manuscripts received without having them refereed or otherwise judging their quality. One goal is to cut the time lag between completion of an article and its publication. Another is to lessen the searching and screening time required for users to locate relevant articles.

The archival mode would preserve high-quality manuscripts in printed form through "annals" which would cover specific subject matter areas, such as sensation and perception, or the psychology of learning. The decision on which articles to include in the annals would be based partly on the response of users who received the manuscript during the early alert stage, and partly on the judgment of editors and referees. ("A popularity contest," some critics snort).

What would happen to the existing journals remains unclear. Van Cott says that when he prepared the NSF proposal he thought the annals would ultimately replace the existing journals. But the latest thinking is that the journals will be retained, perhaps reoriented, and improved. The annals, then, would become a sort of superjournal, containing the very finest material published in journals or elsewhere, and undergoing more stringent refereeing than the current journals.

Some critics of the APA project have attacked aspects of the proposed system itself. Loevinger, for example, suggests that the system, by dispensing virtually every manuscript received, will increase the glut of literature rather than solve that problem. She also says the system, by bypassing referees, will allow the distribution of misinformation, such as papers that contain either sheer numerical errors or more subtle errors of logic or experimental design.

But most critics have concentrated their fire on the way the project is being run rather than on its substance, largely because details of the system are not widely known. In a letter written at the direction of the board of scientific affairs, Jenkins expressed fears that the psychologists who are supposed to be running the project have lost control of it and that "decisions are being made by the technical personnel who are in effect taking over the project." He wrote: "We do not see the guidance of wise, scientifically experienced investigators who are presumably those who know something about the kinds of gains and losses that are involved from the point of view of the scientist in the operation of a scientific communication system."

Executive officer Little attributes most of the objections to misunderstandings caused by "a breakdown in communications." He says critics see the new system as "an attack on something sanctified—the journals," even though, in his opinion, it is not. He also believes some of the critics are miffed because "they were not consulted."

Little acknowledges that the new system will increase the total glut of literature, but he says that from the individual's point of view, the glut will be decreased, since an individual will deal, for the most part, only with articles in his area of interest. Neither Little nor Van Cott expect the quality of scientific communication to decline drastically. The APA is already operating an experimental "early alert" system involving 1000 subscribers. "We anticipated a huge flood of junk," Van Cott says. "We expected that anyone with an old term paper in his drawer would send it to us. But we've had a problem getting enough manuscripts. And the quality has not been low." Still, Van Cott acknowledges it's "too early to tell" how the system will work. "If we get a flood of junk, we'll raise the gate," he said.

Van Cott says surveys reveal that many psychologists would actually prefer to receive unedited manuscripts. This group includes people willing to sacrifice quality for speed of transmission, and people who believe the existing editorial review process screens out material they want. Such screened material includes negative results, results based on a small number of subjects, articles about ideas or methods rather than about empirical investigations, and articles that the journal editor rejects because of some personal bias.

Van Cott insists that none of the ideas proposed by the APA is "really that radical." He says similar ideas have been talked about, and in most cases implemented, by various journals or scientific organizations around the country. The most unique thing about the APA proposal, he believes, is its effort to approach the entire spectrum of scientific communications on a comprehensive basis. The APA proposal is undoubtedly an ambitious and well-meant effort to cope with worsening communications problems. Thus it seems especially ironic that controversy over the proposal should be exacerbated by a "breakdown in communications" within the APA itself.

—PHILIP M. BOFFEY

European Notes

France: Putting Scientists into Its Embassies

Paris. France is building a strong corps of scientific and technical representatives at its major embassies throughout the world. At present it probably ranks just behind the United States in the number of posts to which such specialists are assigned—(13 as compared to 18). However, while the U.S. program is currently in a state of money-saving contraction, the French are opening new posts and enlarging the staffs at several existing ones.

The French program can be traced back to the specialized technical missions assigned to a few key embassies in the early post-World War II days. But over the past 2 years this aspect of diplomatic coverage has rapidly grown from a narrowly defined, fairly low-level function to one of broad jurisdiction and high status in the embassy hierarchy. Thus, the French scientific representatives are accorded the diplomatic rank of counsellor in the major embassies, signifying a major department or function in the embassy. Their American counterparts, with the exception of the incumbent at the U.S. embassy in Paris, who holds the rank of counsellor, have the lesser title of attaché.

Last June a reorganization within the French Ministry of Foreign Affairs pulled together the formerly sprawling field of scientific and technical representation into a single Office of Scientific Affairs. The counsellors come under this office administratively, but their main channel of reporting

is the Délégation Générale à la Recherche Scientifique et Technique, which is the equivalent of the White House Office of Science and Technology. In terms of professional background, it is difficult to compare the appointees of the two countries, but there is a general impression that the U.S. program tends to lean on scientists and engineers long removed from active participation in research, or on nonscientist career diplomats, whereas the French strongly favor appointees fresh from the laboratory.

The importance which the French Foreign Office assigns to this activity can be seen from comparisons with other nations. Thus, in London, the U.S. embassy science office is staffed by a lone attaché and one secretary, no replacement having been sent when the deputy attaché was reassigned last year. The counterpart office at the French embassy was recently expanded, to include two Ph.D. biologists and an engineer, plus three secretaries. In addition, there are two other professionals plus two secretaries, but they are mainly concerned with duties that would come under the "commercial" section in the U.S. diplomatic setup. In the United States, France has scientific representatives in Washington, Boston, Houston, and San Francisco. She has a scientific counsellor in Warsaw, whereas the U.S. attaché there was reassigned last year, his duties having been taken over by a cultural affairs officer. Perhaps alone of all nations, France maintains a scientific counsellor in Peking.

Additional international comparisons are illuminating. While the French embassy in London is strongly staffed for scientific and technical representation, the British have cut back scientific coverage at their embassy in Paris. The representative who was formerly based there is now assigned to London and covers Paris on a commuting basis. West Germany has been laggard in bringing scientists into its diplomatic service but, following the establishment of a London post in 1967, has assigned scientific counsellors to Washington, Paris, and Tokyo and is considering several other appointments.

French growth and U.S. decline in this area of diplomatic representation are partially explained by the fact that, in one role or another, American scientific and technical representatives are heavily distributed around the world. In any foreign country where there is lively activity in science or technical matters, representatives of American firms are to be found trying to look in. The U.S. armed services maintain a platoon or two of specialists who roam about in an attempt to keep up with interesting foreign developments. American scientists are to be found visiting or working in many major laboratories around the world, and the United States is by far the most popular destination of foreign scientists who go abroad. Thus, the United States has many windows on scientific and technical activity throughout the world. French science and technology, on the other hand, are relatively insular, and neither French industry nor the military have adopted the U.S. pattern of systematically scouring the world for new ideas. Hence it is not surprising that the French, given their interest in using science and technology as instruments of international prestige and influence, have accorded scientific representation a high place in their diplomatic missions.

CERN: Rumors but No Decision on Site

Paris. Reports concerning the selection of a site for Europe's proposed 300-Gev nuclear accelerator have attained a degree of inscrutability appropriate to that arcane field of research (*Science,* 23 January).

Is it true that France is backing choice of a Belgian site in return for a Belgian order for French Mirage fighter planes? On the high-energy circuit, there are those who dispute this. But then no one is certain about the origin of the report that France *is* backing the Belgian site. The French say they are backing the French site but are willing to accept any site that meets the technical requirements for the $340-million machine. As for the Mirages, it is indeed true that Belgium is buying 105 of them, but the French insist that there is no link whatever between the planes and the accelerator. The Mirage deal, they explain, was signed and sealed long before the accerator issue arose, and there was no *quid pro quo,* direct or indirect.

Meanwhile, the West Germans are painting a gloomy picture of what might ensue if their site is not selected. It looks like this. The West German *government* is committed to accepting whatever site is decided upon by the experts of the European Center for Nuclear Research (CERN). But the West German *parliament* is fed up with Germany's paying the lion's share of European-cooperation costs without yet having a major facility located on its own territory. Closely tied to this situation is the fact that an influential segment of German scientists, including Nobel laureate Werner Heisenberg, doubts the wisdom of sinking so much money into high-energy physics. Since these doubts have come to the attention of the parliament, it is felt that there is little hope of the already dubious legislators' backing the project if it turns out to be another case of high German payments for construction in another country. As a result, the Germans are now strongly suggesting that, despite the good intentions of the government, it is highly unlikely that parliamentary approval could be obtained for a non-German site.

All of this leads to the still further rumor that the stalemate on a site was really contrived by one or more parties for the purpose of blamelessly getting out from under the financial obligation involved in proceeding with the venture. In 1968 the British dropped out, explaining that they could not afford to proceed. For this they have ever since been vilified in European science and government circles. Their partners in CERN, so goes a speculation, would not be so hamhanded about achieving the same result. In any case, whatever is happening is happening well out of public view.

The site problem was supposed to be taken up at a ministerial meeting of the six CERN partners at the end of January, but the meeting was postponed without explanation; a new date has not been set.

There are other rumors, including one of a vast European-Soviet venture into high-energy physics. The discipline has a long history of conjuring up mirages of one sort or another. This latest, also of uncertain origin, may be especially timely from the American point of view. The accelerator project at Batavia, Illinois, is well under way, and it's now time to think of the next machine.—D. S. GREENBERG