

## ISRAEL

● Some unfashionable opinions on science and defence were expressed in Israel by Sir John Kendrew, now Director-General of the European Molecular Biology Laboratory in Heidelberg, when he spoke at a symposium marking the 60th birthday of Israel's scientist-President, Professor Ephraim Katzir. Sir John pointed out that Israeli scientists, living in a nation which had fought several wars of national survival, faced little moral conflict when it came to doing defence research. British scientists, in contrast, found such research "boring and disreputable."

"We now tacitly assume, in my opinion contrary to the evidence, that defence research is no longer necessary, that the Western countries will probably never again be at war. Our younger scientists don't want to get involved, and as a result our defence committees are manned by grey-beards". Given the imperfections of the world we live in, Kendrew added, "I think that defence research is necessary still, even though it might not be as obvious as it was during the Second World War when I was masquerading as an Air Force officer and Crick as a Naval officer".

Kendrew expressed scepticism as to whether international agreements for arms control could be enforced, a scepticism which was not shared by Professor Carl Goran Heden of Stockholm's Karolinska Institute, who also participated in the symposium. As he stated in his multi-volume report on biological warfare that was prepared for the Stockholm International Peace Institute (SIPRI), Heden thinks that the major powers will make and keep agreements. He admits, however, that small groups of fanatics might take the law into their own hands, which emphasises the need for an international criminal code to deal with such groups.

● If Israeli lives are to be saved, military research may be less important than research on traffic accidents, which claim far more victims than do the fields of battle. Israeli motorists kill off one another, as well as pedestrians, at a rate practically unequalled elsewhere. In 1970, the last year for which figures are available, the accident rate per million kilometres travelled was 0.7 in the US, 1.3 in the UK and France and 2.3 in Israel. Only the drivers of Japan and Belgium were more lethal.

In an attempt to cut down on the carnage, the Israeli police have decided to adopt a plan proposed by plasma physicist turned traffic expert

Gerry Ben-David, who aims at re-educating the entire population of Israeli drivers. It is based on putting drivers under close observation and swiftly making them aware of their mistakes. First tried out on a very limited basis, it will now encompass 10% of Israeli highways.

Placed at strategic points along these roads will be specially trained teams, each member of which will concentrate on certain traffic violations. Every violation will be recorded, as will the licence number of the car concerned (though no attempt will be made to stop the vehicle). The violation data will be transferred for computer processing using standard techniques, and the computer programme will be then control all subsequent communication with the driver. Computerisation makes it possible to ensure that within a matter of days the person (or company) in whose name the car is registered will receive a letter from the traffic police giving full details of the offence and pointing out the dangers involved in such behaviour. If the owner himself was not driving his vehicle at the time, he will be asked to identify the actual driver so that he can be contacted.

During the initial, small-scale trial of the Ben-David scheme, observers witnessed an extraordinary number of traffic violations. One four-man team, for example, reported 6,086 offences in one month along just one section of the road, the most common violations being close driving, unnecessary driving in the lane reserved for passing, and speeding. Motorists "caught" up to three times were sent letters, while those guilty of more traffic violations were asked to come for a talk with the police or perhaps even forced to undergo a new driving test before being allowed to continue on the road.

While Dr Ben-David cannot yet prove that his scheme actually prevents traffic accidents, he notes that a follow-up carried out during the preliminary trial of his system showed that the observed violation rate dropped more than 50% for drivers who received a single letter and 80% for those who received three letters. When observation teams are operating over large stretches of Israeli highways, he feels certain that there will be a significant drop in the countrywide accident rate.

Accident prevention in Israel involves special problems, notably the fact that 75% of the drivers have been on the road for less than 10 years. At the same time, drunkenness, a major cause of accidents in other Western countries, is practically un-

known. In spite of the differences, if Dr Ben-David's system works in Israel it may also work elsewhere.

● After a hard day of driving, exhausted Israelis slump into their arm-chairs and turn on the TV, anxious for entertainment rather than education. It may be for this reason that Israeli TV allocates so little time for science, particularly locally produced programmes.

This month, however, viewers were introduced to an excellent new TV series on archaeology which gives them both science and entertainment, the latter stemming from the fact that the man who explains the archaeology is a master entertainer. Hebrew University Professor Yigael Yadin is no ordinary archaeologist: his descriptions of an excavation have the artistry of a well-crafted murder mystery, and an audience of laymen is kept breathlessly alert awaiting the discovery of an artifact which will reveal the true identity of an ancient civilisation or the cataclysmic event which brought about its destruction.

Yadin's archaeology programme features a "Find of the Month" and other recent discoveries as well as new interpretations of previously unearthed objects. One of the latter, which Yadin showed viewers on his last telecast, was a 6,000-year-old vessel with "beaks" which, until recently, had been called a "bird-like utensil" for want of a better term. Now, he explained, archaeologists have discovered its real purpose by taking a close look at the "food technology" of contemporary bedouin. As a film sequence convincingly demonstrated, the bedouin use a very similar container to make cheese and other processed milk products, which means, almost certainly, that the "bird-like utensil" was an ancient churn.

Another regular feature of the series, "Archaeology Around the Corner", highlights the fact that almost every Israeli town and village has one or more sites of interest. Yadin recently zeroed in on a site in West Jerusalem, where a partially exposed column, lying flat, is clearly visible. A camera team was stationed near the object and then passers-by were asked what it was. Only after several rather comical replies did an interviewee correctly state that it was a column intended for use in the construction of the Second (Herodian) Temple which for some reason had been left lying several miles from the Temple site.

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