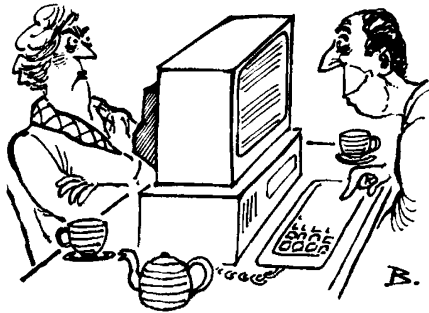


Media research

Making the messages make sense

Cambridge, Massachusetts

A 140-MEMBER multidisciplinary team is in the final stages of being welded into a unique research force to wring greater benefits from communications technology at the Massachusetts Institute of Technology (MIT). Among other things, the new \$45 million Media Laboratory will set out to develop "personalized newspapers", which are compilations from some central



database of information selected to match the interests of individuals.

The new project has been seven years in gestation according to its director, Professor Nicholas Negroponte. The idea is to provide a forum for research for members of the MIT faculty interested in the techniques of communication but unable to give their interests free rein within the disciplinary structure of MIT. Now, Negroponte says, there will be creative artists and creative inventors under the same roof. And the Media Laboratory will ensure that the application of a technique is given as much prominence as the development of its technology.

Negroponte has been this way before. Three years ago, he took a year's leave of absence from MIT when President François Mitterrand appointed him as the first executive director of the World Centre for Personal Computation and Human Development, based in Paris. The Media Laboratory will concentrate on eleven areas of research: electronic publishing, learning research, advanced television, computer music, spatial imaging, graphics, the interaction between people and machines, telecommunications, film and video, computer graphics and animation and computer entertainment.

Negroponte emphasizes that many of the projects in these fields now under the wing of the Media Laboratory were begun at MIT as long as 15 years ago. The projects in electronic publishing nicely illustrate what the laboratory is attempting.

One scheme is to develop the techniques for compiling a daily newspaper suited to the needs of different individuals, each of whom would have registered in advance a profile of his interests. Computers would be used to select from some suitable database of the world's news each night items matching the read-

er's declared interests and tastes. The result would be a "personalized" full-colour morning newspaper "inclusive of non-newsworthy but personally important information of the day". In principle, given the development of a suitable telecommunications network, such a newspaper could be delivered to any home or business computer first thing every morning.

There is also a project to compile video cassettes along the same lines. Computers would sift through each day's output of television news broadcasts, selecting items fitting the declared interests of subscribers and, if necessary, editing these automatically so as to leave only highlights.

East European studies

Environmental issues surface

Washington

THE Third World Congress for Soviet and East European Studies two weeks ago revealed a massive interest in problems of environmental protection, health care and industrial planning in the Socialist bloc, taking the organizers by surprise. Although arrangements had been made to accommodate up to 17 parallel sessions, the rooms allotted for the environmental sessions proved consistently too small. In the rest, only subjects of particular topical interest, such as the Ukrainian Catholic Church, drew such crowds.

These world congresses are sponsored by the International Committee for Soviet and East European Studies, an organization which the Soviet academic establishment regards as potentially a source of Western subversion. As at the two previous congresses (Banff, Canada in 1974 and Garmisch-Partenkirchen, West Germany in 1980), a number of Soviet and East European speakers failed to arrive. Although the reasons are not clear, one speaker, Dr Magdalena Sokolowska, from Gdansk, due to talk on the health system in Poland, informed the organizers that she had been refused a passport. Rather surprisingly, however, Dr Ivan Supek, the Yugoslav dissident physicist, did arrive. Supek was prominent in the 1950s in the Yugoslav nuclear research programme, but has since become an anti-nuclear campaigner and Pugwash activist. His participation was all the more remarkable because in 1984 he was deprived of his passport before a planned lecture tour of the United States and Canada (see *Nature* 310, 93; 1984).

The general absence of Soviet and East European scholars, however, and the inevitable predominance in such a meeting-place of Americans, gave a somewhat unfortunate bias to the proceedings.

Papers on West-East technology trans-

The Media Laboratory's projects for the development of high-definition television pictures are more technical. The objective is a fivefold increase of the definition of television pictures compared with present best practice. Hitherto, most research in this direction has involved an increase of the bandwidth of the transmitting medium to accommodate more information for each frame, but the Media Laboratory is investigating the possibility of using computer intelligence at the transmitting and receiving ends of the transmission link. The first step will be to complete the development of a simulator allowing the parameters defining television transmission — aspect ratio, frame rate and the number of scan lines, for example — to be independently variable, so that transmission capacity can be used most economically.

Bill Johnstone

ferred to dwell almost exclusively on trade between the United States and the Soviet Union, with a number of US presentations pronouncing magisterially on the need for a unified Western stance on strengthening Cocom controls rather than analysing the state of transfer so far and its estimated effect on the Soviet economy.

Several Europeans pointed out the need for greater attention to be paid to technology transfer between Western and Eastern Europe through third (neutral or non-aligned) countries and the special relationship existing between the two Germanies that facilitates both technology transfer and recent joint initiatives in dealing with environmental hazards in the border region. US participants had little to say about this subject.

This US concentration on the Soviet Union entailed an occasional vagueness in dealing with material from the smaller Comecon countries. The British and European papers, on the other hand, tended to be richer in personal and anecdotal detail, such as Dr Fred Singleton's revelation that the Romanian Iron Gates power station, by raising the water level of the Danube, has caused considerable damage to the Djerdap National Park in Yugoslavia, which runs along the river bank, and has also rendered useless land-drainage installations in the autonomous province of Vojvodina.

The US concentration on Soviet (rather than East European) studies, coupled with the lapsing in 1982 of the US-Soviet exchange programme, was undoubtedly responsible for the lack of up-to-date data available to the Americans, and their eager fastening upon unconfirmed reports that the notorious papermill which for a decade has been discharging effluent into Lake Baikal has been, or is about to be, converted to furniture production.

Vera Rich