

CANADIAN ASSOCIATION  
FOR PHYSICAL  
ANTHROPOLOGY

NEWSLETTER

L'ASSOCIATION POUR  
L'ANTHROPOLOGIE  
PHYSIQUE AU CANADA

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#### FIFTH BUSINESS

Some prospects and problems of physical anthropology in Canada were featured at the business meeting of the fifth annual reunion of the CAPA/AAPC (Banff, Nov. 10-13, 1977).

The proceedings of the association's first international colloquium--*Homo erectus: A Symposium in Honour of Davidson Black*--are to be published in a volume edited by B.A. Sigmon (Toronto) and J.S. Cybulski (National Museum of Man). The editors report that the major portion of their task should be finished by the summer. Further details concerning this volume will be presented in future editions of the *Newsletter*.

The *Homo erectus* symposium was, by any measure, a successful venture. While many individuals and institutions contributed to this success, particular thanks must be extended to F.J. Melbye (local arrangements chairman), J.S. Cybulski, B.A. Sigmon and E.J.E. Szathmary (symposium organizers), and to the National Museum of Man, Canada Council, and Ontario Heritage Foundation for financial assistance.

Canada will be the site of the 1983 congress of the International Association of Anthropological and Ethnological Sciences (IUAES), and the CAPA/AAPC will be participating as a member organization. Membership provides us with an opportunity to introduce our association to a wide variety of foreign scholars. C. Meiklejohn (Winnipeg) will be acting as our representative to the permanent council of the IUAES.

Indian groups in Ontario have requested that the Royal Ontario Museum consider releasing Indian skeletal remains presently housed in the museum's collections, for eventual reburial. Dr. P. Storck (ROM) has asked the CAPA/AAPC for its opinion and position on this request. Ethical, social and professional considerations are intricately interwoven here, and this matter generated considerable discussion at the Banff meeting. Are the remains of past populations (Indian or otherwise) a national or provincial resource, or are they the heritage (and at least the moral possession) of certain groups only? Do social and political claims on these populations outweigh the academic ones of physical anthropologists and curators? Debate eventually turned on the narrower question of whom, if anyone, has *legal* right over human remains now contained in museums and universities. A motion presented by D.G. Steele (Alberta), and passed by the membership as the basis for a reply to Dr. Storck, reads: "The CAPA/AAPC will recommend the return of human remains to those who demand them only if legal claims for those remains can be established."

Many felt that the association should create a general policy regarding the recovery and disposition of Indian burials. A committee consisting of J.S. Cybulski (National Museum of Man), N.S. Ossenburg (Queen's), and W.D. Wade (Manitoba) was struck in order to assess this and related questions. Members are strongly urged to write to this committee in order to express their views or to report on the situation in their particular province or region.

Other matters:

- Through an oversight, our association is registered in Ottawa as the "Canadian Association for Physical Anthropologists", not as the "Canadian Association for Physical Anthropology" (the name approved at the Peterborough meeting in 1974). It was

moved that we continue to use the name approved by the membership, nonetheless. This decision seems thoroughly reasonable, since it would cost the association approximately \$140 to make the necessary emendation in our charter.

- The executive has been charged with the production of a seal or logo for the association. Designs or ideas are welcomed, and should be sent to E.J.E. Szathmary (McMaster).
- The fee structure for membership has been modified in order to cover the cost of joining the IUAES (see application form).
- New executive members elected at Banff for two-year terms include E.J.E. Szathmary (McMaster), president; N.S. Ossenburg (Queen's), secretary-treasurer; and R.D.E. MacPhee (Winnipeg), editor. F.J. Melbye (Toronto), C.E. Eyman (Calgary) and U. Fleising (Calgary), the local arrangements chairmen for the past two meetings, are members of the executive *ex officio*.

CAPA/AAPC NEWSLETTER

It is anticipated that several changes in the form, content, and policies of the *Newsletter* will be made this year. The following paragraphs set out some of these intended modifications.

1. *Editorial Board*

The *Newsletter* now has an editorial board, consisting of the editor (R.D.E. MacPhee, Winnipeg) and three sub-editors elected at the Toronto meeting (G.Ellis, Western Ontario; N.S. Ossenburg, Queen's; and L. Sawchuck, Toronto).

The editor will be responsible chiefly for co-ordinating communication between sub-editors and others, producing and mailing the *Newsletter*, and attending to any business or other concerns that lie outside the provinces of the sub-editors.

The sub-editors will be responsible chiefly for soliciting and assessing contributions from persons working in their fields. The fields of the sub-editors are non-human primates (G. Ellis), past populations (L. Sawchuck) and living populations (N.S. Ossenburg).

2. *Content of the Newsletter*

The *Newsletter* has at least two major functions, and ought to strike a balance between them. The one concerns the role of the *Newsletter* as a vehicle for reporting and commenting upon the activities of the CAPA/AAPC. The other concerns the contribution to knowledge that the *Newsletter* should make as the official publication of a learned society.

The first function can be largely fulfilled by the editorial staff and the executive, since we are still a small organization at this point. Successful completion of the second function, however, requires the active participation of all our members.

While recognizing that the *Newsletter* is not yet an appropriate place for the publication of article-length manuscripts based on original research, the editorial board feels that members (and others) may wish to contribute other sorts of materials:

(a) *Book Reviews*. Reviews of important books, monographs, texts and other publications are welcomed. Limits should be set at 250-350 wds., although longer submissions will be considered.

(b) *Letters and Research Notes*. Short (500-750 wds.) notes and queries are also welcomed. These may take the form of problem-oriented reports on field work or other professional activities, or may consider the implications of the contributor's research (or that of others) in more theoretical terms. While there is no limitation on subject matter, submissions should be written in a fashion that will be informative and understandable to the non-specialist.

(c) *Teaching Forum*. Most of our members are involved in teaching in some way, and the *Newsletter* would be a good place to share experiences and knowledge. Pertinent subjects include techniques of instruction, presentation of conceptually-difficult materials, film criticisms, useful teaching aids, and announcements concerning new literature, casting programmes, equipment, and so forth. While submissions should be as concise as possible, there is no word limit.

These categories are obviously not exhaustive, and other sorts of contributions are invited. Manuscripts may be sent directly to the editor or to the appropriate sub-editor.

### 3. *Style of Publication*

The *Newsletter* has been issued in photocopied typescript since its inception. The major reason for this is financial; indeed, were it not for the continued support of certain institutions, it would

be difficult to publish the *Newsletter* at all.

However, in the opinion of several members, this style of publication effectively limits the sorts of contributions the *Newsletter* can attract. The president and editor are presently looking into alternative methods of publication and sources of support. In order to make a convincing case to granting agencies, however, it is very important that we demonstrate the academic strength of physical anthropology in Canada. Again, contributions are encouraged.

4. *Frequency of the Newsletter*

The editorial board will make every effort to adhere to the following publishing schedule:

February *Newsletter* (deadline for submissions: January 1)

July *Newsletter* (deadline for submissions: June 1)

October *Newsletter* (deadline for submissions: September 1)

If the number of submissions warrant it, the number of newsletters per volume year may be increased to four. The chief purpose of the October number will be to inform members about the annual meeting (normally held in mid-November). The other two will concentrate on original contributions.

PALEOANTHROPOLOGY IN THE PEOPLE'S

REPUBLIC OF CHINA\*

112702 -- paleoanthropological research in china provides more data on man's evolution

peking, november 28, 1976 (hsinhua) -- intense efforts by china in paleoanthropological research under the guidance of chairman mas's revolutionary line of combining the efforts of professionals and the masses and of following up clues offered by working people are providing a wealth of proof of engels' formulation that "labour creates man himself".

work since china's liberation in 1949 has brought to light evidence of paleolithic stone implements and fossil remains of their human creators in nearly every province or autonomous region. but in the 28-year period when paleoanthropological work, starting in 1921, was entirely in the hands of imperialist powers, only three sites of human fossils -- the cave of peking man and the upper cave at choukoutien and the ushen banner in inner mongolia -- were discovered in china.

using the paleogeomagnetic method, chinese scientists have established that the yuanmou apeman, whose two upper central incisors were found in yuanmou county of yunnan province in southwest china, lived 1,700,000 years ago. this dates the existence of an apeman (homo erectus) in china back more than one million years. at the same site a few stone artifacts were discovered of the same period proving the early human efforts to grapple with nature.

fossils of the lantien apeman in shensi province are dated about 600,000 years ago, yunhsien apeman in hupeh province probably of the same age, and those of peking man at choukoutien on peking's outskirts about 500,000 years ago. during the great cultural revolution more stone artifacts were discovered in the stratum of lantien apeman and human cranial bones and stone artifacts in the cave of peking man. the three teeth of yunhsien apeman in hupeh province were uncovered last year.

excavations at a water conservancy site in tawah county of hupeh province during the great cultural revolution revealed man-made stone implements. they are estimated to date from about 300,000 years ago. an even greater number were found in chienhsi county of kweichow province. they are from about 600,000 years ago. two large-scale excavations conducted in chienhsi county have opened kuanvintung, the biggest cave site of the early paleolithic period yet found in southern china. to date, over 3,000 stone artifacts have been recovered.

deposits more than 40 metres deep at the cave site of peking man contain tens of thousands of stone artifacts. those in the upper part of the excavation belong to the later period while those deeper are from the earlier period. in ascending order from the lowest deposits, it is possible to trace the evolution in the making of the stone artifacts. there is considerable evidence of the deliberate use of fire at the site of peking man, which is the earliest yet verified in the world.

these finds of the apeman (homo erectus) suggest that their appearance was similar to modern man but still had some ape-like characteristics. the cranial capacity of lantien man was estimated at 780 cc, while that of peking man 1059 cc. the stone artifacts used were very simple and crude. although able to use fire, these creatures only took it from natural combustion. human fossils of later stage (neanderthaloids) so far discovered in china include mapa man of chuchiang county, kwangtun province, estimated to be more than 100,000 years ago, tingtsun man of hsiangfen county in shansi province, about 100,000 years ago, and changyang man of hupeh province, tungtzu man of kweichow province of the same stage. they are intermediate between apeman and modern man but with the brain volume similar to that of modern man.

human fossils and cultural relics less than 40,000 years ago were found in nearly every province or autonomous region of china after liberation. liukiang man of kwangsi, tzuyang man of szechwan, ordo man of inner mongolia are the famous representatives during this stage. the body and appearance of man were similar with those of modern man. human society became more organized, relations between people became closer and more stable and tools were steadily improved. not only were new skills in fashioning stone artifacts worked out, but bone and antlers were made into tools. fire was being produced at will by friction. people hunted and fished and began to decorate themselves with ornaments made by beading animal teeth, conch shells and pebbles. productive capacity rose and life became more varied.

the vast amount of data found to date and their wide dispersal have enabled chinese scientists to advance a new periodization of man's evolution in china that shows the fallacies of many earlier foreign appraisals.

based on the study of the limited number of fossils of upper cave man found in china before liberation, foreign scholars stated that the few individuals found in the upper cave belonged to three racial types: eskimoids, melanesoids and mongoloids. with no factual basis for such a conclusion, the foreign scholars claimed that these people had come from elsewhere, had been attacked by the natives of this area and become extinct. chinese scientists have carefully restudied this question since liberation and set forth the thesis that all these human fossils are of a proto-mongoloid type. they suggest that the chinese people, the american indians and the eskimos in the arctic may be descendants of these early people.



the stone age site at shuitungkou in ningsia had been considered as a representative of the transitional type between the middle and late paleolithic by foreign scholars. it is restudied and clarified. the conclusion formerly drawn has been corrected. it belongs to the late paleolithic.

since few human fossils and stone artifacts were discovered in china before liberation, there was a gap of hundreds of thousands of years between peking man and upper cave man. some people rejected any possible line of descent between peking man and the modern inhabitants of china. post-liberation finds have filled in the gap and shown the clear sequence of evolution.

one of the more curious, unscientific efforts is that of certain scholars of soviet revisionism who assert that tingtsun culture came from the west, in an attempt to deny the continuity of chinese history and culture. chinese paleoanthropologists have made very detailed studies of the stone implements of tingtsun, peking man and the kuanyintung cave of chienhsi. choppers and small points at all these sites are virtually identical and the characteristic heavy prismatic points at tingtsun is also found at earlier sites of lantien, kehe and sanmenhsia. the chipping method, the technique of making stone artifacts and the form of artifacts have nothing in common with stone artifacts fashioned in the same period in europe. in other words, the evidence both positive and negative confirms the continuity of cultural tradition in china's early period.

since early 1949, shortly after the liberation of peking, the party and the people's government have paid great attention to excavations. work at choukoutien, home of peking man, was the first to be resumed. science popularization has been given growing emphasis.

during the cultural revolution and the movement to criticize lin piao and confucius, chinese scientists criticized the revisionist line of liu shao-chi and lin piao of making scientific research of sole concern of specialists. guided by chairman mao's revolutionary line, scientific research is undertaken to serve proletarian politics and draw workers, peasants and soldiers into the field work, making this research accessible to the masses. provinces, cities, prefectures and counties have trained many new research workers. in the course of production, many people reported clues about fossils and artifacts and devise ways and means to protect them.

paleoanthropology has always been a field in which there has been fierce struggle between materialism and idealism and between dialectics and metaphysics. since the advent of the cultural revolution in 1966, chinese scientists, workers, peasants and soldiers have done much useful work showing how labour created man himself and thereby striking down a number of reactionary fallacies, ancient and modern, chinese and foreign, through the use of dialectical and historical materialism.

the cultural revolution has seen the publication of the journal "fossils" and many popular science books for workers, peasants and soldiers. the exhibition of peking man now covers a larger area and more exhibits are on view. since being reopened in 1972, the exhibition annually draws some 200,000 visitors, including thousands of foreign guests, overseas chinese and compatriots from hongkong and macao. many provinces and cities hold exhibitions on the subject "from ape to man". end item

112608 -- 100,000-year-old skull fragment fossil found at north china old stone-age site

talyuan, november 28, 1976 (hsinhua) -- the fossilized right parietal (roof of the skull) bone of a child dating back about 100,000 years was recently found at the well-known paleoanthropological site of tingtsun in north china's shansi province. "tingtsun man", a type of homo between the ~~ape-man~~ and the modern man, was first discovered at the site in 1954.

tingtsun site (dating back 100,000 years) in hsiangfen county is a mid-paleolithic site with a large collection of both human fossils and artifacts so far unearthed in china.

on september 14 excavators found the fossilized right parietal bone of a child in the layer of sand gravel at the same spot where fossil teeth of "tingtsun man" were first unearthed in 1954.

the new-found fossil of "tingtsun man" provides fresh material for the study of the development of china's ancient man and the geological age of the tingtsun site. It also sheds new light on the physiological and morphological features of china's ancient man at the mid-paleolithic stage.

the newly-discovered fossilized skull fragment is thinner than the parietal of a child about the same age in the category of peking man. this shows that it dates from a period later than that of peking man which belonged to the mid-pleistocene epoch (dating back one million years to 200,000 years). the new finding also serves to confirm the geological age of the tingtsun site as belonging to the late pleistocene epoch (dating back 200,000 years to 10,000 years).

since the site was often threatened by the flood waters of the fenho river, the second biggest tributary of the yellow river, in recent years, the state administrative bureau of museums and archaeological data decided to conduct a new round of excavation to give it better protection. scientists from the institute of veriebrate paleontology and paleoanthropology of the chinese academy of sciences, personnel of the museums and archaeological department of shansi province and commune peasants of tingtsun started the excavation in august this year.

in recent years soviet revisionist "scholars", in an attempt to attack china from the archaeological angle, preposterously asserted that tingsun culture originated from the west. hungarian "scholars" also alleged that all human fossils found in china were not remains of the ancestors of the modern chinese. the new-found fossil at the tingsun site is a powerful rebuff to the provocations by soviet revisionists. end item

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\* These news releases are reprinted here with the permission of the People's Republic of China, through the courtesy of the Department of External Affairs (Government of Canada). The *Newsletter* also wishes to thank J.S. Cybulski (National Museum of Man) for submitting the text of the releases to the editorial board.

The editorial board agreed to the only condition connected with reprinting, that the releases be published without any emendations or alterations.

## PREDATION CYCLES: A POSSIBLE MODEL?

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One of the things that is becoming increasingly obvious in studies of primate predatory activity is that the phenomenon appears to operate cyclically. Chimpanzee predatory actions are known to be periodic, with extended intervals of a few weeks or months between episodes of hunting. The recent observations of Harding and Strum (1976) on the baboons of Kekopey Ranch (Kenya), however, suggest that primate predatory activities may rise and fall like the cycles of a sine wave.

The authors did not directly observe the origin of the inferred cycle, since the Kekopey baboons were already engaging in predatory activity when studies began in 1970. In the first study period (1970-71), Harding and Strum (1976) counted 47 instances of successful predation. Adult males were responsible for 44 of these kills, and adult females for the remaining 3. In the second study period (1972-74), the kill total reached 100. The apparent basis for this increased rate of success was behavioral: adult males progressed from 'accidental' killing to purposeful 'forage-hunting', and, eventually, to 'cooperative hunting'. At the same time, females became much more actively involved in predatory activity and meat-eating, as did their offspring. Females were responsible for 14 of the kills, while juveniles accounted for 16. Harding and Strum (1976) noted that by early 1974 a substantial degree of aversive conditioning was evident among the local populations of Grant's and Thomson's gazelles (the major prey species). This implies that primate hunting may be cyclical because it is inherently self-limiting. As prey species become aware of predators and cease to allow close approaches, the rate of successful predation attempts should

decline. As the reward for energy expenditure decreases and falls below a functional level, the number of predatory attempts should also diminish and possibly cease altogether. The Kekopey study does not establish how long it may be before active predation is extinguished and the cycle enters a quiescent phase (during which no or very little predation occurs).

It would be foolhardy to attempt to predict when a new cycle would start, but it is my guess that this may not happen for a rather lengthy time. It will take a considerable period of time for the prey animals to lose their acquired aversive conditioning, perhaps a span covering 4 or 5 generations. This would represent a period greater than the generation length of the baboons; hence, by the time that the gazelles begin to associate freely with the baboons once more, there will be no living baboon who would remember the phase of intensive hunting. Repetition of the cycle would have to wait the 'invention' of hunting again.

Now, what speculations about the origins of hunting by humans can one draw from these data and interpretations? It is entirely possible that the hunting activities of early hominids went through precisely the same cyclical sequence: gradually-intensifying predation followed by a period of decline and eventual loss of hunting practices. However, the cycle could have been mediated in two ways. The increasing lifespan of early hominids may have reached a point where the non-hunting phase of the cycle could have been spanned; or, the advent of technology and greater determination may have permitted the maintenance of predation on a continuing basis.

The major difference between this idea and traditional anthropological views of the origin of hominid hunting concerns the possibility (indeed, the probability) that predatory activity was initiated and lost on numerous occasions and in many places before it became a fixed feature

of human existence. By this analysis, one would not be able to specify a particular time period and say, 'hunting began at this point in time (and no other)'. Human hunting practices became a fixed component of culture only when cyclicity was finally replaced by continuity.

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Harding, R.S.O. and Strum, S.C.: The predatory baboons of  
Kekopey, *Natural History Magazine*, June, 1976, pp. 46-53.

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Appearing in Future Editions of the CAPA/AAPC *Newsletter*:

- C.E. Eyman and U. Fleising (Calgary) on the status of physical anthropology in Canada.
- The CAPA/AAPC budget.
- R.D.E. MacPhee (Winnipeg) on Philip Hershkovitz' new book, *The Living New World Monkeys (Platyrrhini)*.

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The *Newsletter* gratefully acknowledges the support of the Universities of Winnipeg and Manitoba.

PROGRAM OF THE HUMAN BIOLOGY COUNCIL

Annual meeting at the SHERATON CENTRE, Essex Room, Toronto, Canada<sup>1</sup>

April 12, 1978

PAPERS TO BE PRESENTED

- 9:00 - 9:30 Alex F. Roche, Fels Research Institute: RECENT TRENDS IN THE ASSESSMENT OF MATURITY.
- 9:30 - 9:45 Discussion
- 9:45 - 10:15 Margaret Mackenzie, University of California, Berkeley: OBESITY: AN OVERVIEW OF RECENT RESEARCH.
- 10:15 - 10:30 Discussion
- 10:30 - 10:45 Break
- 10:45 - 11:15 Claude Bouchard, University of Laval: HERITABILITY OF MOTOR PERFORMANCE AND WORKING CAPACITY.
- 11:15 - 11:30 Discussion

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Break for Lunch

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- 1:30 - 2:00 Jerome Cybulski, Archeological Survey of Canada, National Museum of Man: SKELETAL BIOLOGY, DEMOGRAPHY, AND PATHOLOGY OF THE EARLIER POPULATIONS OF CANADA'S WEST COAST.
- 2:00 - 2:15 Discussion
- 2:15 - 2:45 Ken Morgan, University of Alberta: INCIDENCE OF CANCER AND CAUSES OF MORTALITY IN CANADIAN HUTTERITES.
- 2:45 - 3:00 Discussion
- 3:15 - 3:30 Roberto Frisancho, University of Michigan: PERSPECTIVES ON STUDIES OF HUMAN ADAPTATION.
- 3:30 - 3:45 Discussion

BUSINESS MEETING

- 4:00 - 5:30 Annual business meeting

<sup>1</sup>You should write directly to the Sheraton Centre for room reservations. Note that our third annual one-day meeting will be held on the day before the American Association of Physical Anthropologists' meeting and is at the same location: The Sheraton Centre, 123 Queen Street West, Toronto M5H 2M9, Ontario, Canada; (416) 361-1000. When writing the hotel for reservations, identify yourself as a HBC member.