ready for the period of intense solar activity in 1968, an all-Chinese digital computer has been developed and a new fossil skull of Peking man found. It may be that the Chinese have also perfected a gas centrifuge technique for the production of uranium 235. Obviously, in spite of being larded with and attributed to the thoughts of Mao Tse Tung, both applied and basic science have continued through the upheaval. And Dr Oldham made the interesting point that there is nothing wrong with Mao Tse Tung's scientific maxims. When they are stripped of their jargon they boil down to such truisms as "Do not be overawed by what authorities in science say, be willing to challenge their beliefs". No one would quarrel with this. Naturally enough the maxims are aimed at the mass of a poorly educated population and they may not be a great benefit to well educated scientists, but they would not do much harm either.

But although science has not been stopped by the cultural revolution there has been a distinct change of emphasis. Any country in China's position trying quickly to apply science and technology to its economy faces two problems. What technologies are most appropriate for its stage of development and where should the technologies come from? The country can either try to develop the most advanced technology, even though it is expensive and uses little manpower, or it can use less sophisticated technology and more labour. Equally it can import a technology or try to do its own research and development. As events in most developing countries have shown, striking the right balance between these alternatives is extremely difficult. Before the cultural revolution, China seemed prepared to import science and technology. As Dr Oldham interprets it, the main conflict of the cultural revolution, as far as science and technology is concerned, has been about the extent to which the Chinese should become self-reliant. If economic development were the sole criterion, the policies ascribed to Liu and his followers, who were prepared to rely heavily on imported science and technology, were probably right. But if total development—economic, social and political—is the aim, the self-reliance policy of the revolution makes sense. The new policy is more introspective and isolationist, but it is likely to result in a greater concentration of scientific and technological resources on problems primarily relevant to China's development. That is a loss to world science and to individual Chinese scientists who have lost some freedom of research and will no longer be competing on a world stage. For this reason it is crucial that formal contacts, such as between the Royal Society and the Chinese Academy of Sciences, be maintained and if possible expanded. But Dr Oldham is probably right in saying that, for China as a whole, what has happened may be a gain.

Future Foretold

from our Special Correspondent, Gif-sur-Yvette

THROUGHOUT this week an unusual meeting has been taking place near Paris. At an elegant chateau which

forms part of the French National Centre for Scientific Research (CNRS) at Gif-sur-Yvette, experts from all over France—and some from other parts of the world—have been discussing what the world will be like in the year 2020. To keep the discussion within sensible limits, it has been set in a geographical context so that each day has been spent discussing the way in which different technological developments will affect the way land is used. It is clear that this meeting, known as the Symposium on Urban Planning and Advanced Techniques, is intended to be the first of a series which could, no doubt, last long enough for the results of this meeting to be compared with the reality of 2020. But the discussions in the past week have been more limited; they have been restricted to developed countries and have covered five broad topics—power and natural resources, data processing and transmission, communications and telecommunications, agriculture and rural space, and urbanization.

The inspiration for the meeting seems to have derived from Mr Jerome Monod, a French government official responsible for regional development and planning. But the origins are obscure, and it is probable that Mr Jacques Bloch-Morhange, a man with a catholic range of interests including, it is said, the breeding of racehorses, had something to do with it. Mr Bloch-Morhange is acting as secretary-general of the conference. The organizing committee of five, drawn from universities and government service, did most of the preparatory work which included commissioning studies by experts in the subjects concerned. The immediate practical benefit seems to be to help the French Government to formulate the Sixth Plan, but the organizers also see it as a way of helping administrators to avoid making decisions which are immediately overtaken by events.

The conference has been conducted at a philosophical level divorced in the main from immediate considerations such as those of finance. It was possible, for example, for the greater part of a discussion on the benefits of data processing to be completed before anybody asked if the financial investment in France would be great enough to sustain the hopes which had been expressed. But the discussion had not been futuristic—if anything the estimates of power and natural resources had erred on the side of conservatism. To be told that by 2020 half the electricity consumed would be generated by nuclear power, with the other half derived from hydrocarbon sources, astonished nobody. To this extent, the predictions have been unexceptionable, even unadventurous; but that they will help to formulate policies in the next five or ten years is undeniable. Much will depend on those who have to write the final report and draw together the results of what has been rather diffuse discussion. While it has been an interesting exercise, it is not immediately clear how the broad policy implications suggested by the week's discussion can be implemented in the face of the financial restrictions which normally determine events.

Donnish Productivity

BRITISH universities, enlivened no doubt by the scrutiny to which they are now subjected by the Comptroller and Auditor General, have been discussing the efficiency of their operations. To judge from the discussion