

that his linguistic data provide compelling circumstantial evidence for the hypothesis that the spread of agriculture and language followed a similar pattern. The congruence between the inferred pattern of the spread of language and the genetic evidence for diffusion is indeed a close one, but we need to remember that these categories of evidence are still circumstantial.

All this agreement with conventional wisdom makes me uneasy. It is as well to remember that C. H. Waddington, while he referred apparently deferentially to the "conventional wisdom of the dominant group", also encouraged the use of the less-than-deferential euphemism 'coudung' for the condition in which there is widespread satisfaction that all the evidence points in the same direction. There are uncanny resemblances between the scenario for the origin of agriculture outlined in this volume and suggestions that have been made for the origin of two distinctive groups of fossil hominids, those belonging to the genera *Homo* and *Paranthropus*.

However, instead of the Younger Dryas providing the substrate for the adoption of agriculture, the drying and cooling between 3 and 2 million years ago have been implicated in promoting an adaptive dichotomy in the early hominid, with *Paranthropus* turning to megadonty (that is, enlarging the chewing capacity of its teeth) and *Homo* to culture. Since the apparent link with climate has proved difficult, if not impossible, to establish in the hominid case, similarly the Younger Dryas scenario for agriculture strikes me as too simplistic.

The breadth of evidence being brought to bear in the pursuit of agricultural origins is as impressive as the ingenuity with which much of it is being applied. The contributors in this volume have evidently been chosen with care and the editing is exemplary, as are the summary chapters written by the editor. The contributions to an equivalent book in a decade's time will doubtless give more prominence to molecular evidence, and I would hope that the criteria for recognizing agriculture will have been developed further and that more work will have been done in Africa.

Lastly, I hope that the archaeologists of the future will choose a more reductionist approach. There is more than a hint in some of the contributions that the 'present' is being imposed on the 'past'. Our ancestors may have been less certain about the distinctions between foraging, cultivation, herding and agriculture than we are today. □

Bernard Wood is in the Department of Human Anatomy and Cell Biology, The University of Liverpool, Liverpool L69 3BX, UK.

Reading the mind of God

Maryanne Traylen

Science and Wonders: Conversations about Science and Belief. By Russell Stannard. *Faber and Faber: 1996.* Pp. 208. £8.99 (pbk).

In his book *Understanding the Present: Science and the Soul of Modern Man*, Brian Appleyard asks whether science is incompatible with the word of God. By arguing that science cannot be value-free or neutral — it is, he claims, spiritually corrosive — he encourages a division between science and the spiritual. In *The Unnatural Nature of Science*, Lewis Wolpert encourages the same division from a converse angle. In the face of science, he claims, the spiritual is non-existent. But in *The Mind of God*, Paul Davies, concerned to put the mind back into matter, tries to show how science should be enriching rather than alienating.

Russell Stannard's gentle enquiry, which arose from a series of BBC radio programmes, is not as deliberate in its intent as any of these recent books. He does, however, interview those who, like himself, are in agreement with Davies

and want to see the gap created by dualism bridged. The people he has talked to are theologians as well as former physicists (Stannard is himself a professor of physics) or biochemists, or are involved as directors or lecturers in theology or biblical studies as well as science. He also interviews atheists, astronomers, neuroscientists, biologists and even creationists — all in the cause of strengthening the interface between science and religion, which, he claims, is one of the fastest growing areas of academic study today. Amiable discussion flows from the questions put to his interviewees about the cosmos, life, the mind, room for God and the relationship between science and religion. Yet the overall result, after these big issues have been chattily chewed over, is unsatisfactorily short of target.

Stannard lets the views of others paint a picture, be they the Archbishop of York in his palace, the psychiatrist Montague Barker on Freud's couch in Hampstead or Jocelyn Bell-Burnell, for a while the only British woman professor of physics, all of whom discuss whether the uncertainty principle and the Big Bang theory imply the existence of a Creator. Keith Ward attempts to remove the crisis from this dilemma by substituting the notion of the 'creation' of the Universe — which takes place not only at the beginning, but also now and always — for the notion of



SQUADRON of squid — a group of *Sepioteuthis sepiodea* in normal daytime resting position above a coral reef at Little Cayman Island. Cephalopods, of which there are about 700 species (including squids, octopuses and cuttlefishes) living throughout the world's oceans, are a very ancient and specialized group within the Mollusca. They are considered to be the most highly evolved marine invertebrates, with elaborate sense organs, large brains and complex behaviour. From *Cephalopod Behaviour* by Roger T. Hanlon and John B. Messenger. Cambridge University Press, £50.