than a dot. Then, what is the rationale of Sol to restrict sale of numerous maps on scales larger than 1:1 million?

The policies of Sol and NRSA contradict each other though both are Central Government organizations. Is Sol, carrying the burden of its hoary old age of 232 years (established in the year of grace 1767) so hidebound that it is unable to shake off its antediluvian outlook?

The geological maps of the 'restricted' areas published by the Geological Survey of India (GSI) are also restricted because they are based on Sol maps.

Also in Sol, all topographic sheets on scales larger than one-fourth inch or more equal to a mile come stamped with the injunction 'not for export'. The obvious intention is that the maps should not be taken out of India. The rationale behind this rule is also questionable, when foreign agencies have published maps of these areas for open distribution.

While Sol will not allow its maps to go out of the country, NRSA sells freely the imageries, tapes and maps the world over, earning valuable foreign exchange. As a global player in this field, it offers quite a competition to NASA, America, in providing satellite photographs and data.

Foreign agencies publish maps of India without obtaining the permission of the Surveyor General of India. For example, bathymetric Admiralty maps of the seas surrounding the Indian coast for navigation purposes, are available from a firm in Calcutta (possibly from other sources as well in India) issued by a foreign organization, obviously without the mandatory approval of the coastal features by the Survey.

In the interest of not only geological investigations but of scientific research and overall development as well, it is urged that the Government remove the irrational classification of restricted maps, and make available freely all maps issued by Sol.

Quite a few laws and rules on the statute books are hopelessly outdated having no relevance now, but the Government has taken no action to repeal them. The Ministry of Science and Technology should advise the Government about the absurd restrictions enumerated above and urge for their removal.

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**Futile exercise in thought control**

*S. R. Valluri*

_The Hindu_ of 17 December 1998, reporting on a parliament proceeding stated that 'A formal warning has been issued to a scientist at the Institute of Mathematical Sciences (IMSc) for writing an article specifically criticizing the present nuclear tests' and that 'Action has been initiated against T. Jayaraman under the provision of the Institute conduct rules and that some scientists wrote to the IMSc Director, opposing any disciplinary action'. Since the issue has attracted parliament attention, it has assumed political overtones and raises some issues of wider importance. Jayaraman discussed some very important policy issues. To argue his viewpoint he quoted statements publicly reported to have been made by the secretaries to the Department of Atomic Energy (DAE) and DRDO. In a democracy, it is not a crime to base ones argument on public statements of politicians or government officials. In fact, in a similar situation, the scientists in United States started publishing the _Bulletin of Atomic Scientists_ to give an opportunity to 'non establishment scientists' to freely express their viewpoint on the US nuclear policies. It is within the right of citizens in a democracy with many political parties to hold 'politically partisan views', such as they are on issues of vital importance that can affect all of us.

This action of the Director of IMSc has apparently been prompted by the unhappiness expressed by the Secretary to the DAE which is the grant-in-aid funding agency for IMSc. This precipitated the present anomalous situation. It has attracted more attention than the original article of Jayaraman among the scientific community. One wonders, if this was what the Secretary, DAE...
and the Director, IMSc had really desired.

It is not clear what the situation would have been, if IMSc had been under the authority of the HRD Ministry, which has a moral obligation to protect the concept of academic freedom in the institutions supported by it. One wonders if the government cannot tolerate any criticism of its nuclear policy and is therefore not keen for any public debate in the scientific community on this issue of profound importance to humanity. The memories of censorship and excesses during ‘Emergency’ in 1975–77 are not yet forgotten. It is not easy to take lightly any constraints on rights of people to think and express their thoughts freely.

Many of us in our administrative careers, running academic and research institutions, had occasions to invoke conduct and service rules. It is also a fact that when such powers have been used rather arbitrarily, some of us got our knuckles rapped by public opinion or higher appellate authorities, if not by courts. It is not that such rules should not be used, but that their application should not grossly violate some general conventions and rights bestowed upon different cross-sections of our society.

However, we must also be clear, how far this freedom of expression of a citizen extends in a democracy. A person directly employed by the government, surrenders this right to question government policies publicly. He is governed by the Central Conduct Service (CCS) Rules. He may not publicly dissociate himself with any official policy of the government. The elected leaders may change their views and even reverse policies. In public, the government employees however are obliged to dance to the tune of their political masters. Had Jayaraman been directly an employee of DAE, which he is not, the Secretary, DAE would have been within his rights to take action against him for publicly disagreeing with a government policy.

IMSc however, is a grant-in-aid institution unfortunate enough to receive its funds from DAE, and with its Secretary, as the Chairman of its Council. By general convention, the Chairman is the appellate authority on matters of discipline, when a staff member disagrees with a decision of his Director. It would appear that the Chairman of the Council, who triggered off this action has unwittingly compromised the integrity of the appellate authority by expressing his unhappiness, which apparently motivated the Director of IMSc to take action. It would appear that no distinction has been made between the rights and responsibilities of appellate authority on the one hand and those of the disciplinary authority on the other.

Rules and regulations (other than General Financial Rules) are enabling clauses to be exercised with discretion, bearing particularly in mind, the precedents they set. The essence of a functioning democracy is not to discourage free public debate out of which policies could and should normally be evolved by the elected leaders. The government does have the last word in the decision making, but they do not have the luxury of curtailing free debate in a free society.

One wonders if this is not a case of intrusion into the right of inquiry and expression of the staff in grant-in-aid institutions. Should grant-in-aid institutions be obliged to incorporate into their bylaws, as a precondition and without any right of discretion, aspects of conduct and service rules which prohibit the right to differ with any government policy? To carry the argument further should these institutions in turn be also required tomorrow to stipulate similar conditions on others while dealing with them? Where does one draw the line?

Nuclear power in any form, leave alone the development of nuclear bombs, had been a controversial issue all over the world, with some countries even giving up nuclear energy as a source for generation of electrical power, because of the inherent dangers it involves, even for its own people. It behoves the government to encourage and to listen to the debate and to review and temper our nuclear policy, if deemed necessary, instead of getting the ‘establishment scientists’ exercise ‘thought control’ on issues of profound importance to all of us.

It should not come as a big surprise that the public sympathy is wholly with Jayaraman. The general feeling is that it was unworthy of scientist bureaucrats to exercise their authority in this manner. In any case, Jayaraman’s comments have nothing to do with the functioning of IMSc to attract strictures, but everything to do with developments that could affect all of us. Let it again be understood that in such a debate personal criticism of individuals involved can only dilute and distract the arguments and not strengthen them. The arguments should carry conviction in their own right.

This incident reminds this writer of an event that took place after Morarji Desai came to power in the elections held after the lifting of the emergency in 1977. Morarji wanted to take action against this writer who was then the Director of the National Aerospace Laboratories of the CSIR. What was the crime? Morarji wanted to substantially dismantle the CSIR structure and transfer the bulk of its laboratories to other government departments. A PTI reporter from Delhi asked this writer for comments. At that time PTI was still being run essentially as a government arm. In all innocence, this writer therefore took the query to mean that the government really wanted to know the opinions of people directly familiar with the matter. This writer told the reporter, that while the government would be well within its rights to do what it pleased, it would not cost the government much to ascertain from CSIR directors, the pros and cons of such a decision. The comment was widely reported in the press. Morarji considered this a criticism of the government and wanted to take disciplinary action. Fortunately better sense prevailed and the matter was dropped.

If the Prime Minister could change his mind and reverse his judgment, and refrain from taking a punitive action against a scientist, would it be too much to hope that the Secretary, DAE, the scientist that he is, would be gracious enough to receive from Jayaraman an appeal to rescind the note of warning from the Director and put this unpleasant incident behind. As it stands, the Secretary, DAE and the Director, IMSc have lost more than Jayaraman, in the eyes of the disinterestedly interested scientific community.

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