Ageing Japan

# Riches make for longevity

*Tokyo*

THE life expectancy of both Japanese men and women is now the highest in the world, according to figures released by the Ministry of Health and Welfare just a couple of days after the 119th birthday of the world's oldest living person — Shigechiyo Izumi of Kagoshima, on the southern island of Kyushu. Life expectancy is now 78.8 years for women and 74.2 years for men: and if cancer, strokes and heart attacks could be overcome, then Japanese women could expect on average to live to 88.4 years and men to 83.8 years.

But a second report — the white paper on population — from the same ministry's Council of Population Problems, due to be officially released later this month, draws some wider and perhaps more worrying conclusions from current demographic trends. Japan's change in life expectancy has been so rapid — it did not reach 50 years until 1947, and 70 until 1971 — and the postwar decline in population growth so sudden, that the nation is now well on the way to becoming the first "geriatric society". At present, there are 7.5 "workers" (people between 15 and 64) for each person over 65; in the year 2000 there will be only 4.9 and in 2025 2.9 workers for each "old" person.

At present Japan is still a "young" society and several Western nations are already approaching the proportions of old people that Japan will have in 2000. What is so worrying is the speed with which Japan is ageing — some two to four times faster than Western nations — and the consequences this will have for a nation increasingly dependent on high technology and the ability to take up new ideas commonly associated with youth. Already the government is taking the long-term future into account by changing health insurance and pension laws so that it is not left in twenty years with bills it cannot pay. But there are no concrete proposals on how the huge numbers of people in their 60s, 70s and 80s are to play the active part in society the white paper calls for.

The white paper is in part aimed at the United Nations conference on population in Mexico next month. There, it is hoped that Japan's change from a high-birth high-death society to a low-birth low-death society in a very short space of time will be held up as an example to nations with rapidly increasing populations. Japan's population growth rate is now down to 0.7 per cent annually and is still declining. Population should continue to grow from the present 119 million to 130 million by the end of the century and then slowly fall again to the present level. The report also charts, for the first time in Japan, the strong relationship between life expectancy and income levels.

The changes in Japanese life expectancy have, of course, largely been attained by reduction of stillbirths and of deaths during birth and the early years of life, so that the gains in life expectancy for those who survive these dangerous years, compared, say, with somebody living a hundred years ago, are not as great as might first appear. Nevertheless, putting the life expectancy figures together with the average age of marriage given in the report — 25.3 years for women and 28.9 for men — shows that the average couple can look forward to nearly 48 years of married life — surely the most convincing argument there could be for the practice of "serial monogamy".

**Alun Anderson**

Polish science

# Administration changes afoot

POLAND is likely to acquire two new high-level bodies dealing with the administration of science — a State Committee for Science and Technical Progress and a Council for Fundamental Research. New legislation on science and on the role of the Polish Academy of Sciences is now under way, and although no official announcement has yet been made, an extensive interview with Dr Jan Karol Kostrzewski, the new president of the academy, in the weekly *Polityka* last month gives a strong hint of how the decision will go.

Poland is unique in the Socialist bloc in having no State Committee for Science. Such a committee did, at one time, exist,

Chinese research administration

# Relics of cultural revolution

CHINA'S reinstatement of intellectuals victimized during the Cultural Revolution has sometimes encountered unexpected snags. Although the Chinese press often refers to people trained in university or technical colleges who encounter prejudice among the industrial work-force, odd traces of the Cultural Revolution still remain within the academic establishment itself.

Last month it was revealed that, until May this year the Tianjin Internal Combustion Engine Research Institute was still being run by a "revolutionary committee" whose members had for the most part been appointed during the Cultural Revolution. These people, Beijing radio reported, were "seriously factionalist" in outlook and "despised intellectuals". Talented scientists and technologists found it impossible to carry out their research properly, and were "despised and expelled". There was no proper financial accounting of the institute's budget, and much valuable equipment was carelessly destroyed.

This "state of chaos", the commentator explained, had been allowed to continue because of a bureaucratic muddle about responsibility. Originally, the institute had been under the joint jurisdiction of Tianjin University and the Tianjin Municipal First Machine-Building Industry Bureau, neither of which "attended to its task". In 1978, the Ministry of Machine Building decided unilaterally to take over the institute, but the Ministry of Education objected.

In the following year, Tianjin municipality decided to make it a part of the university, but the Tianjin Municipal Science and Technology Commission objected.

A prolonged period of haggling ensued between the educational establishment and the industrial administrators, neither being willing to let the institute go to the other. In February 1982, the state of affairs came to the attention of "leading comrades" in Beijing, who instructed the departments concerned to stop haggling and to sort out the chaos at the institute. Nothing was done, however, and the haggling continued.

At the end of April, Beijing finally intervened. The State Scientific and Technological Commission, the Ministry of Education, the Ministry of the Machine-Building Industry and the Tianjin Municipal Party Committee were ordered to start direct consultations and given a deadline for solving the problem.

On 5 May, it was announced that the institute had been transferred to the Ministry of Education and would be "managed" by Tianjin University.

Finally, on 8 May, the university sent in "capable cadres" to run the institute and, on 17 May, the new administration of the institute and the branch Party committee were announced.

The institute will now be run by a five-member council, four members of which are academics. The new director of the institute is Shi Shaoxi, president of Tianjin University and a member of the Learned Council of the Chinese Academy of Science.

Although the "18 years of chaos" in the institute has now been resolved, there are clearly high-level fears that this is not an isolated case. The radio reports of the affair included an appeal to all Chinese newspapers to publish the story prominently on their front pages. No reason for this request was given, but in a Chinese context it suggests that such reports are meant to prick the consciences of other bureaucrats who might have neglected the institutes under their control. For how many more years these relics will persist is anybody's guess.

**Vera Rich**

but it was abolished in 1972 and its functions were merged in the new Ministry of Science, Higher Education and Technology. There is no doubt, Kostrzewski told *Polityka*, that the establishment of this ministry as the body which would administer science was a mistake. The proposal to set up the two new bodies is a practical consequence of this conclusion.

The role of the State Committee is fairly obvious. In Kostrzewski's words, "only the state can undertake the burden of financing science and can support in a compact organizational framework the strategic reorientation of our technological policy". The Council for Fundamental Research, however, is a specifically Polish concept, and is, said Kostrzewski, the idea of the academy. Basic research, he explained, has its own specific features.

The new bodies, however, will not apparently mean the disbanding of the Ministry of Science, Higher Education and Technology. In 1981, when the question of reorganizing Polish science was seriously mooted for the first time since the 1972 reforms, there was strong support for the idea that the ministry should be divided, with higher education amalgamated with the existing Ministry of Education and Upbringing, to give a single education ministry covering the whole learning process from kindergarten to *Doctor habilitatus*. Dr Kostrzewski, however, when asked if the new Council for Fundamental Research might not conflict with the interests of the Ministry of Science, Higher Education and Technology, replied only that the minister, Dr Benon Miskiewicz, was in favour of the new council, and that if the two bodies did have any conflicts, they would "solve them jointly".

The creation of new administrative bodies, however, cannot solve the main problem facing science in Poland — the lack of funds, and, in particular, of hard currency for foreign journals and equipment. In real terms, the science budget for 1982 was only 54 per cent of that for 1978. During the same period, employment in research and development establishments has fallen by 25 per cent, scientists' pay by 37 per cent and that of professors by as much as 60 per cent. Years of underinvestment in industry have led to a constant decline in the country's technological level. According to Dr Kostrzewski, the new "steering mechanism" for science, embodied in the proposed new bodies, offers a chance of remedying the situation. Without a major injection of funds, especially hard currency, however, the new bodies may be of as little use, as one pessimistic academician put it, "as stirring the tea without adding sugar". **Vera Rich**

Yugoslav dissent

# Physicist's passport confiscated

Dr Ivan Supek, the most senior member of the Yugoslav Academy of Sciences and founder of the Pugwash movement in Yugoslavia, has been deprived of his passport and called in for police interrogation, as part of a new clampdown on intellectual dissent.

Dr Supek, originally a physicist, is one of the earliest known campaigners against nuclear arms. During the Second World War, he was instrumental in passing on to the Western Allies a warning from Heisenberg that Nazi Germany was working on a fission bomb.

In 1958, Supek resigned from the Yugoslav Atomic Energy Commission, fearing that even peaceful nuclear research could too easily be diverted to military ends, and switched his attention to the history and philosophy of science, founding (in 1962) the Institute for Postgraduate Studies at Dubrovnik, whose courses have a strong orientation towards the ethics of science. During the past few years, he has become increasingly critical of contemporary Yugoslav politics, and has published two books abroad, *A heretic of the left*, and a "documentary novel" about the pre-war Croat communist leader Andrija Hebrang.

The clamp-down against intellectual dissent began on 20 April with a police raid on an unofficial seminar in Belgrade. Twenty-eight people, including the lecturer and dissident Marxist philosopher Milovan Djilas, were taken in for questioning. Six of them, including three students, now face conspiracy charges, and the trial for anti-state activities of a seventh, Dr Vojslav Seselj, a former sociology lecturer at the University of Sarajevo, who is being treated as the main idealogue of the group, opened last week.

The Belgrade seminar is accused of "great Serbian nationalism", an ideology unlikely to inspire sympathy among Croats. Nevertheless, a group of Croat prisoners in the Lepoglava prison protested in May to the then Yugoslav head of state, Mika Spiljak (the office has since rotated), demanding political prisoner status for themselves and expressing their sympathy with the Belgrade group. When this action was punished by solitary confinement, they smuggled out a further appeal to the Secretary-General of the United Nations, again pledging support to the senior participants.

This Croat support for the Belgrade dissidents has apparently provoked the security authorities into action against Croat dissidents still at liberty, including Dr Franjo Tudjman, a historian and former partisan general who had been conditionally released from a three-year prison sentence on health grounds but who has been rearrested, and is now in prison.

**Vera Rich**

UK agriculture

# Shake-up for research

A RADICAL transformation in the direction of British agricultural research is promised by the announcement, earlier this week, of the formation of a new government committee, called the Priorities Board for Research and Development in Agriculture and Food. The new committee, whose chairman will be Mr Kenneth Durham, chairman of Unilever, will have the unusual task of giving advice both to the three British ministries of agriculture (one each for Scotland and Northern Ireland and one for the rest of the United Kingdom) and the Agricultural and Food Research Council (AFRC).

The creation of the new board seems to have been brought about by the long-standing difficulties in the relationship between the agriculture ministries and the research council. Attempts in the past decade to follow the Rothschild principle that much of the research council's activity would be research commissioned by the ministries have been repeatedly frustrated.

Research planning within the Ministry of Agriculture, Fisheries and Food (MAFF) are said to have been frustrated by the down-grading of the post of chief scientist, while the ministry's own Agricultural Development and Advisory Service (ADAS) has not been as influential as it could have been.

Relationships have been further complicated by the intervention of a body called the Joint Consultative Organisation, originally intended as a means by which farmers could be consulted about research policy, which has become a more than candid critic of AFRC. It is not clear which parts of that organization will continue under the new arrangements.

The membership of the priorities will include Sir Ralph Riley, the retiring secretary of AFRC, and two members of the council, Sir Hans Kornberg (Cambridge) and Mr Ronald Halstead (chairman-designate of Beecham), who will be resigning from the council. The other members are Professor Ronald Bell, director-general of ADAS, Dr Alan Raven, scientific adviser to the Scottish department, and two farmers, Mr John Martin (Cambridgeshire) and Mr John Moffit (Northumberland).

The importance of the new arrangements stems from the way in which the priorities board, by offering advice both to government departments and the research council, will be able to influence the whole pattern of agricultural research in Britain. It should be able also to defend the research council from some of its wilder critics, but also to foster the rationalization of ADAS and the research council. Whether it will wring more money from the Treasury is another matter. **John Maddox**