

with inefficiency in specific areas". Professor R. S. Barton thought that the word "language" itself was misleading because a programmer does not "talk with or to a computer but through one", and therefore the architecture of the machine must be closely associated with the programming language. Although the nature of ALGOL had been a great influence on the design of several computers (for example, some of the Burroughs range), it seems that these concepts are yet to be fully exploited.

METEORITES

Crown Minerals

A BILL designed to prevent meteorites being sold to museums for scientific study at inflated prices, and also to bypass the wrangles which often develop over ownership of meteorites, has been laid before the House of Lords. Introduced by Lord Cranbrook, a trustee of the British Museum, the bill proposes that all meteorites which fall in Great Britain should automatically become crown property, in much the same way that some archaeological samples are designated as "treasure trove". What this means in practice is that the British Museum (Natural History), the National Museum of Wales or the Royal Scottish Museum will have the first rights to all meteorites which fall in Great Britain.

Ownership of meteorites in most countries is less than clear, and this has often given rise to a situation in which scientific research is hampered by the desire to establish ownership. The lucrative market which has developed among mineral traders, especially in the United States and Germany, has exacerbated the situation, and often a museum can only get hold of a sample of a meteorite if it is prepared to pay the full market rate. But perhaps the most important difficulty is that research is often delayed by these ownership wrangles.

Speedy recovery and analysis of meteorite samples is particularly important for cosmic ray tests, which must be carried out within a few weeks of the meteorite landing, before the radioactive elements have decayed. In two fairly recent cases, for example, such work has been hampered by ownership disputes. The St Marguerite meteorite which fell in north-east France in 1962 was transferred to the Paris museum for study, but when the analysis was half completed, the farmer on whose land it fell asked for the sample back, and the museum had no option but to return it. Similarly, when the Bovedy meteorite fell in Northern Ireland in 1969, half of it was lent to the Ulster Museum for analysis, but the other half was retained by the farmer. The museum has used up most of its sample in tests, and it is believed that the rest of the meteorite has found its way

to Armagh and is unavailable to the museum.

If Lord Cranbrook's bill becomes law, the British government will be following a precedent established in India in the 1870s. The Indian government then passed an act which gives the state the right to all meteorites which fall in India. The system of rewards to the finder that was instituted at the same time means that nearly all the meteorites that land in the country find their way quickly to the museums for study.

ARCHAEOLOGY

Sutton Hoo Revived

THE first presentation of the extensive new work that has been devoted to finds from the Sutton Hoo 7th century ship burial was given at a recent meeting of the Society of Antiquaries by Dr Rupert Bruce-Mitford, Keeper of Medieval and British Antiquities at the British Museum. It acted as a tantalizing curtain raiser for the publication of the definitive four volumes on the ship and its treasures, described by the distinguished Anglo-Saxon scholar Sir Thomas Kendrick as "the most marvellous find in the archaeological annals of England".

Dr Bruce-Mitford concentrated on objects which have been the subject of new work or about which modern studies have produced revised opinions. These include the design of the elaborately decorated helmet, the so-called "standard", the royal whetstone, numerous textiles (some of them of great richness and previously little discussed), the drinking horns, and some impressive wrought iron work associated with the large bronze cauldron. The cauldron has now been reconstructed from several thousand crumbled fragments. Two years of patient detective work at the museum, and some pre-war photographs, enabled a small firm of specialist ironmakers to work out how to make a reconstruction of a wrought iron chain which includes sections of plaited metal bars and even a reef knot.

During further study and laboratory work on the controversial large ceremonial object known as the standard, the correct attribution of the elegant little bronze stag mounted on a decorative ring has emerged. It is now definitely not associated with the standard but seems to have surmounted the royal whetstone. This strange carved red stone object, two feet in length, had previously been considered as a ceremonial object which was carried or laid horizontally. Fragments that match the broken "foot" of the stag's ring were detected at the end of the whetstone where something is clearly missing. It seems the royal whetstone was a symbol of royal authority and dignity, similar to a sceptre. It also now seems that the king commemorated by the Sutton Hoo ship burial was High King Redwald of Anglia—a lapsed Christian.

ENVIRONMENT

Preparing for Stockholm

ANYBODY in Britain will have the opportunity of influencing the British contribution to the United Nations conference on the environment in 1972, or so it seems from the plans outlined by Mr Peter Walker, Secretary of State for the Environment, this week. He has appointed four chairmen to assemble working parties which, it is intended, will gather information and advice from diverse sources and then mould them into a brief for Mr Walker to take to the conference as head of the British delegation.

He seems set to spend an exhausting two weeks in Stockholm, for much talk will surely be needed to fulfil the official purpose of the conference, which is to evaluate the present state of the world environment and discuss the principles on which future international action can continue and might be extended. The world environment has been made more manageable as a topic for discussion by dividing the agenda into three themes: the control of pollution, the human habitat and the management of natural resources. Three of Mr Walker's working parties are to be concerned with these topics, and the fourth will investigate the contribution which young people can make to the preservation and improvement of the environment.

The working party on the control of pollution is to be chaired by Sir Eric Ashby, who should have special expertise as the chairman of the Royal Commission on Environmental Pollution. Lady Dartmouth, who is to chair the working party on the human habitat, has had much experience in local government to help her in the contemplation of housing problems and the preservation of historic buildings. Mr Ralph Verney, who is to look after the management of natural resources, is a member of the Forestry Commission with experience of local government, finance and planning. The fourth working party is to be chaired by Mr Dennis Stephenson, the twenty-five year old director of a market research firm, who has been building up a reputation as a community worker and social researcher. He and his colleagues will be collecting the environmental views of all the young people's organizations they can find.

Mr Walker has invited anybody to send memoranda, evidence, ideas and suggestions to the four working parties, saying that he wants the British contribution to the UN conference to develop out of a "dialogue with the country". He also hopes that the pre-Stockholm cogitations will produce something of value for home consumption as well as providing the background for his speeches to the conference.