Michael James Mehlman 1943–2011

SALLY MCBREARTY

Department of Anthropology, U-2176, University of Connecticut, Storrs, CT 06269, USA; mcbrearty@uconn.edu

OBITUARY

Michael James Mehlman, archaeologist of the East African Paleolithic, died of kidney cancer on February 11, 2011, in Santa Cruz, California. Mike made a lasting contribution to our understanding of the Middle to Later Stone Age transition, and his work established the archaeological sequence for northern Tanzania upon which all subsequent research on that period in the region relies.

Mike was born on October 22, 1943, in Menlo Park, California. As an undergraduate he studied at Tulane University, and he maintained an affection for the city of News Orleans throughout his life. He moved on to UCLA, and eventually to UC Berkeley, where he earned two bachelor's degrees, the first, with honors, in 1966, and the second, in anthropology, also with honors, in 1970. He was admitted to the PhD program at the University of Illinois, Urbana, in 1970 to study archaeology under the supervision of Charles M. Keller, who had been Desmond Clark's first PhD student at UC Berkeley. In the summer of that year, Mike excavated with Charlie at the Acheulian site of Isimila, where he fell in love with East Africa (Hansen and Keller 1971). Later that same field season, they surveyed the Manyara and Engaruka basins. The following year Mike accompanied Charlie to Berkeley where Charlie was to fill in for Desmond Clark, who was on sabbatical. Berkeley was an exciting place at that time for anyone with an interest in East African archaeology and human evolution. Among the faculty were not only Desmond, but also Glynn Isaac, Clark Howell, Dick Hay, Garniss Curtis, Sherwood Washburn, and Phyllis Dolhinow.

While at Berkeley, Charlie conducted a seminar on the African Middle Stone Age (MSA), then an obscure topic in archaeology. Mike's term paper for the course on the East African MSA later formed the basis of his MA thesis (Mehlman 1974). It is a model of thoroughness, accuracy, and attention to detail, as well as an example of Mike's lucid writing style. After his return to Urbana with Charlie, Mike was shortly followed by a contingent of half a dozen Berkeley undergrads who had been enrolled in that seminar, and who chose to do their graduate degrees with Charlie. In 1972 and 1973, Mike acquired field experience at Stoke Newington, London, with Garth Sampson, the European Mesolithic site of Bergumermeer, Germany, with Raymond Newell (cf. Gifford-Gonzalez 1985), and at Lake Turkana Kenya, with Glynn Isaac, John Barthelme, and Diane Gifford-Gonzalez (Barthelme 1995; Gifford-Gonzalez and Behrensmeyer 1977; Harris et al. 2006). He devoted much of the years 1973 and 1974 to studying comparative collections of MSA and LSA artifacts at the National Museums of Kenya, Nairobi, the Field Museum, Chicago, and the Institut für Urgeschichte, Tübingen (Figure 1). He then embarked for Tanzania in 1975 to excavate at Nasera rockshelter, which had been discovered and briefly excavated by Louis Leakey, who referred to it as Apis Rock (Leakey 1931, 1936a). Mike insisted upon reinstating the local Maa name of Soit Nasera for the site.

Mike was particularly interested in the transition between the Middle and Later Stone Ages, then assigned to the "second intermediate" period in African prehistory. The signature industry of the second intermediate was the Magosian, which contained artifacts of both MSA and LSA types, and the sequence at Nasera as described by Leakey seemed to contain a similar entity. However, Hole (1959) had demonstrated that the sequence at the type site of Magosi, Uganda, was disturbed and thus that the association of the MSA and LSA artifact types was suspect. The Magosian and the model of "intermediate" industries was therefore abandoned (Bishop and Clark 1967), but little progress had been made in our understanding of the process of the



Figure 1. Clockwise from L: Mike Mehlman, Charlie Keller, Sally McBrearty, Diane Gifford-Gonzalez, Preston Staley (in foreground, with cat), Society of Africanist Archaeologists in America meetings, Dallas, Texas, 1973.

PaleoAnthropology 2011: 188–191.© 2011 PaleoAnthropology Society. All rights reserved.ISSN 1545-0031doi:10.4207/PA.2011.ART52

replacement of MSA by LSA industries.

Mike's meticulous excavations at Nasera consumed most of 1975 and 1976. Having excavated an area of 75m², he finally reached bedrock at a depth of 9m. These excavations produced a sample of 283,000 stone artifacts, most of them quartz, 168,000 bone fragments, and 536 potsherds. While camped at Nasera his only neighbors were Maasai pastoralists with whom he developed a close symbiotic relationship. He did, however, regularly drive the 27km from Nasera to Olduvai, where he became one of a very select few who were Mary Leakey's firm favorites. The research at Nasera showed that the MSA and LSA sequence contained a number of distinct industries, to which Mike gave local names. Among them is the Nasera Industry, a late MSA entity characterized by backed pieces and numerous small points. Mike's work at Nasera confirmed the presence of industries in East Africa that contained elements common to both the MSA and LSA but were not the product of mechanical mixing of strata like the Magosian. It further suggested that characteristically LSA artifacts, such as geometrically backed pieces, accrued gradually across the MSA-LSA transition (Mehlman 1977).

Not content with these results, which alone would have comprised a major contribution, Mehlman expanded his thesis research to establish the archaeological succession for this entire region of northern Tanzania. His efforts included work at the site of Mumba, where a Middle to Later Stone Age sequence had been investigated by Kohl-Larsen (1943), and on the Lake Eyasi shoreline, where hominin cranial remains and artifacts resembling Sangoan types had been described by Hans Reck and Kohl-Larsen (1936; Kohl-Larsen 1943) and Louis Leakey (1936b, 1946). At Mumba, Mike re-exposed and somewhat enlarged Kohl-Larsen's deep sounding (Figure 2). He obtained samples for dating and clarified the site's geologic sequence and the total assemblage composition for the different stratigraphic units. He confirmed the impression he had gained though examination of the contents of the Kohl-Larsen spoil heap and of museum collections that only a small selected sample of the total artifacts recovered at the site had been retained. He established the presence of backed geometrics firmly in a Middle Stone Age context that was clearly separated stratigraphically from the overlying LSA layers. He defined the Mumba Industry on the basis of this assemblage, demonstrating the existence in East Africa of MSA technology not unlike that of the South African Howiesons Poort (Mehlman 1979). Because backed geometrics were probably components of complex projectile weapons, their presence in the Mumba industry signals a technological sophistication previously unsuspected in the East African MSA (Mc-Brearty and Brooks 2000).

Annoyed with assertions of the persistence of anatomical and behavioral primitiveness into late East African prehistory (Protch 1975), Mike undertook a clarification of the stratigraphy of the Lake Eyasi shore and its relationship to the Mumba sequence. By careful sedimentological analysis and geologic mapping, including a traverse over more than 3km with rudimentary field equipment, Mike established



Figure 2. Base of Mehlman-Kohl-Larsen excavations, Mumba rockshelter, Tanzania, July, 1977.

that the strata at Eyasi containing the archaic cranium and Sangoan artifacts lay beneath the MSA sequence at Mumba (Mehlman 1984, 1987). In collaboration with Gunter Bräuer of Hamburg University, he was then able to demonstrate that human molars in the MSA layers at Mumba are probably those of modern *Homo sapiens* (Bräuer and Mehlman 1988). Geochemical analysis by Merrick and Brown (1984) determined that the source of the obsidian used by MSA people at Mumba lay in the vicinity of Lake Naivasha, Kenya, 230km to the north. This substantial distance indicates the existence of either very large home ranges or extensive trade networks in East Africa during the Middle Stone Age.

The MSA remains at Mumba and Nasera were of course beyond the range of the radiocarbon method, but Mike obtained ¹⁴C dates on material from the LSA layers, and the great depth of the MSA deposits at both sites indicated that a substantial amount of time had been required to accumulate them. Fauna was not particularly well preserved in the MSA layers at either Mumba or Nasera, but Mike's identifications of extinct taxa among the fossils from Eyasi allowed him to estimate their minimum age at 130 ka, and his correlation of Eyasi and Mumba showed no substantial unconformity between the sequences, demonstrating an early age for the base of the Mumba sequence also. This impression was confirmed by Th/U dates from the older layers at Mumba ranging between 109 ka and 130 ka.

Mike's two volume thesis (Mehlman 1989) incorporated these findings. It not only established the archaeological sequence for the Middle and Later Pleistocene of northern Tanzania, but was among the first works to argue for the antiquity of *Homo sapiens* and MSA technology in East Africa, during a time when most prehistorians endorsed the "short chronology" for Africa then advocated by Desmond Clark (e.g., Clark 1982). Mehlman noted that the MSA-LSA transitional industries at Mumba and Nasera were neither ephemeral nor fleeting, but "of extended duration, perhaps lasting as long as the MSA or LSA sensu stricto" (Mehlman 1989: 563). Later, amino acid racemization dates of ~52 ka on ostrich eggshell beads from the upper MSA layers at Mumba (Hare et al. 1993) clearly illustrated traces of symbolic behavior in the MSA.

In the concluding chapter to his thesis, Mike depicted his Tanzanian work as "a singularly daunting research effort for a single individual," and confessed, "I began my analytical studies in dismay because it was then apparent that they would be inordinately time-consuming and promised no guarantee of clear-cut results" (Mehlman 1989: 567). Yet through his efforts we now have the framework of culture history for the last 200,000 years of human habitation in northern Tanzania.

In a letter of 1992, Mike described his professional aspirations in these words: "In the broadest sense, my goal is a post-Olduvai, post-Acheulian reassessment of East African prehistory that is ... relatively free of Eurocentric bias." He had a deep understanding and love for Africa and Africans, and a distaste for the racist sentiments that underlay many assumptions about the nature of the African archaeological record at that time. He was a critic of the three-age system in African prehistory and was bemused by the increased interest in the MSA in recent years, observing that "As 'MSA' comes to have more vague and disparate meanings, its use increasingly fails to signify anything in particular" (Mehlman 1989: 7). Mike was gratified that his work made possible a greater appreciation of African prehistory. He was however intolerant of superficiality in all its forms, and he was impatient with those unwilling to exert the energy to gain a nuanced understanding of the African past. His careful study of the pottery, human remains, and stone artifacts from the upper strata at Mumba and Nasera led him to question assumptions about the subsistence economy and way of life of the sites' later inhabitants, and to criticize facile ethnic and behavioral parallels with the modern inhabitants of the region.

Over the course of his career Mike received fellowships, grants, and awards from many sources, among them the National Science Foundation, the Ford Foundation, the LSB Leakey Foundation, the British Institute in Eastern Africa, and the Phi Beta Kappa and Phi Kappa Phi honors societies. He held research positions at the Institut für Urgeschichte, University of Tübingen, with Hansjürgen Müller-Beck in 1980, and at the Smithsonian Institution with Alison Brooks and John Yellen in 1991–1992 (Brooks et al. 1995; Yellen et al. 1995). At Tübingen, as described above, he studied the University's holdings of selected artifacts from the Kohl-Larsen excavations at Mumba. At the Smithsonian he collaborated with Alison and John in the analysis of the lithic artifacts that they had excavated at Katanda, Congo. While Mike bemoaned "the intractable nature of quartz as an object of study" (Mehlman 1989: 567), his experience with the thousands of quartz artifacts from Nasera and Mumba, made him uniquely qualified for his work on the Katanda artifacts.

Mike was a soft-spoken and somewhat self-effacing person. Perhaps as a result he never held a formal faculty position. This is a serious loss to the profession, because Mike was a gifted teacher, and his patience and critical mind would have made him an invaluable advisor to graduate students. Until his retirement in 2004, he worked for twenty years in Collection Planning at the UC Santa Cruz library, where he developed a number of close friends. In a note in the library newsletter, his friend Barbro Lindblom stated, "He was a gifted searcher and worked with the most complex serial records with … tenacity and thoroughness."

In 1981, while Mike was carrying out artifact analysis for his PhD thesis at Mary Leakey's camp at Olduvai, his father, Charles, who had been ill for some years, died. Within a week, his mother, Nora Jean, also died. By chance, within days of his parents' deaths, Mike arrived at my home in Nairobi for some long postponed R&R. It was my unhappy task to inform him of his loss and to put him on a plane back to the US. He never returned to East Africa. Shortly thereafter he suffered the first of his many major illnesses, a life-threatening ailment that was never conclusively diagnosed. In the ensuing years he experienced a greater variety of serious and painful disorders than any human being should be expected to endure. Fortunately, his brother-inlaw, John Gosling of Stanford University, is a skilled physician and surgeon whose expert advice permitted Mike to enjoy a far greater number of years of life than his close friends anticipated. His sister, Kate Gosling, took pains to make his final years more comfortable.

Mike is survived by his siblings, Kate Gosling, Harry Mehlman, and Martha Sharp, and several nephews and nieces. He was married briefly to Diane Gifford-Gonzalez. Near the end of his life he relied heavily upon his family and friends in California for their understanding and help with the practicalities of daily life. He no doubt exasperated them by insisting upon a measure of independence until the end. Mike had an animated sense of humor and a keen sense of the absurd. Those who knew him well will remember his quiet laugh, his love of music and good food, and, in the early years, the presence of that ever-smoldering cigarette.

ACKNOWLEDGEMENTS

I would like to thank Diane Gifford-Gonzalez for suggesting that I write this remembrance. I would also like to thank Diane, Kate Gosling, Alison Brooks, and Andrew Hill for correcting my facts and jogging my memory.

Sally McBrearty Glastonbury, Connecticut 8 April 2011

REFERENCES

- Barthelme, J.W. 1985. Fisher-Hunters and Neolithic Pastoralists in East Turkana, Kenya. British Archaeological Reports, Oxford, no. 254.
- Bishop, W.W. and Clark, J.D. 1967. *Background to Evolution in Africa*. Chicago University Press, Chicago.
- Bräuer, G. and Mehlman, M.J. 1988. Hominid molars from a Middle Stone Age level at the Mumba Rock Shelter, Tanzania. *American Journal of Physical Anthropology* 75, 69–76.
- Brooks, A.S., Helgren, D.M., Cramer, J.M., Franklin, A., Hornyak, W., Keating, J.M., Klein, R.G., Rink, W.J., Schwarcz, H.P., Smith, J.N.L., Stewart, K., Todd, N.E., Verniers, J., and Yellen, J.E. 1995. Dating and context of three Middle Stone Age sites with bone points in the upper Semliki Valley, Zaire. *Science* 268, 548–553.
- Clark, J.D. 1982. The cultures of the Middle Paleolithic and Middle Stone Age. In Clark, J.D. (ed.), *The Cambridge History of Africa*, vol. 1: *From the Earliest Times to 500 B.C.* Cambridge University Press, Cambridge, pp. 248–341.
- Gifford-Gonzalez, D.P. 1985. Harzmountain-Liederkranz: Eine neue Fundstelle der Grouchmarxkomplex (A Translation and Synthesis). *Journal of Irreproducible Results* 30, 27–28.
- Gifford-Gonzalez, D.P. and Behrensmeyer, A.K. 1977. Observed Formation and Burial of a Recent Human Occupation Site in Kenya. *Quaternary Research* 8, 245–266.
- Hansen, C.L. and Keller, C.M. 1971. Environment and activity patterning at Isimila Korongo, Iringa District, Tanzania: a preliminary report. *American Anthropologist* 73, 1201–1211.
- Hare, P.E., Goodfriend, G.A., Brooks, A.S., Kokis, J.E., and von Endt, D.W. 1993. Chemical clocks and thermometers: diagenetic reactions of amino acids in fossils. *Carnegie Institute of Washington Yearbook* 92, 80–85.
- Harris, J.M., Leakey, M.G., and Brown, F.H. 2006. A Brief History of Research at Koobi Fora, Northern Kenya. *Ethnohistory* 53, 35–68.
- Hole, F. 1959. A critical reanalysis of the Magosian. *South African Archaeological Bulletin* 14, 126–134.
- Kohl-Larsen, L. 1934. *Auf den Spuren des Vormenschen*, vols I & II. Strecker un Schröder, Stuttgart.
- Leakey, L.S.B. 1931. The Stone Age Cultures of Kenya Colony. Cambridge University Press, Cambridge.
- Leakey, L.S.B. 1936a. *Stone Age Africa*. Oxford University Press, Oxford.

- Leakey, L.S.B. 1936b. A new fossil skull from Eyassi, East Africa. *Nature* 128, 1082–1084.
- Leakey, L.S.B. 1946. Report on a visit to the site of the Eyasi skull, found by Dr Kohl Larsen. *Journal of the East African Natural History Society* 19, 40–43.
- McBrearty, S.and Brooks, A.S. 2000. The Revolution That Wasn't: a New Interpretation of the Origin of Modern Human Behavior. *Journal of Human Evolution* 39, 453– 563.
- Mehlman, M.J. 1974. The Middle Stone Age in East Africa and the Somalilands: a Review. Paper in lieu of MA thesis, University of Illinois, Urbana.
- Mehlman, M.J. 1977. Excavations at Nasera Rock, Tanzania. *Azania* 12, 111–118.
- Mehlman, M.J. 1979. Mumba-Höhle revisited: The relevance of a forgotten excavation to some current issues in East African prehistory. *World Archaeology* 11, 80–94.
- Mehlman, M.J. 1984. Archaic *Homo sapiens* at Lake Eyasi, Tanzania: recent misrepresentations. *Journal of Human Evolution* 13, 487–501.
- Mehlman, M.J. 1987. Provenience, age and associations of archaic *Homo sapiens* crania from Lake Eyasi, Tanzania. *Journal of Archaeological Science* 14, 133–162.
- Mehlman, M.J. 1989. Late Quaternary Archaeological Sequences in Northern Tanzania. Ph.D. Dissertation, University of Illinois, Urbana. Available through ProQuest Dissertations & Theses, Document ID: 303705423.
- Mehlman, M.J. 1991. Context for the emergence of modern man in Eastern Africa: some new Tanzanian evidence. In Clark, J.D. (ed.), *Cultural Beginnings: Approaches to Understanding Early Hominid Lifeways in the African Savanna*. Forschunginstitut fur Vor- und Fruhgeschichte, Romisch-Germanisches Zentralmuseum, Monographien 19, Bonn, pp. 177–196.
- Merrick, H.V. and Brown, F.H. 1984. Obsidian sources and patterns of source utilization in Kenya and northern Tanzania: some initial findings. *African Archaeological Review* 2, 129–152.
- Protch, R. 1975. The absolute dating of Upper Pleistocene sub-Saharan fossil hominids and their place in human evolution. *Journal of Human Evolution* 4, 297–322.
- Reck, H. and Kohl-Larsen, L. 1936. Erster Überblick uber die jungdiluvialen Tier- und Menschenfunde Dr. Kohl-Larsen's im nordöstlichen Tiel des Njarasa-Grabens (Ostafrika). *Geologische Rundschau* 27, 401–441.
- Yellen, J.E., Brooks, A.S., Cornelissen, E., Mehlman, M.J., and Stewart, K. 1995. A Middle Stone Age worked bone industry from Katanda, Upper Semliki Valley, Zaire. *Science* 28, 553–556.

Note: To my knowledge, this references list includes all of Mehlman's published works. Monographs enlarging upon his dissertation work were planned, and were to be published in the *Tubinger Monographien zur Urgeschichte* series, but were never completed.