NOTICE OF GENERAL MEETING

The 5th General meeting of the Society for 1986 will be held in

THE CONSERVATION CENTRE, 120 WAKEFIELD STREET, ADELAIDE

on

MONDAY, 28th JULY 1986 AT 8.00 PM.

AGENDA

1. Apologies:

2. Minutes of the previous General Meeting:
   Minutes of the previous General Meeting, held in the
   Conservation Centre on Monday 23rd June 1986, to be confirmed.
   A copy of these minutes is attached.

3. Papers and Journals:
   Papers and journals from other societies and organisations,
   received since the last meeting will be tabled at this meeting.

4. Business:

5. Speaker:
   Mr. Neale Draper - Lecturer in Aboriginal Studies,
   S.A.C.A.E. Underdale Campus, will address the Society.
   The subject of his address will be:
   "The Kartan - Mystery and Myth".

6. Supper will be served at the end of the meeting.
AUSTRALIA and China share an ancestral bond which goes back to when the last, ancient links in man's evolution were forged.

And a solution to the age-old riddle of how modern man rose to his ultimate dominance in the world may be found with the aid of facts now being accumulated by researchers in Canberra and Peking.

The evidence to establish this "longest link" has long been obscured, partly by our own false sense of Australia's past which diverted the focus of science, and partly by world politics. Australia closed its doors, China its doors. Only in the last decade has it been possible to trace the outline for an ancestral tree of Australia's original inhabitants. Its roots can be seen to stretch way across the Asian archipelago and deep into ancient China.

Since China has opened up to the West, not only has its primordial link with Australia been uncovered, but yet another tantalising discovery has been made quite independently. Surveys of human gene pools carried out at the University of California under Professor Allan Wilson, have shown that the genetic divisions which gave rise to modern man took place in Asia. The traces of these processes can still be detected (using biochemical analysis) within indigenous Asian and Australasian populations, who have descended directly from the archetypal breed in China. The last of these took place around 100,000 years ago. Modern Homo sapiens only became dominant elsewhere after long migrations and extensive interbreeding.

Primigesimal types reaching Australia had come to their final destination, along with archaic man from Indonesia. They evolved into the modern Aborigine. This explains why, more than any other race, the Aborigine has preserved the anatomical building blocks which went into modern man. And the Australian continent nurtured the whole immaculate process.

This revelation complements a series of discoveries in the natural sciences which have pushed back Australia's first settlement tens of thousands, and perhaps well beyond 100,000 years. Others have illustrated the unrivelled technological advance of the Aboriginal people, and the richness of the ancient Australian landscape they inhabited. It now appears that Australia once supported one of the most ancient and successful societies on earth, until its incipient demise only 200 years ago.

Descriptions of where Aborigines came from, how and when have been conspicuously vague or absent from Australia's history books. It was long thought that this land had been inhabited 20,000 years ago, and no more than 10,000. No one knew how for sure. Aboriginal Dreamtime suggests that ancestors came across the seas. Since it was about 10,000 years back that ocean travel by primitive people became common, this rough explanation seemed sufficient.

Now irrefutable fossil evidence has shown that man was well established over this continent at least 40,000 years back. Research into changes in the past environment tentatively suggest that he was using fire around Lake George, NSW, presumably for hunting, 120,000 years before the present.

This has caused much consternation among experts. How could primitve man have reached Australia at such an early date, given that the landmass has been ocean-bound for millions of years? Did he evolve here? Unlikely, since the only evidence to suggest where the split between apes and hominids took place has come from equatorial Africa.

It may be plausible then that the early migrants to Australia were the very first humans to invent sea travel, and to possess navigational skills. A technological advanced breed of archaic Asians - truly ancient mariners, perhaps?

The most qualified person on the spot certainly believes so. Dr Alan Thorne is a paleoanthropologist, trained in paleoanthropology, zoology and prehistory. He works at the Research School of Pacific Studies at the Australian National University, where he specialises in the origins and development of human populations in Australia and Asia. Over the years he has excavated the majority of the earliest human fossils in Australia.

In 1973 he was one of the first Australian scientists to visit China and the 1940s, and he was able to compare Australian finds with those made in China in the last few decades. More recently Thorne has been able to demonstrate the linkage between the ancient Chinese who came from Indonesia and Australians came from China.

His paper on the subject entitled "The Longest Link: Human Evolution in Southeast Asia and the Settlement of Australia" is currently available.

Thorne believes that long before travel became common the first migrants to Australia made their way aboard rafts shaped from bamboo and bound with reeds. This relatively advanced marine technology could have been developed through a long affinity between the archaic populations and the string of islands and largely coastal environments they inhabited.

Is it possible that the earliest migrants to Australia were the very first humans to invent sea travel, and to possess navigational skills - truly ancient mariners?
Sea-level fluctuations over tens of thousands of years forced these early humans to adapt quickly to dramatic changes in island size and to varying coastal ecologies on which they based their existence. Survival would have depended on crossing the waters and quickly adjusting to new environments.

Thorne says that the earliest colonisation of Australia is best seen as the "voyaging of competent mariners". Archaic man would have reached Australian shores most easily at times when ocean levels were at their lowest, as huge amounts of water became trapped in the frozen polar regions. Such times occurred around 160,000, 55,000 and again at 20,000 years ago. Ocean voyages to Australia would have involved a series of short "island hops" each of about 30 kilometres in length, the farthest being no more than 80 kilometres.

In post-glacial times (between 10 and 15,000 years ago) to the present these distances have more than trebled and ocean levels have stabilised. This put an end to the feasibility and the urgent need for risky migrations. It also meant a decline in the marine technology used to make them.

According to Thorne, once early man had migrated from Indonesia the path was set for a flow of migrants from so far as China.

His conclusions are based on the skeletal remains he has unearthed in Australia which show that at least two distinct types of early man once inhabited the continent. They were the common ancestors of the Aborigine. One type is from an archaic group, with thick protruding features described as being of the "robust" variety. These have been discovered in the Murray Valley area, especially at Kow Swamp in northern Victoria, and at Taiga in Queensland, Mossigil in New South Wales, and Cosack in Western Australia.

Their origins can be traced back to the early Homo sapiens populations that inhabited areas of Java, just north of Australia, up to two million years ago. The other group, a gracile type who had smaller, more delicate characteristics, has been found mainly near the ancient Lake Mungo formation in southwestern NSW and at Kellar in Victoria. This group forms part of a lineage which goes back to the earliest modern forms of Homo sapiens in China.

Thorne describes the biological connection between Australia and its northern neighbours as a "continuous association over more than 50,000 years, or possibly twice that time period. If there was a break, perhaps it was when the white Australians ended the regular Macassan contact early this century.

"Ironically, these same Australians helped to start a new migration, resulting in the movement of people by watercraft from Southeast Asia, through Indonesia, following the Vietnam War. In a real sense the boat people arriving on the coast of Australia today are the latest in a very long succession of voyagers linking Australia to Indonesia and ultimately to Asia."

The story of Thorne's discovery goes back a long time, to events that took place in China at the turn of the century. Forty kilometres southwest of Peking lies Dragon Bone Hill, a mecca to Chinese peasants for as long as remembered. They scavenged the dusty slopes for fragments of bone. These were often ground into a powder and sold through apothecaries, labelled a "miraculous" medicine, and said to possess great aphrodisiac qualities.

In 1903 a German anthropologist, K. A. Haberer, searching through an assortment of animal bones he had collected, found an "ape-like" tooth. Similar finds were made in the years following and by the mid-1920s a laboratory had been established at Choukoutien, a small village set among the barren hills. One of the largest excavations of human remains in history had begun.

It took more than 10 years before Sinanthropus pekinensis was exhume, piece by piece from his ancient grave. He was about half-a-million years old and at the time was hailed as the fabled "missing link".

From a scientific point of view the find was spectacular. It was the first discovery of Homo erectus to be accompanied by detailed cultural remains from his close environment. There was now evidence that this cave dweller was able to use fire and had developed a basic stone technology. This placed him firmly within a human context at a much earlier time than had been thought previously. Other discoveries still do not rival the completeness of the remains from the Peking Man dig.

His antiquity drew wide interest. Less attention was given to another set of fossils taken from the "Upper Cave" which appeared to be of a more recent nature, and which were later to be of interest to Australian archaeologists. Some scientists, working at Choukoutien considered these fossils to be of special significance as they represented the earliest evidence of modern man outside Europe — a primitive Oriental race, and probably the direct descendent of Peking Man.

In 1973 Thorne was trying to trace the ancestors of a particular type of human
form — the gracile type — which he had unearthed in various parts of Australia. He seized an opportunity to make one of the first-contact visits to China and was at last able to match his finds with the human remains taken from the Upper Cave. With some astonishment he found the features to be almost identical. He has now made a number of trips and has been able to verify the connection between China and Australia.

From these two distant corners of the earth a link was established which would allow for a theory of the origins of the Aboriginal race to be developed. It also meant that the biological order of the first Australians could be placed within a global context.

The fullness of life in Australia’s very ancient past is now being realised. It is known that micro-organisms were developing in the country’s central heart around four million years ago. The deserts were once lush forests, scattered with streams and great lakes. Gigantic beasts rose and eventually became extinct. And through the late Pleistocene ice ages human society grew and flourished. It was during this time (between 10 and around 100,000 years ago) that modern man ascended to his universal dominance, pushing aside archaic types in what is thought by some to have been a dramatic shift in human evolution.

Much of the work carried out by Canberra scientists focuses on the new barren inner regions of the country, in the search for signs which may illustrate more clearly how this critical phase in man’s evolution took place. It has been in these relatively untouched areas that some of the major discoveries have been made.

Through time, as events unfolded, they became etched chronologically in the dirt and rock, preserved and coddled, as within a huge museum. The aged relics of a materially-based society do not exist as they may in Peru, or Egypt, and elsewhere. But the signs of a much more ancient and highly-civilised race are everywhere, subtly disguised in the dust.

Aboriginal life did not express itself in disfigurations of the external environment. It was far more intricate and compatible in its dominance. A concrete understanding of the workings of nature meant there was no need to grossly transform it, or greatly add to it.

Their ordering and classification of the biological and physical environment was all encompassing. For Australia, it is still in many areas more complex than our own slowly-growing nomenclature. Their religion was a rich dialogue between man, earth, sun, moon and stars.

The Dreamtime and artwork collected and conveyed knowledge over hundreds of generations. For a remarkably long time Aboriginal society kept in harmony with its world. It was possibly the longest-lasting civilisation on earth. White Australia only snatched a brief look at the final stages of its history.

At the base of the mountains which form a distant backdrop to Canberra’s limestone plains there are large caverns going deep into the rock, and here the corpses of Aboriginal “kings” were laid to rest. Their bones, skeletons reportedly measuring six-and-a-half feet (195cm) in length were preserved in the dark cool hollows. Europeans stumbled upon them in much later times when the area became well populated, and removed skulls and other bones as souvenirs, not thinking they were pillaging sacred tombs. There were no cries of protest. The direct descendants of these great leaders were long gone.

Today, there are still faint signs everywhere which provide an insight into this country’s primal, yet highly-civilised human past. On the surface of sandstone, near streams and rivers, can be found curious grooves in the rock. These were fashioned by Aborigines as they ground the edges of their stone hatchet heads. The wooden handles which had once been attached have long since decayed away, leaving only the stone heads. This led people who came across them to think they were simply crude hand-held choppers.

Dr Frank Dickson, a retired, top-level engineer, obtained his doctorate from Macquarie University last year for explaining the exact qualities of these and other tools. The scientific analysis he used in his investigation is seldom found in the study of human history.

He collected thousands of the artefacts from different parts of the country and recreated examples of the tools, using authentic bonding agents and original designs. It took him years to develop the skills involved (he still likes to being an amateur).

Using experimental science, based on the physics which must have gone into making the tools, and using these implements, he was able to reconstruct them, with their hands, and their proper dimensions could be understood. Shaping the tools to the same weight and balance and size, is a delicate art which we now often rely on the technical assistance of machines to carry out.

Dickson’s work has shown that specialised techniques employed in making these tools must have been adopted by Aborigines 10 to 15,000 years before similar capabilities became widespread around the world. Some of the materials used, such as the gluees, were on a par with our own synthetic types, ecologically perhaps better.

Perhaps the one most intriguing aspect of man’s first settlement of Australia yet to be fully resolved, is the precise timing of the arrival. The hard scientific proof of occupation at 100,000 years ago is still to be found. But as few people have seriously considered the possibility, up till now at least, such evidence has not been consciously sought.

The only material sign to turn up so far were found by accident. Dr Gurdip Singh, research fellow in the Department of Biogeography and Geomorphology, who

Aboriginal society kept in harmony with its world and was possibly the longest-lasting civilisation on earth. White Australia snatched only a brief, final look at it.
occupation of China. The bones disappeared.

A legal conflict continued in China
after the war. When the Communist forces
 gained power in 1949, contact with the
outside world virtually ceased. The
appearance of Peking Man and the
Upper Cave bones became a mystery. The
Chinese thought the United States had
them, and vice versa. Some thought the
Chinese Nationals had run off with them.
No one knew for sure what had happened.
Or at least those who did know kept silent.

When China resumed contact with the
West in the early 1970s, one of the first
points to be raised, on a very discreet
level, was that of Peking Man. To the Chinese
the bones represented more than evidence
of a scientific discovery, they were cultural
treasures symbolising their great ancestors.

But the factual evidence of Peking Man
was well documented anyway. The greater
loss to science, especially outside China
during her years of isolation, was the
absence of the Upper Cave material, and
access to the Upper Cave itself.

Within China the fascination with
Dragon Bone Hill had increased and
excavations had been renewed at the
Choukoutien site, with further relics being
unearthed. In fact the past 30 years has
seen a vast explosion in the number of
fossil discoveries throughout China,
particularly in the southern areas.

What has a true understanding of ancient
peoples of Australia been so slow in
dawning?

In a strict sense, to describe the earth's
surface, it must be defined as "Australia
and the rest of the world", for they are
quite separate entities. Australia is cut off
and in another polar region. It is distinctly
different.

Through time this massive island has
played host to the full complement of
elements which have across the globe
directed the evolutionary forces of life.
Only here did much of the drama occur in
isolation.

The focus of archaeological attentions
has in the past revolved around Europe
and nearby countries. Discoveries in Asia
and "Downunder" were viewed in terms of
what they contributed, if at all, to the
theories emanating out of the Northern
Hemisphere. Even Peking Man was at first
considered a late "Asian Neanderthal",
which in retrospect was like calling the sun
a planet of the earth.

Antipodean scientists adopted this
typically Eurocentric approach, not only in
studying human evolution, but in all the
natural sciences.

Although, there are now moves to have
our new view of the world overthrown,
Australia's indigenous culture, in every
sense, is starting to be recognised in its own
right overseas. Australia too is developing a
clearer picture of itself and its past. There is
now dynamic action to preserve the
natural heritage which still exists and much
of which is unique.

ANU, has been carrying out a study of
vegetation patterns around Lake George
for the past eight years. He has looked at
the changes which have taken place over
the last million years using a method of
"dating reversals" whereby changes in
the magnetic polarity of core material can
be used to determine the age of the deposit.
Analysis of the pollen then indicates the
type of vegetation which existed at the
time.

A couple of years ago he was studying
such core sunk to about seven metres.
At a point which he determined to mark
120,000 years ago, he found a distinct
difference in the flora which had existed.
Fire-resistant species of eucalyptus, which
now occupy the area, became dominant over
the earlier fire-sensitive casuarinas. If the
time-scale of this change is correct, and was
not distorted by abnormal rates of material
being laid down, then there are only two
likely explanations for the apparent regular
occurrence of fire. Either a freak change in
the climate, sufficient to spark self-
combustion, occurred, of which there is no
evidence of to date.

Or people started burning off.

Ten years ago such a extrapolation
would have been dismissed as pure fantasy.
Now prehistorians say that the probability
of man occupying Australia 120,000 years
ago is quite real. Some suggest an
occupation well beyond this date.

The hard and conclusive evidence puts
the settlement date at 40,000 years ago, but
this is now seen as a minimum since it is
based on the carbon dating of fossils, a
method only accurate for a period of no
more than about 40,000 years.

Given the rate at which man's
occupation of Australia is currently being
pushed back in time there has been a burst
of speculation about what probably took
place in this very distant past. For instance,
an occupation beyond 30,000 years
indicates that Australians were co-existing
with the giant marsupials of a past era,
probably hunting them, perhaps assisting in
their extinction. This remains one of the
many questions to be explored.

Establishing the link between the
ancient Chinese and Australians has broad
implications in terms of what it adds to
the general picture of modern man's
evolutionary history. It could in future
help explain how modern Homo sapiens
came to occupy the world, which in many
ways has remained a mystery.

Some new facts about the earlier stages
of human evolution, the "top end" where
hominids first diverged from apes, are
being revealed by excavations in Africa,
particularly in Ethiopia. But even with
these, and the large amount of work done
in the past, there still remains an awkward
gap of several million years between the
dating of the earliest hominids found, and
the time when the split with apes most
likely took place.

At the latter "bottom end" of the scale,
when archaic types developed into modern
man, gaps in the fossil records represent
shorter periods of time, but events were
more complex and diverse in nature,
making the absence of detailed fossil
records critical to our understanding of
how humans evolved.

There are many niggling questions to be
answered, especially in the last phases of
human development. How did modern
man become the single dominant type,
sharing fundamental traits and cultural
trappings — language, taboos, religions —
which in one form or another make man a
universal creature?

Scientists in Canberra and Peking are
hopeful that soon they may be able to
come up with some answers.

Until recently it would have been
dismissed as fantasy to
suggest that man was here in
Australia as long ago as
120,000 years. Some experts
now look even further back.

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