

LETTER FROM CANBERRA



Archaeology booms in Australia

**Finds of bones and
artifacts open up new
views of ancient man**

by Lennard Bickel

Less than two years ago a book sponsored by the Australian Government cautiously noted that the Stone-Age indigenous peoples found by the colonists "came down from somewhere in the north about 18,000 years ago."

Recent finds at Kow Swamp (SN: 3/7, p. 254) pushed that date back considerably. Further findings, in an area known as the Walls of China, have been definitely dated by carbon 14 methods as at least 32,000 years old, and Australian anthropologists are confidently predicting that the age of man in Australia will probably be extended even farther.

Dr. Rhys Jones of the Australian National University, for instance, believes it will be only a matter of time before the indications of ancient age are substantiated.

"I am confident," he says, "that we shall soon show that man was in Australia 50,000 years ago, and I am now quite prepared to see a date of 100,000 years for human remains."

He is, however, unable to accept anything beyond that, which raises a question of how these ancient men came to be there. For the recent finds are not remains of modern man, but several genetic removes from him.

"The morphology and structure of this human being in the Walls of China puts her somewhere between the first man, *Homo erectus*, and modern man," says Dr. Jones.

Anthropologist Alan Thorne of Sydney University, who discovered the Kow Swamp remains and did the morphology on the remains at the Walls of China, believes that at least three genetic swappings were necessary—probably during the last 25,000 years—to convert the morphology of these ancient people to what is found among the present Aborigines. There is no direct line that he can see from the steeply receding forehead, high peak crania and massive jaws of the ancient finds.

"Frankly," says Thorne, "if a few of the Kow Swamp frontal bones were recovered from the Trinil beds (in Java), I'm quite sure they would be labeled *H. erectus*. Naturally, that is not to say that they are *H. erectus*."

Since the *Homo erectus* remains found in Java have been dated at upwards of half a million years, the great similarity between Kow Swamp and Java man raises intriguing questions. How did antique man with the mark and features of Java man of half a mil-

lion years ago manage to exist almost unchanged until about 30,000 or even 100,000 years ago? And what then could have brought about the demise of the type?

Another question that is exciting archaeologists and stimulating expeditions is the source of the vast fan of fading rock art that has recently been shown to lie across the entire continent, from the Pacific to the Indian Ocean.

A 7,500-mile expedition led by Drs. Robert Edwards and Grant Inglis of the South Australian Museum in Adelaide last year revealed not only that this chain of rock art sites exists, but that they all bear a constant pattern of symbols, signs and tracks of animals and birds that spell out a totemic and crude religion associated with the environment. Modern Aborigines disavow these as the work of their own people but preserve many of the sites as places of secret ceremony and as sacred spots created by the mythical ancestors who created the world in their Dreamtime.

Written on the rocks, too, are all the signs that these people spread their culture across the land and then suddenly stopped. Their art has not been perpetuated and has been replaced by the more modern art of the Aborigine.

Leaders of the work in Australia believe the answers will be found somewhere in the outback, buried beneath the floors of caves and rock overhangs near the waterholes at some of the 50 newly discovered art sites or the hundreds that are yet to be found.

So far, the evidence linking the heavy-browed Java-type ancients with the strange and wonderful rock art rests on the great age of the art and the fact that stone tools and animal remains found at the sites of the bones were also discovered near the rock art. Cave art has clearly been dated back to 22,000 years, and the guess is that it is much older.

The prospects of pushing back the date and source of ancient man in Australia have changed the continent from an archaeological backwater, into a center of activity.

Certainly the archaeological work has been given impetus by the Federal establishment of the Institute for Aborigine Studies two years ago. It now has an annual budget of \$500,000 but is almost certain to get more as tasks expand.

Much of it will be needed for the search over three million square miles of a continent which has hardly been scratched archaeologically.