

https://dspace.org/

The ownership of the Taung skull and of other fossil hominids and the question of repatriation

Tobias, Phillip V.

2005
BERNARD PRICE INSTITUTE FOR PALAEONTOLOGICAL RESEARCH
http://hdl.handle.net/10539/16004

Downloaded from a DSpace repository. https://dspace.org/

The ownership of the Taung skull and of other fossil hominids and the question of repatriation

Phillip V. Tobias FRS, Hon. FRSSAf
School of Anatomical Sciences, University of the Witwatersrand, Johannesburg

Received 20 April 2005. Accepted 10 September 2005

The ownership of fossils, and for purposes of this paper I refer to that of hominid fossils, was long assumed to be vested in the individuals who made the discoveries. The author reviews here a series of case histories with which he has had direct or indirect personal contact, that illustrate claims for ownership. Some have been explicit, some implicit. They are drawn from South Africa, East Africa, North Africa, England, France, Germany, Italy, Russia, the Netherlands, Indonesia and China. This historical essay reviews the replacement of this practice by a policy that fossils are not seen as personal property, but as part of the heritage of the country of origin. During the colonial era, many specimens were removed from former colonies to the 'home countries', where they remained for decades, at least until the subject territories attained their independence from the former imperial powers. The new policy about ownership, in such cases, entails the return (repatriation) of the expatriate fossils to the source country. Examples of success stories and of tardy responses are given. A policy for the future is set forth.

Keywords: national heritage, fossil hominids, repatriation.

AVANT PROPOS

It is a privilege to have been invited to contribute this article in honour of James Kitching. My acquaintance with him goes back to the earliest days of the Bernard Price Institute for Palaeontological Research (and its predecessor) and to the early expeditions organized by the Wits Anatomy Department to Makapansgat from the middle 1940s onwards. Our friendship blossomed from those times and was to last for almost sixty years. With his remarkable powers of observation, indefatigability and dogged perseverance, he went on to make more personal discoveries of fossils than any other person who worked in South Africa, rivalling in this respect even the redoubtable Robert Broom. To the Kitching family thanks for bestowing such a remarkable set of genes as James inherited. Thank you James for your unexampled gifts to palaeontology and for your unique personality.

RAYMOND DART AND TAUNG

Historically, the Taung child skull had provided the world's first striking evidence that the early hominids had evolved in Africa and what manner of creatures our early ancestors were. It was important not only as a beautiful and very well-preserved specimen, but because, historically, it was the recovery of this child skull of what Raymond Dart called *Australopithecus africanus* that effected a revolution in our understanding of human evolution. Its geography was unexpected; its morphology was without precedent; the pattern of early hominid emergence that it compelled on us was totally at variance with what had been expected by the wise ones up to 1924 (the discovery year) and 1925 (the year in which R.A. Dart published the first account of it). If there were doubt that humans had evolved from non-humans beforehand, the features of the Taung skull, as Dart's analysis revealed them to the world, largely dispelled these uncertainties, although it took a number of years for a sceptical community of scholars to accept Dart's claims.

From the beginning Dart, who had achieved instant fame through the Taung find and what he made of it, assumed that he owned the Taung skull. Such visitors as Robert Broom, Ales Hrdlicka, Alfred Sherwood Romer and the Prince of Wales (later and briefly King Edward VIII) enjoyed free access to the Taung skull, usually in Dart's office in the Wits Anatomy Department. For the Prince of Wales, Dart took the skull down to the old Carlton Hotel, Eloff Street, Johannesburg, for the apprisement and delectation of the Prince. Those were the first notable visitors to the Taung child in 1925 and it was in Dart's gift to show it to them.

Not only Dart but his University and the Witwatersrand Council of Education were under the impression that Dart owned the skull. This is confirmed by a passage Dart wrote in his autobiographical *Adventures with the Missing Link*:

> 'Perhaps, like Davidson Black [who had revealed Peking Man to the world], I should have travelled overseas with my specimens to evoke support for my beliefs, and I was presented with this opportunity. The Witwatersrand Council of Education wrote to say they appreciated that, because of the lack of comparative material in the form of anthropoid skulls of corresponding age, it would be impossible for me to perform a satisfactory monographic study of the Taungs [*sic*] skull in South Africa. The Council said they were willing to defray the expenses of my going to England for this study *provided I donated the skull to the university.* After careful thought, I decided I could not be bound by such a conditional undertaking, nor was I prepared to absent myself for so long a time from the young department [of anatomy] and my newly established home.' [emphasis mine]. (Dart with Craig 1959, p. 51.)

With the Council of Education's offer having been refused by Dart, the Taung skull remained to all intents and purposes his personal property. This view persisted from 1925, the year of the announcement of the discovery, to the end of 1958, when Dart relinquished the chair of anatomy to me. At that stage Dart told me that he was handing the custody of the Taung skull to myself. There was no written agreement and, to the best of my recollection, no mention of ownership of the skull. At Dart's behest, I was to be the guardian and keeper of the skull. Thus it has remained. Although the author gladly accepted the responsibility of being custodian of the Taung skull, he has never considered himself to be the owner of the skull. In terms of the policy set out in the Conclusion below, while the fossil is, in the broadest sense, owned by the world – as world treasure, in the narrower and more practical sense, the fossil belongs to South Africa, a viewpoint one has repeatedly stressed over many years. Within South Africa, the direct custodianship of the skull would repose in an appropriately-equipped and expertly staffed Institution, the choice of which – usually a university or a museum – would normally depend on historical factors

and the convenience of researchers in the field of palaeo-anthropology. This determination is in keeping with worldwide practice, for example in France, Germany, the United Kingdom, the Czech Republic, Russia, Hungary, Italy, Spain, Indonesia, China, Australia, the Chad, Ethiopia, Kenya, Tanzania, Malawi and South Africa. In terms of these considerations, the Taung skull appropriately reposes in the University of the Witwatersrand, the Florisbad cranium in the National Museum in Bloemfontein, the Swartkrans and Kromdraai hominid fossils in the Northern Flagship Institution (Transvaal Museum), the Makapansgat hominid remains in the University of the Witwatersrand, the Hopefield skull in the Iziko South African Museum). The list is not complete.

In the present context, it should be noted that the term *repatriation* applies to the return of a fossil to the country of origin from another country to which it had been removed. It does not apply to the movement of fossils from one repository to another within the same country (see Conclusions).

It could be argued that Dart's personal claim to ownership rested on his extraction of the skull from the breccia received in his laboratory, and on his remarkable recognition of the unique and hitherto unprecedented complex of traits that pointed to the child's special place in hominid[1] evolution. He had not excavated the specimen from the deposits of the Buxton Limeworks: that had been carried out by a limeworker, M. de Bruyn, while, on the instructions of A.F. Campbell of Johannesburg, the box of specimens had been retained in the site office of the works manager, A.E. Spiers. Other links in the chain of discovery had been forged by E.G. Izod, 'Pat' Izod, Miss Josephine Salmons and Professor Robert Burns Young. On a visit to Taung from the Wits geology department, Young had actually selected the groups of fossils in breccia blocks, including the Taung child skull. Young had arranged for them to be brought to Johannesburg and handed over to Dart on 28 November 1924. With all these interlinking moments, Dart's role was the final and inevitably the most important one (Tobias 1984a).

THOMAS DREYER AND FLORISBAD

Dart's claim of ownership was not unique in those far-off days. When the Florisbad cranium was discovered in 1932 by Professor Thomas F. Dreyer (1935) near Bloemfontein in the Free State Province, the two assistants who helped him in the excavation, A.J.D. Meiring and A.C. Hoffman, were not allowed to come near the Florisbad cranium. According to what Hoffman told me years later when he was Director of the National Museum in Bloemfontein, Dreyer, overcome by emotion, hugged the cranium to his bosom, while sitting on a small elevation close to the excavation site, and threw clods at the two young men when they tried to come nearer to see the fossil! Dreyer's possessiveness and 'ownership' of the cranium were evident from that point. Some twenty two years later, the Annual Conference of the S.A. Association for the Advancement of Science met at the National Museum in Bloemfontein under the presidentship of Hoffman, then Director of the Museum. Dreyer, aged and ill, came from his home to the Museum to show the participants the important Florisbad cranium. That year had earlier been marked by Dreyer's receipt of a doctorate of science *honoris causa* from the Witwatersrand University. This recognition was for Dreyer a high-water mark in his career, for he had long smarted under his perception that the Florisbad cranium had been spurned by Dart's school in Johannesburg and Drennan's in Cape Town. The culmination came with Dreyer's last public showing of the Florisbad skull at the National Museum. Soon after these two signal events, Dreyer died, doubtless a happier man than he had been in the preceding decades of frustration and resentment. To this day Florisbad remains the most important fossil hominid find from the Free State Province.

SERGIO SERGI AND THE ITALIAN NEANDERTALS

Another example of claimed ownership was of the Italian fossils of San Felice Circeo (Monte Circeo) and Saccopastore. These splendid Neandertal skulls reposed in the Institute of Anthropology at the University of Rome under its Director, Professor Sergio Sergi (1878–1972). Sergi told me that during the German occupation of Italy in World War II, he became aware that German officers were seeking fossil treasures for Adolph Hitler and that they wished to obtain these skulls. Some of the following story Sergi himself told me during my visit in the 1960s. Further details were kindly filled in by Professor Giorgio Manzi of Universita di Roma 'La Sapienza', helped by Professor P. Passarello, and Professor A.G. Segre and Mme. Eugenia Segre-Naldini. In the period between July 1943 and June 1944, a German officer called on Sergio Sergi and asked to see these skulls, probably with the aim of sending them to Germany. Sergi told the officer that the specimens were at that time in Messina, Sicily, where his colleague Landogna was making some special studies on the fossils – or so said Sergi. He knew very well that the American forces had already landed in Sicily, so that even if the fossil skulls were down there, access to them by Hitler's agents would have been impossible. In fact Sergi had instructed his technician, Maria Ricca, to take the skulls secretly in an unexceptional shopping basket to a well known church, Santa Maria della Pieta, in Trastevere, Rome, after a clandestine agreement with the clergy of that parish. The place of safe-keeping was below the altar of the church! There they reposed, probably until Rome was liberated by the allied armies in June 1944. At the end of the war, the crania of Saccopastore and San Felice Circeo were safely recovered and restored to the University of Rome.

When S. Sergi retired from the directorship of the Institute of Anthropology, I was told by some Roman colleagues that he was not enamoured of his successor, Venerando Correnti. So Sergi removed the Saccopastore and San

[1]Hominid' (a member of the Hominidae) has been used almost universally for the family of humankind for the last century. Molecular data have shown that apes are genetically so close to living humans that it would be inappropriate for them to be classified as a separate family. Hence, for many evolutionists apes are also hominids. To distinguish those hominids that are most closely related to humans, many palaeo-anthropologists, especially English-speakers, have adopted the tribe 'Hominini' (conventionally shortened to hominin) within Hominidae. However, numerous authorities continue to use 'hominids' in the old sense, a usage that is followed here. There is as yet no consensus.

ISSN 0078-8554 *Palaeont. afr.* (December 2005) **41**: 163–173

Felice Circeo skulls to his private apartment in the city. In order to see the skulls, I had to seek an invitation to visit Sergi's apartment. The wizened octogenarian received me warmly when I arrived by appointment one morning. He had been studying hairs. To measure the diameter of a single hair, he had devised an apparatus (a 'trichonophore') to hold an individual hair. With another piece of equipment he had invented, a 'microtrichonometer', he proceeded to measure the diameters of hairs held by his trichonophore. Another part of the extraordinary study was microtrichonoscopy! When I arrived for what I presumed would be a visit of at most a few hours (I had booked a city tour for the afternoon), Sergi started demonstrating these instruments to me, explaining how they worked and what he did with his results. It was a little heavy going. My mastery of Italian was limited and Sergi had almost no English. So he spoke to me in a kind of pidjin, comprising Italian, German, French, some English – and the remainder in what I took to be pure Latin. I quietly dubbed the composite language 'Sergi-ese'; yet I managed to follow a large part of what he was saying to me. The hours were passing – my city tour ticket was still in my pocket, a little hot and crumpled. I had not yet fulfilled the main purpose of my visit, to familiarize myself with the Italian fossil skulls. Then his daughter, also an anthropologist, whom it is said he had left 'as his eyes and ears' in Correnti's Institute of Anthropology, came in and announced that lunch was ready. This was the last thing I had expected. There followed a simple but delicious repast with Italian red wine. After that my powers of concentration, which had held up in fair to middling style throughout the morning, waned embarrassingly. Another hour or two of microtrichonology ensued (thank goodness, Sergi who knew how to measure any one of my eyelashes, did not notice my drooping eyelids!). In the late afternoon, he was reminded that I wished to see those fossils. Into the bedroom we went, where they were kept in hat-boxes under the bed with one on top of the wardrobe. In a rather soporific state I examined these specimens. Sergi's rapid, soft, high-pitched pitter-patter of conversation accompanied this exercise also. By the time I took my leave at about six in the evening, I was feeling quite punch-drunk. It had been a memorable and unrepeatable experience. My unused city tour ticket was discarded.

Those fossil skulls were most assuredly Sergi's personal property (he believed); after all, had he not saved them from the looting of the German officers – and, for that matter, from the clutches of Correnti? On my visit to Correnti in the Institute, the poor plundered professor, whom I found a very pleasant person, insisted on telling me how he was saddled with the first name, Venerando ('Venerable!'). His grandfather had been a deeply pious man. He insisted that his grandson be given this name under pain of disinheritance. A little archly, Correnti said, 'What could my parents do?'

RALPH VON KOENIGSWALD AND 'JAVA MAN'

A fourth example of a palaeo-anthropologist who firmly believed he owned the fossils for which he was responsible was Gustav Heinrich Ralph von Koenigswald, known to his family and friends simply as 'Ralph'. He had been responsible for discovering and recovering a number of fossils of 'Java Man' along the Solo River, at the boundary between the middle and eastern thirds of Java, in what was then the Dutch East Indies, later Indonesia. Koenigswald later became a good friend of mine, from his first visit to South Africa in the early 1950s soon after my appointment as a young lecturer in Dart's department. He had been born in Berlin in 1902 of Danish-German parentage. When he was only fourteen years of age, he and a friend made a first visit to Mauer near Heidelberg. Only 10 years earlier, in 1907, a fossilized hominid mandible had been recovered from the Grafenrain Quarry at the village of Mauer on the Elzenz River. In a letter to me, many years later, Koenigswald mentioned this visit: 'I did not find a new Heidelberg Man, but a kind workman presented me with a molar of a rhinoceros, the first specimen of my vertebrate collection.' Koenigswald accepted that he owned the rhinoceros tooth and all of the other specimens that were to come later.

Not long afterwards, Koenigswald visited Steinheim an der Murr near Ludwigsburg, 32 km north of Stuttgart in Wurttemberg. It was 15 or 16 years before Karl Sigrist jun. discovered the strange and interesting *Homo* cranium of Steinheim in his father's sand and gravel pit in 1933. On that early visit, Koenigswald recalled in a letter, 'the only mandible of a wolf ever found there I discovered, but left it to old Berckhemer, whom I have known since my school days.' It was Fritz Berckhemer, geologist and palaeontologist of the Wurttemberg Natural History Museum in Stuttgart, who was later to excavate the famous Steinheim human cranium and to publish the first brief record of it in 1933. In both these instances, testified to by Koenigswald's correspondence with me, it is clear that from a tender age he held without question to the maxim, 'finders keepers' much loved of schoolboys in my own youth. It was 'my vertebrate collection' and 'I left it to old Berckhemer'.

The most crucial chapter in Koenigswald's career began in 1930. Here is the story in Koenigswald's simple and unadorned prose:

> 'In the autumn of 1930 my old teacher, Professor F. Broili, [at the University of Munich] received an enquiry from Holland: would one of his students be willing to go to Java as a palaeontologist for the Geological Survey? He asked me; I jumped at the chance; and in January 1931 I landed at Tanjung Priok, the port of Jakarta.' (1956, page 23)

From 1931 to 1941 Koenigswald made some of the most important discoveries of *Homo erectus* specimens ever encountered and contributed appreciably to an understanding of their place in time and in hominid systematics and evolution. The details of these admirable fossils need not concern us here. On two of the Javanese specimens, the Trinil calvaria that Eugene Dubois had recovered in 1891 and the Kedung Brubus mandible of 1890, I had made re-studies that were published in 1966, 1967 and 1971. Here I should like to dwell on the fate of the Javanese fossil hominids.

In December 1941, Japan entered World War II. Within days, the famous original fossils of 'Peking Man' had disappeared, while work in Java had come to a standstill.

A last-minute American offer to move the original Javanese hominids to the United States was not accepted; in any event Koenigswald himself did not learn of the offer until after the war. Instead he took extraordinary measures to ensure that 'his' fossils were secreted and protected. Shortly before the Japanese forces occupied Java, plaster casts were substituted for some of the original hominid fossils. In Koenigswald's words,

> 'The casts were extremely well made and to lay eyes almost indistinguishable from the originals. We had mixed finely ground brick dust with the plaster of Paris, so that even in the event of injury the break would remain nicely dark, as in a genuine fossil. We switched the skulls, so that if the contents of the safe should one day vanish eastwards a few original pieces, at least, would remain in the country.'

When the Japanese overran Java, Koenigswald was taken captive and he spent many months in a prisoner-of-war camp. However, his wife, Luitgarde von Koenigswald, whom he had married at Bandung in 1935, managed with the help of Javanese friends to stay out of the prison camp. The new Javanese fossil finds, some of which had not yet been described, were saved by her. In this operation, she was helped by neutral friends, namely two Swiss geologists from the Shell Company, Doctors Mohler and Rothpletz, and a Swedish journalist, Rulf Blomberg. The specimen that Koenigswald regarded as his most important discovery, namely the maxilla of Sangiran IV with its large palate and diastema (or space between the canine and first premolar), Mrs. von Koenigswald kept in her pocket throughout the Japanese occupation. Other specimens were concealed by Koenigwald's friends, the villagers and the neutrals. On one occasion, the Swedish friend, fearing a house search, put the entire collection of isolated teeth which he was safeguarding, including those of *H. erectus* and *Gigantopithecus,* into large empty milk bottles which he buried in his garden by night!

Because of Koenigswald's foresight, all of the Javanese hominid fossils survived the war. It was a remarkable legacy to posterity and to the post-war flowering of science. His achievement stands in marked contrast to the tragic loss of the Peking Man remains. At the end of hostilities, a weakened Koenigswald was released and he was re-united with his family, Luitgarde, daughter Annamaria-Felicitas and all of 'his specimens', save for one of the Solo skulls from Ngandong. Later, the missing Solo cranium was found by an American officer, Walter Fairservis, in the Imperial Household Museum of the Japanese Emperor. The skull was repatriated to its fellows in Koenigswald's hands. Franz Weidenreich had escaped from the Japanese occupying forces in China and got safely to New York. Following a letter Koenigswald sent to Weidenreich, the latter arranged with the Rockefeller Foundation and the Viking Fund (forerunner of the Wenner-Gren Foundation for Anthropological Research) to bring the Koenigswalds' live and fossil families to America. Koenigswald had no compunction about packing the Javanese fossils and carrying them to the U.S.A. with him. Earlier, he had had no scruple about taking the Javanese fossils to Peking (now Beijing) at Weidenreich's invitation, to make, with the latter, direct comparisons between the *H. erectus* fossils of Java and those of China. The Javanese fossils were in his perception his own: he had led the team that dug many of them up and he had saved them from wartime pillaging.

Since this passage was written, one of the reviewers of this article has kindly drawn my attention to a document in Bandung, which purports to show that Koenigswald 'applied for and obtained formal permission to borrow the Indonesian fossils when he took them from Indonesia'. The reviewer does not indicate whether the Bandung document covers all of the Javan hominid fossils, or only those which had not yet been published; nor whether a time factor was attached; and it is not clear if this document covered the temporary removal of some of the Javan hominid fossils to Beijing, China, during Koenigswald's visit before the war, or the long-term removal with his departure for America after the end of the war. In any event, it is manifest from Koenigswald's subsequent actions that he considered the arrangement as far more than a 'loan', nor did he refer to such formal permission in his partly autobiographical *Meeting Prehistoric Man* (1956).

As a result, when the Rijksuniversiteit of Utrecht in the Netherlands created a new chair of stratigraphy and palaeontology especially for Koenigswald, off he went with his itinerant fossils for a twenty-years' sojourn in Utrecht.

During these twenty years, most highly productive ones from Koenigswald's point of view, he brought the Javanese fossils across to Cambridge in 1964, where, as a visiting professor, I had the originals of the Leakeys' Tanzanian fossils. There followed an 'Afro-Asian Conference – with a difference'! (Tobias & Koenigswald 1964). Once more, Koenigswald felt free to pack 'his' fossils, with his socks and pyjamas, and trundle them across the seas.

At Utrecht, Koenigswald dreamed of establishing a great international centre for the cherishing and safeguarding of 'his' Javanese hominid fossils and for the study of human evolution. His plans were not to be realized in the Netherlands.

Instead, in Germany, the Werner-Reimers Foundation provided the facilities he needed at the Senckenberg Research Institute and Natural History Museum of Frankfurt. Once again, Koenigswald packed his bags, his fossils and his personal library, and without a 'by your leave', or apparently any consultation with the Netherlands authorities, carried them off to Frankfurt, Germany. He still considered them his personal property. There was anger in the Netherlands when they learned that the birds had flown. In this case, they felt strongly: after all the fossils had been discovered in Java when it was still a part of the Dutch East Indies; Koenigswald had been given a position in the Geological Survey and several years later Dutch nationality; the University of Utrecht had created a new chair especially for him. The least the Dutch authorities might have expected was that the fossils from their former colony would remain in the Netherlands 'motherland'!

Koenigswald spent the last fourteen years of his life with his beloved fossils in the Senckenberg. He retained warm and close links with the Indonesian investigators, Teuku Jacob, Sastrohamidjojo Sartono and Pieter Marks. Jacob

received his Ph.D. degree at Utrecht and Koenigswald gave the Indonesian scholars much help and encouragement, when they visited him at his Institute in the Senckenberg. The relationship culminated in Koenigswald's last visit to Java in 1976 to receive the honorary doctorate of science of the Gadjah Mada University of Yogyakarta. It was the first honorary degree to have been awarded by that University to a European.

On one of my visits to Indonesia after Koenigswald's death in 1982, my good friend in Yogyakarta, Teuku Jacob, told me that Koenigswald had returned to him the fossil cranium of Mojokerto, a child calvaria from Perning in Java. Jacob had taken it back to Yogyakarta after the Nobel Symposium in Karlskoga in 1978. It was black and almost as round as a large cricket ball, but the face, jaws and teeth were not present. There was a small deficiency of bone in the region of bregma (the point or area where the frontal bone and the two parietal bones approximate one another). Previous workers had taken this gap to be an unclosed anterior fontanelle, and they inferred from this that the Mojokerto individual represented a baby or young child. I had carefully examined the area in question, both in Utrecht and at the Senckenberg, with magnification. It was clear to me that a piece of bone had been broken away in that area, and that the gap was not the unmistakable anterior fontanelle. I re-examined the black 'cricket ball' in Jacob's hands in Yogyakarta. Then he appealed to me: could he be sure that this was the actual fossil specimen? Mindful of the cunningly devised casts that Koenigswald had prepared in Java as the Japanese were getting nearer, Jacob asked: could this not be one of those casts in which brick dust had been mixed with plaster of Paris? I examined it, especially in the region of bregma, and I tested the weight in my hand. I could detect nothing that would disqualify it from being the original. To satisfy Jacob's doubts, the only manner by which it could be proven one way or the other, short of sectioning the specimen which nobody's conscience would allow, was to scan it, that is, to make a CT-scan (Computerized Tomographic Scan) of the specimen. This is a non-invasive method and would leave the specimen intact. I left Teuku Jacob with that suggestion, although at that time neither he nor I knew of the appropriate apparatus anywhere in Indonesia. Japan and Australia might prove to be the nearest countries where this sort of study could be done. There, for the moment, the matter rested.

In reply to my letter of 30 July 2004, seeking more information on this, Teuku Jacob wrote on 26 August 2004. He confirmed that the Mojokerto cast had been cleverly made 'with the same colour and weight as the original'. Then he added that the skull he had doubted before was the original as he had proved by scanning in Jakarta, Paris, Toulouse and Tokyo. The semicircular canals of the inner ear could clearly be seen and, when the black colour in the foramen magnum was scratched away, the natural pumice filling the brain-case was clearly revealed.

When on 20 November 1983 I delivered the memorial address in honour of Koenigswald, at a commemorative function in the Senckenberg Museum, Frankfurt, I ended with these words:

> 'His ever present sense of humour, the naughty twinkle of his eyes, the little chuckle, that over-obvious wink when he made a piquant and sometimes unquotable point about one of his colleagues, his gifts as a raconteur and his seemingly inexhaustible fund of anecdotes, the breadth of his knowledge about eastern lore, the passion of his quest for ancient remains, his probing and punctilious observations, his manifestly endomorphic love of life, his enthusiastic enjoyment of the company of his fellow scientists and of their wives – all add up to a celebrated man, an eminent scientist, a loyal friend, an unparagoned personality, companion of the heart.' (Tobias 1984b, pp. 89–90)

I wondered at the time whether I should have added to the formidable list of attributes – 'staunchest upholder of the private ownership of fossils'. I am glad I left it out because of what I have recently learnt from Teuku Jacob (see below).

FRANZ WEIDENREICH AND 'PEKING MAN'

An interesting contrast may be cited. Weidenreich departed from China several months before the Japanese occupation of Beijing late in 1941 and with his wife went to live and work in New York. He was able to take with him *casts of Peking Man* and of most of the important later Javanese finds, of which he had obtained casts from Koenigswald, during their exchange of visits in 1937 and 1939. Sadly, from one point of view, Weidenreich left the originals of Peking Man behind in China. In contrast, Koenigswald took the *originals of Java Man* with him to America. Those Peking Man fossils disappeared not long afterwards and have never been seen again. The Java Man fossils, which Koenigswald guarded as if they were his own children, survived – although it must be admitted that they are probably the most well-travelled fossils ever! Circumstances did not permit the Peking Man fossils to be removed when it was still tolerably safe to do so. Koenigswald created his own circumstances! These two pieces of historical happenstance should not, of course, be taken by inference as support for the private ownership of fossils.

Other instances are known to me, but I have included here only some with which I had contact.

THE ATTITUDE TOWARDS OWNERSHIP TODAY

It is universally acknowledged that all fossil hominid specimens that are found today belong to, and belong in, the country in which they are found. The array of fossils from northern Kenya, which emanated from the east and west of Lake Turkana, and those from the area of the Tugen Hills just to the south, are the property, the national heritage of Kenya. The Olduvai, Laetoli and Peninj fossils from northern Tanzania are unequivocally Tanzanian treasure. The fossil hominids of Bahr-el-Ghazal and Toros-Menalla in the Chad Republic belong to the Chad. The change came about with the attainment from the 1960s onwards of *uhuru,* independence, decolonization. Earlier, fossils discovered in British, French, German, colonies and protectorates, were automatically taken to the 'home country'. Kenyan fossils discovered before *uhuru* went to the Natural History Museum in London. The same was true of fossils like the Kabwe or Broken Hill remains from Zambia (recovered when that territory was still Northern Rhodesia) and the Singa cranium from the

Sudan. From Algeria, the hominid fossils of Ternifine, and from Morocco, those of Casablanca, Jebel Irgoud and other sites, were taken to Paris where they reposed in either the Museé de l'Homme, the Muséum National d'Histoire Naturelle or the Institut de Paléontologie Humaine. There were similar examples from Eyasi in Tanganyika (before World War II), which were taken to Germany; and from Palestine/Israel from which fossils were taken to London, Paris and the Peabody Museum, Harvard University.

It might be thought of as a delicate and sensitive issue what should happen to the fossil remains which were removed from the far-flung corners of empires, to various 'homelands' (which of course were not really homelands at all, when looked at from the angle of the fossil human populations!). It is accepted today by almost all countries and by UNESCO that such specimens are part of the legacy of their respective territories of origin. The question should therefore be asked: is there any valid reason why this principle should not apply to parts of the heritage discovered when political circumstances were different, for example, before independence? To be consistent, the principle should surely apply retrospectively.

From a purely practical point of view, there are considerable difficulties when a collection of specimens reposes partly in the land of the find and partly in some other country. For example, a scholar who wished to study the Mount Carmel *Homo* fossils from the Tabūn and Skhūl caves would have to travel from the Natural History Museum in London, to the Peabody Museum of Harvard University, Cambridge, Massachusetts, to the Rockefeller Museum in Jerusalem. Then, if casts of these fossils were desired, some were officially obtainable from the University Museum, University of Pennsylvania, Philadelphia.

Next to that wide scattering of the Mount Carmel fossils, the division of the Sterkfontein hominid fossils into some six hundred specimens in the School of Anatomical Sciences at the University of the Witwatersrand Medical School, Johannesburg, and one or two hundred specimens in the Transvaal Museum of the Northern Flagship Institution, in Pretoria, is relatively inconsiderable: the two institutions are about fifty kilometres apart. That division of the collection founded on historical factors is inconvenient but not a serious hardship for the earnest scholar. Moreover, casts of excellent quality can be obtained from both host institutions.

REPATRIATION OF HOMINID FOSSILS

Should there be wholesale repatriation of hominid fossils from their places of enforced exile to their cradlelands? On grounds of principle, there is no doubt that this would be the most ethical solution, other things being equal. However, one must ask: are other things equal? Where we are contemplating the future of objects of such rarity and of such historical and archival world value, we have to ask whether conditions in the source-land are such as to provide adequate protection, security, curatorial skills and custodianship. In some countries, such facilities may not be available. This lack would demand help from a body like UNESCO[2], for the construction of suitable vaults, the provision and training of curators, and the development of a culture of cherishing, appreciating, admiring and valuing the objects in question. UNESCO already has such programmes under way in several parts of the world.

[2]United Nations Educational, Scientific and Cultural Organisation.

REPATRIATIONS TO ASIA

Java, Indonesia

The return by Ralph von Koenigswald of the 'black cricket ball', the calvaria of the Mojokerto child, to Teuku Jacob of Gadjah Mada University at Yogyakarta, has already been mentioned.

In a recent letter received from Indonesia's most eminent palaeo-anthropologist, Professor Teuku Jacob, more light has been thrown on repatriations to Indonesia. When Teuku Jacob was hospitalized for a few days in Utrecht in 1967, Koenigswald promised him that he would return the collection to Java. In an interview in the *Frankfurter Algemeine Zeitung* in 1974, Koenigswald indicated that he would return the collection to Indonesia. A year later Teuku carried the Ngandong skulls back to Java. In 1997, he had picked up the Sambungmachan skull 3 which he wrote had been 'smuggled away to New York'. Another *Homo erectus* skull had been spirited away from Indonesia and allegedly offered for sale by an antique dealer in Switzerland! Sambungmachan 4, Jacob wrote, was back in Java – in Bandung. All told, according to Teuku Jacob, around two-thirds of the Indonesian *H. erectus* were now in Yogyakarta, Java. Other pre-war Indonesian hominid fossils were still in Leiden and Frankfurt. It is very largely owing to the persistent efforts of Teuku Jacob and the understanding and co-operative attitude of the late Ralph von Koenigswald that this satisfactory outcome has been achieved.

China

It is not part of the theme of this article to discuss the lamentable loss of the 'Peking Man' fossils, that had been discovered at Zhoukoudian near Beijing (formerly Peking). They were casualties of the Sino-Japanese theatre of World War II and their disappearance has never been adequately explained. Despite strenuous efforts by Chinese and U.S.A. colleagues, the missing collection of *Homo erectus pekinensis* fossils has never come to light during the lapse of sixty years. Happily, palaeo -anthropologists at the IVPP (Institute for Vertebrate Palaeontology and Palaeo-anthropology) in Beijing have subsequently made a number of important discoveries of *H. erectus* and other hominids in China.

Another small repatriation is worth mentioning. To the University of Uppsala in Sweden several teeth of 'Peking Man' from Zhoukoudian, Locus A., had found their way in the 1920s. Otto Zdansky in 1923 sent to Uppsala a lower premolar and an upper molar; while Birger Bohlin produced in 1927 a lower molar. In 1978, during the course of a meeting in Sweden, I was delighted to find that the teeth had survived and were still present in Uppsala, and in addition that Birger Bohlin was alive as a professor emeritus of the Institute of Geology at the University of Uppsala. The meeting itself was historical: it took the form

ISSN 0078-8554 *Palaeont. afr.* (December 2005) **41**: 163–173

of a Nobel Symposium organized by the Royal Swedish Academy of Sciences, from 21–27 May 1978, and it commemorated the 200th anniversary of the death of Carolus Linnaeus. Carl von Linné, to use the unlatinized version of his name, was the great classifier extraordinaire of living things. Linné braved the wrath of his fellow mortals and claimed that whatever rules were found to apply to other animals should be assumed to apply as well to man. More than a hundred years later, Charles Darwin in *The Origin of Species* did not do as much: in that voluminous book, mankind earned only one small hesitant sentence *on the last page of the book.* In a sense, Linné brought humans down from the angels to join the apes. It was eminently worthwhile that the Academy had brought a goodly selection of scholars together. We met in Karlskoga in Alfred Nobel's house, where the King and Queen of Sweden joined us for one of the sessions of the symposium and for lunch. It was on this occasion that King Carl Gustav conferred on Mary Leakey the Linnean Gold Medal. She was the first female recipient. During a visit to Uppsala, we met old Professor Birge Bohlin and were shown by him those Chinese teeth that had been excavated over half a century earlier. He gave a talk in the form of a postscript to the excavation at Zhoukoudian in 1927 and 1928. During an informal get-together of the symposiasts, in the presence of Bohlin, the organizer, Lars-König Königsson, and Carl Gustav Bernhard, the Secretary-General of the Royal Swedish Academy of Sciences, Richard Leakey used the occasion to challenge the Swedes to return those Zhoukoudian teeth to the Institute of Vertebrate Palaeontology and Palaeo-anthropology (IVPP) in Beijing, China. I was in full agreement with the sentiment, although the way in which it was sprung on the Swedish hosts on such a Linnaean bicentenary occasion was inappropriate. In the event, the teeth were duly returned to China. This was not a case of specimens having been taken away before independence, but the removal of the fossils went back to a period when foreigners had had very few scruples about what they did with specimens from far-off cradle-lands.

THE SITUATION IN AFRICA

South Africa

As one of the self-governing dominions of the British Commonwealth, South Africa was in the fortunate position that its early fossil hominids were not removed to England. This was true of the early finds of the first two decades of the Union of South Africa, such as the calvaria of Boskop and the skull of Taung, and of all the later discoveries. Soon after I took over the custodianship of the Taung, Makapansgat and post-1965 Sterkfontein hominid fossils, I was approached by a representative of a distinguished US university who offered to buy one australopithecine tooth for a considerable sum of money! I was aware that Robert Broom had sold a number of Karoo fossils of reptiles to colleagues in the U.S.A, but I was deeply conscious of the value of fossil hominids to South Africa and strong ethical considerations loomed large in my thinking. I had not a moment's hesitation in rejecting the American offer!

A great number of archaeological and physical anthropological specimens had been removed from South Africa, especially to Europe, in the nineteenth century, but these examples of the plunder of recent human skeletons and cultural objects fall outside the scope of this study.

Like South Africa, Australia fell under the commonwealth dispensation. Hence fossil human skulls recovered there have remained in the country.

East Africa

Sudan – A cranium from Singa on the Blue Nile was early removed to the Natural History Museum in London. It was studied there by Arthur Smith Woodward in 1938, by Lawrence H. Wells in 1951 and by me in 1955 (Tobias, 1962). In 1963, Don Brothwell was making a detailed re-study of the Singa skull. Both he and I agreed that the cranium should be regarded as neandertaloid and not as 'Bushmanoid' as Woodward and Wells had concluded. To the best of my knowledge, the cranium still reposes in the Natural History Museum.

Kenya – a number of the earlier discoveries of Upper Pleistocene *Homo* specimens from Kenya still reposed in the Natural History Museum, London, when I last enquired. These included remains from Kanam and Kanjera, but not those found since the end of World War II, such as the Koobi Fora, West Turkana and Tugen Hills fossils.

In Nairobi, Richard Leakey caused a fine facility to be built with generous support from the Royal Swedish Academy of Science and other international sources. In this were housed all of the fossil hominids from Kenya that had been recovered after *uhuru.* It was initially given the name TILLMIAP, The International Louis Leakey Memorial Institute for African Prehistory. At the opening ceremony, a fine statue of Louis Leakey standing at the entrance of TILLMIAP was unveiled. This was an example of a former colony which had risen admirably to the need for the bones of its earliest citizens to be housed in ideal conditions.

Tanzania – Two or three fossil partial crania were recovered by Kohl-Larsen from Lake Eyasi in northern Tanganyika (as it then was). When I studied these specimens, Eyasi II was represented by an occipital bone in the National Museum, Dar-es-Salaam. Its marked occipital torus was reminiscent of those of Kabwe, Zambia, and Hopefield, Western Cape Province. Eyasi I was still in Germany to where Kohl-Larsen had relocated it. Clearly these Eyasi remains should be re-united in Tanzania, if this has not already been done.

There is an interesting example of a successful local repatriation, where the fossil concerned was an 'expatriate' for a relatively short period. When Mary Leakey discovered the magnificent cranium of *Australopithecus boisei* (called originally by her husband Louis Leakey *Zinjanthropus boisei,* and nicknamed variously 'Zinj', 'Dear Boy' and 'Nutcracker Man' based on proposals respectively by Louis, Mary and myself), it was removed from Tanzania to the Leakeys' base at the National Museum in Nairobi, Kenya. I worked on it there and also in the Witwatersrand anatomy department for some years. When I had completed my major study (Tobias 1967a),

but when the finalizing of my manuscript, reading of proofs and so on, were not yet finished, Louis Leakey arranged for 'Zinj' to be returned to the newly independent and re-named Tanzania. From the scientific academies of Beijing, Moscow, Paris, London and Washington, leading figures in palaeontology came to Dar-es-Salaam for the handing-over ceremony. I was invited to be present – although it was stipulated that I attend not as a representative of any organization or country, but as the person who had worked on the fossil for some five years! Here is the point: a special depository was constructed in the National Museum (formerly the George V Museum) in Dar-es-Salaam. This was made exceptionally secure, fire proof, with temperature- and humidity-control. It was a model of how the world's most precious fossils should be housed. President Julius Nyerere, known to his nation as 'Mwalimu' or teacher, took a personal interest in the preparation of the repository and played an active part in the ceremony that took place in the grounds of the Museum. Here was a National Museum that was convinced of the need to erect suitable facilities and, when funds were forthcoming, they did just that.

North Africa

Fossil hominids were originally removed from Algeria and Morocco to France. The most important specimens were: from Algeria – mandibles, teeth and a parietal bone from Ternifine; from Morocco – specimens from Témara, Sidi Abderrahman, Rabat, Jebel Ighoud and Tangier (Mugharet-el-Aliya).

From the Haua Fteah cave in Cyrenaica, Charles McBurney and a team from Cambridge University recovered two mandibles in a Levalloiso-Mousterian horizon. These were studied by J.C. Trevor and L.H. Wells (1953) and in greater detail by Tobias (1967b). When last seen the two jaws were in the Natural History Museum, London.

From the cave of Porc-Epic near Dire-Dawa in Ethiopia, a mandibular fragment was recovered. Its repository was last reported to be the Institut de Paléontologie Humaine, Paris.

Chad Republic – the cranium of Yayo (Koro Toro), discovered by Mme Francoise Coppens, was for many years in Paris where the author examined it jointly with Yves Coppens. Its latest repository was the Museum National d'Histoire Naturelle, Paris. The more recent Chadian finds from Bahr-el-Ghazal and Toros-Menalla were recovered by a joint Franco-Chadian expedition led by Michel Brunet of Poitiers, France. These specimens, like the post-independence discoveries in Kenya and Tanzania, are housed in the Chad.

Central Africa

The finest fossil hominid specimen to emerge, until today, from Zambia was the outstandingly complete cranium of what used to be called 'Rhodesian Man' or Broken Hill Man and after independence came to be known as Kabwe Man, Kabwe being the African name for Broken Hill. This specimen was recovered by a miner, T. Zwigelaar, in 1921, long before independence. From colonial Northern Rhodesia, the cranium went to the Natural History Museum in London. There, when I last looked, it still resided. Word reached me that the Zambian Government had asked the British Museum to repatriate the skull to Zambia. This was apparently declined by the British authorities, for one or other of several reasons one has heard. One does not know if the refusal was because Zambia, as such, did not exist when the cranium was recovered in 1921; for fear that facilities for storage and curating of the skull might not be at par in Zambia; or for the concern that, if this specimen were repatriated, it might prove to be the thin end of the wedge leading to a flood of other requests. This is one of the cases known to me where an official, formal request for repatriation of a fossil hominid specimen has been made to a former colonial power by the fossil's source land.

LOSS DURING REPATRIATION

This is the sad tale of 'Egbert' the neandertal youth from Ksâr 'Akil in the Lebanon. Father Franklin Ewing S.J. had excavated in the cave deposit of Ksâr 'Akil near Beirut in the Lebanon in 1938, and with his colleague J.G. Doherty, had recovered human remains, said to have been 'neandertaloid' in character. The best preserved was the partial skeleton of a child of about eight years old, to which Ewing gave the nickname 'Egbert' because (he told me) of the state of preservation of its cranium – 'like a broken eggshell!' Some other human remains were recovered. Egbert was for the time being in Fordham Catholic University in The Bronx, New York City, where I visited Ewing and 'Egbert' in 1956. Father Ewing allowed me to handle and examine it. It included a good mandible and I was able to obtain a cast of the cranium and mandible of the best specimen. I compared the Ksâr 'Akil jaw with the juvenile jaw that McBurney had invited me to examine, from Haua Fteah in Cyrenaica, a little further around the Mediterranean littoral. There were strong resemblances between the two mandibles and I included photographs of both in my description of the Haua Fteah remains, published as an appendix in Charles McBurney's *The Haua Fteah (Cyrenaica) and the Stone Age of the South-East Mediterranean* (1967). In 1956 I took photographs of Ewing holding Egbert on the steps at the entrance to Fordham University. After Ewing's death, these remains were intended to be repatriated to Beirut. They were sent from Fordham to the Society of Jesus' headquarters in Austria, with a view to their being returned to the museum in Lebanon. The fossil bones have never been seen again, despite fairly rigorous enquiries made by Nancy Minugh-Purvis of Philadelphia and myself as a Visiting Professor at the University of Pennsylvania in the 1990s. So my 1956 photographs of Father Ewing and Egbert may be the last photographs taken of the skull.

LE MOUSTIER AND COMBE CAPELLE SKELETONS, PROBLEMATICAL EUROPEAN REPATRIATIONS

The skeleton of the Le Moustier Neandertal youth was brought to light in August 1908 in the Dordogne district in the south of France. The tools from this cave gave the name Mousterian to the associated archaeological industry

(Klaatsch & Hauser 1909). It seems clear that the skeleton was moved to Germany without the enthusiastic acquiescence of the French archaeologists. In *Fossil Man,* the 1923 English translation of the classical French work, *Les Hommes Fossiles,* by Marcellin Boule, a rather scathing account is given of the exhumation and removal of the Le Moustier skeleton. Essentially the same account is repeated in the 1957 English edition by Boule and Vallois:

> 'In January 1909, a dealer in antiquities, of Swiss nationality, who had only too long exploited, for German profit, the deposits in the Dordogne district, that is to say, the most ancient and the most valuable archives in France, revealed the circumstances under which he had discovered and exhumed a human skeleton at Le Moustier.

The exhumation [by the Swiss dealer, O. Hauser] took place on 10 August 1908, in the presence of a tribunal of scientists from beyond the Rhine – Klaatsch, H. Virchow, von den Steinen, Hahne, Wüst, and others (and, of course, in the absence of any French scientist). Even so the scientific value of this relic is markedly diminished by the poverty of significant stratigraphical or palaeontological data, and especially by the deplorable manner in which it was extricated and restored. The reconstruction of the skull by Klaatsch, a professor of anatomy, is a positive caricature. A second reconstruction, in which several of Klaatsch's distinguished colleagues were called upon to assist, has at least the merit of being more faithful. The monetary value of the skeleton from Le Moustier was, on the other hand, considered beyond compare by the 'Museum für Völkerkunde' in Berlin, which paid Hauser, the dealer, the fabulous price of 125,000 [gold] francs!'

In fairness to Hauser, however, when he brought the first limb-bones to light, he suspended operations for four months and entrusted the excavation of the bones to Hermann Klaatsch (1923).

A year later, Hauser recovered another skeleton, ornamented with sea-shells, in a bed at Combe Capelle in the Dordogne, France. This, too, was acquired by the Berlin Museum, Hauser once again acting as an agent. Combe Capelle was considered to represent 'a variety of the Cro-Magnon Race' (Boule & Vallois, 1957).

Then, for some thirty-five years, the two historical skeletons reposed in the State Museum in Berlin where they were rated as 'two of the most important anthropological artefacts of the Museum für Vor- und Frühgeschichte' (Hoffman & Wegner, 2002). During the Second World War, the bombing of Berlin on 3 February 1945 resulted in the Museum being hit and, in the ensuing fire, the Le Moustier postcranial remains, among others, were severely damaged and partly destroyed. As a young student I grew up with the teaching that the Le Moustier skull had been lost, a casualty of the war. In 1957, Boule and Vallois wrote – not entirely accurately – that the Le Moustier skeleton 'was completely destroyed during the last war' (page 205, footnote 22). In fact, the Le Moustier skull had been taken to the Soviet Union in 1945. Subsequently, the 'lost' skull was located in Moscow, whence it was returned, along with the necklace of Combe Capelle and art objects, to the German Democratic Republic in 1958. For seven more years, the Le Moustier skull remained to all intents and purposes 'lost' in Berlin. Only in 1965 was the Le Moustier skull 're-excavated' in Berlin where it was identified as that of Le Moustier (Hesse & Ullrich 1966; Hoffman & Wegner 2002).

Theoretically, if the Soviet authorities had known of the identity of the skulls, they would have been confronted with a dilemma: to which destination should the remains be returned – to France, from which they were removed almost a century ago, or to Berlin where, by purchase, they had reposed since about 1909? By today's thinking, the Le Moustier skull should have been sent to France. However, the Russians sent it back to the Berlin State Museum from which it had been plundered, presumably by Soviet officers.

This must be an unusual, if not unique, repatriation quandary, where there were two potential claimants for the 'return' of a fossil *Homo* expatriate. However, if that was the theoretical position, it should be added that there was no evidence that the skulls of Le Moustier and Combe Capelle were identified specifically in Moscow, nor that these cranial remains had been closely examined there. They were returned, along with stolen artworks in a packing case, to Berlin from which they had been taken. It was only in 1965 that Henrike Hesse 'rediscovered' the Le Moustier skull (Hesse & Ullrich 1966).

In 1997, I was invited to Berlin by the German palaeoanthropologist, Herbert Ullrich. He gave me the opportunity to examine the somewhat fire-scorched skull of Le Moustier and to confirm its identity. Until then, it had been one of the very few European hominid fossils that I had not personally examined over the previous forty-five years.

At the time of my visit to Berlin in 1997, the skull of Combe Capelle, which Otto Hauser had excavated near Mont Ferrand in the Dordogne on 26 August 1909, was still 'missing'. Strenuous efforts were made by some of the German colleagues to find and identify the fragments of the calvaria, face and mandible. Isolated fragments had to be compared with illustrations and measurements that had much earlier been published (Hoffman 1997). Only on 27 December 2001 could Almut Hoffmann and Dietrich Wegner announce that they had 're-discovered' and identified the skull of Combe Capelle without any doubt (Hoffman & Wegner, 2002).

The cases of Le Moustier and Combe Capelle illustrate dramatically how, under wartime conditions, the purloining of fossils by invaders may add another dimension to the problems of expatriation and repatriation of fossil hominids.

CONCLUSIONS

This article has been concerned, in the main, with a series of case histories that illustrate claims for the ownership of hominid fossils. The coverage has not been universal, but the author has confined his attention very largely to examples with which he has been personally in contact, whether directly or indirectly. The article has dealt with specimens whose hominid (hominin) status is not in doubt. There are, of course a number of taxa whose systematic status is still uncertain; this includes fossils whose generic status has been variously assigned and at

deeper, Miocene levels, whose classification as hominids *sensu stricto* has been proposed by some and opposed by other scholars. Examples of such indeterminate genera, or whose determinacy changes with the recovery of new specimens or alterations in the systematics of higher primates, are *Otavipithecus, Kenyapithecus, Afropithecus, Samburupithecus, Nacholapithecus, Morotopithecus, Heliopithecus, Proconsul, Griphopithecus, Ankarapithecus, Oreopithecus, Rudapithecus, Graecopithecus, Sivapithecus, Lufengpithecus.* In the normal course of events, it would be appropriate and judicious for specimens representative of such taxa to be handled, as though they were agreed hominids, at least until consensus was reached on their status. Therefore the author's conclusions below should be applied to such specimens.

The author staunchly supports the idea that fossil hominids belong in and should remain in their country of origin. Where the fossils had been removed to another country, they should be restored to their cradle-land. If there is doubt about whether the facilities in the cradle-land are adequate, the country of 'adoption', perhaps helped by UNESCO, should offer to improve or help provide appropriate facilities for the permanent housing of the fossils in their country of origin. This category of heritage treasures comprises very rare specimens, many of which can fairly be described as unique. Therefore UNESCO should perhaps set up a commission to oversee problems of repatriation of fossil hominids, just as there is a special authority (the World Heritage Centre) to oversee sites and collections that have been placed on the World Heritage list.

This analysis and these recommendations do not necessarily apply to recent human remains, including lightly fossilized skeletal material. A different set of issues may arise in such cases, especially if the bones in question are claimed by living peoples, such as ethnic or tribal groups. Such claims may raise questions, such as the credibility or authenticity of the claimed relationship between the living populations and the skeletal remains: this might apply in cases where the recent skeletal remains have been exhumed from unmarked and unidentified graves. It is less likely to apply to skeletons in anatomy departments of medical schools: under the law of South Africa, for instance, such skeletons may be prepared from bodies legally acquired from state institutions (such as hospitals), bodies, that is, of people who have died in such institutions unclaimed by relatives or bona fide friends. Another category of legally permissible acquisition of human bodies by medical schools is that of persons who have made testamentary provision for their bodies, after death, to be delivered to anatomy departments or other medical school departments, of the institution chosen by the body donor.

In respect of recent or lightly fossilized human material that has been removed from the country, such bones belong to the country of origin and should be repatriated to it. It would not be appropriate for such remains to be handed over to local populations who claim 'ownership' of the remains, if they suspect or have reason to believe that the skulls or skeletons in question had originally been exhumed, or nefariously obtained as by the unlawful killing of human beings, from people living in the 'tribal' land or national territory, or who had belonged to the local population in question. There would always be problems of firmly establishing the provenance of such remains. Instead, on repatriation such remains should be returned to the state, which should be recognized as the appropriate authority to receive the remains and, taking what advice it needs, to determine the most suitable repository for them, be it in a university with a medical or health sciences faculty, or in a museum.

One other problem related to the main theme of this article has been raised by one of the referees and has already been under discussion in South Africa and elsewhere. This relates to requests received from time to time that specific fossils housed in museums and in universities be transferred to an authority close to the discovery site. The term 'repatriated' has even been used in such requests, although the term is clearly not applicable: 'repatriate' means to return to the native land (*Patria,* native land). 'Relocate' or even a borrowing of the genetical and botanical term 'translocate', would be appropriate for a movement from one repository to another within the country.

Basically, the same essential principles should apply in such cases. The fossil in question belongs to the country within which it was discovered. Thus, the Taung skull belongs to South Africa and not to one of its areas or provinces. The second principle is that the specimen should repose in an appropriately-equipped and expertly staffed institution. Thirdly, the choice of institution should depend on historical factors – by whom and where was the specimen recovered, extricated from the entombing matrix or breccia, reconstructed (where necessary) and analysed? Fourthly, another most important factor governing the choice of a suitable institution is this: *the fossils, let it never be forgotten, are research materials.* At which institution would the needs and convenience of researchers and graduate- and postgraduate students be best served?

Regional interests and local tourism can be well served by the provision of superlatively made casts of selected fossil specimens. Experts at the repository should always be willing to help design suitable displays and furnish reliable information for the erection of local exhibits at or near the source site. Successful examples of such local exhibits are those at Olduvai Gorge, Tanzania, type site of *Australopithecus boisei* and *Homo habilis*; Zhoukoudian, near Beijing (where original fossil hominids are housed), the type site of *Sinanthropus pekinensis,* now known as *Homo erectus pekinensis* and still popularly called 'Peking Man'; and San Felice Circeo (Monte Circeo), the cave site on the west coast of peninsular Italy, which has yielded a fine Neandertal skull, – to name one in each of three Old World continents.

My thanks are due to Teuku Jacob, Giorgio Manzi, Yves Coppens, P. Passarello, Michel Brunet, Aldo G. Segre, Eugenia Segre-Naldini and earlier conversations and correspondence with Ralph von Koenigswald, Harry L. Shapiro, Louis, Mary and Richard Leakey, Desmond Clark, Birger Bohlin. I am grateful to Marion Bamford, Lucinda Backwell, Heather White and Peter Faugust.

REFERENCES

BERCKHEMER, F. 1933. Ein Menschen-Schädel aus den diluvialen Schottern von Steinheim a.d. Murr. *Anthropologische Anzeiger* **10**, 318–321.

BOULE, M. 1923. *Fossil Men: Elements of Human Palaeontology.* Edinburgh, Oliver and Boyd.
BOULE, M. & VALLOIS, H.V. 1957. *Fossil Men.* New York, The Dryden Press.
DART, R.A. 1925. *Australopithecus africanus*: the man-ape of South Africa. *Nature,* London **115**, 195–199.
DART, R.A. & CRAIG, D. 1959. *Adventures with the 'Missing Link'.* New York, Harper and Brothers.
DREYER, T.F. 1935. A human skull from Florisbad, Orange Free State, with a note on the endocranial cast by Ariëns Kappers. *Koninklijke Akademie Van Wetenschappen in Amsterdam, Proceedings* **38**, 119–128.
DUBOIS, E. 1891. Voorlopig bericht omtrent het onderzoek naar de Pleistocene en Tertiaire vertebraten-fauna van Sumatra en Java, gedurende het jaar 1890. *Natuurkundig Tijdschrift voor Nederlandsch-Indië* **51**, 93–100.
HESSE, H. & ULLRICH, H. 1966. Schädel des '*Homo mousteriensis Hauseri*' wiedergefunden. *Biologische Rundschau* **4**, 158–160.
HOFFMANN, A. 1997. Zur Geschichte des Fundes von Le Moustier. *Acta Praehistorica et Archaeologica* **29**, 7–16.
HOFFMAN, A. & WEGNER, D. 2002. Der Schädel von Combe Capelle. *Anthropologische Anzeiger* **60**(4), 333–339.
KLAATSCH, H. 1923. *The Evolution and Progress of Mankind.* London, T. Fisher Unwin.
KLAATSCH, H. & HAUSER, O. 1909. *Homo mousteriensis Hauseri*: Ein altdiluvialer Skelettfund im Departement Dordogne und seine Zugehörigkeit zum Neanderthaltypus. *Archiv für Anthropologie* N.F. **7**, 287–297.
KLAATSCH, H. 1909. Preuves que *l'Homme mousteriensis Hauseri* appartient au type de Néanderthal. *L'Homme Préhistorique* **7**, 10–16.
KOENIGSWALD, G.H.R. VON 1956. *Meeting Prehistoric Man.* London, Thames & Hudson.
KOHL-LARSEN, L. 1943. *Auf den Spuren des Vormenschen.* Band I und II. Stuttgart, Strecker and Schröder.
LEAKEY, L.S.B. 1959. A new fossil skull from Olduvai. *Nature,* London **184**, 491–493.
TOBIAS, P.V. 1962. Early members of the genus *Homo* in Africa. **In**: Kurth, G. (ed.), *Evolution und Hominisation,* 191–204. Stuttgart, Gustav Fischer.
TOBIAS, P.V. 1966. A re-examination of the Kedung Brubus mandible. *Zoologische Mededelingen* **41**, 307–320.
TOBIAS, P.V. 1967a. *Olduvai Gorge* – Vol. II. *The Cranium and Maxillary Dentition of Australopithecus (Zinjanthropus) boisei.* Cambridge, Cambridge University Press.
TOBIAS, P.V. 1967b. The hominid skeletal remains of Haua Fteah. Appendix IB. **In**: McBurney, C.B.M., *The Haua Fteah (Cyrenaica) and the Stone Age of the South-East Mediterranean,* 338–352. Cambridge, Cambridge University Press.
TOBIAS, P.V. 1971. *The Brain in Hominid Evolution.* New York and London, Columbia University Press.
TOBIAS, P.V. 1984a. *Dart, Taung and the 'Missing Link'.* Johannesburg, University of the Witwatersrand Press for the Institute for the Study of Man in Africa.
TOBIAS, P.V. 1984b. The life and work of Professor Dr. G.H.R. von Koenigswald. In: *Auf den Spuren des Pithecanthropus. Leben und Werk von Prof. Dr. Gustav Heinrich Ralph von Koenigswald (1902-1982).* Aufsätze und Reden der Senckenbergischen Naturforschenden Gesellschaft **34**, 25–96.
TOBIAS, P.V. & KOENIGSWALD, G.H.R. VON 1964. A comparison between the Olduvai hominines and those of Java and some implications for hominid phylogeny. *Nature,* London **204**, 515–518.
WELLS, L.H. 1951. The fossil human skull from Singa. *Fossil Mammals of Africa,* No. 2. London, British Museum of Natural History.
WOODWARD, A.S. 1938. A fossil skull of an ancestral Bushman from the Anglo-Egyptian Sudan. *Antiquity* **14**, 190–195.