Institute Moves to New Berkeley Headquarters

We have moved. At the end of December, 1994 the offices and laboratories of the Institute of Human Origins moved across Berkeley to a new location on Ninth Street at its intersection with Gilman Street. The new space consists of about 10,000 square feet on one level in a modern commercial building in the northwestern section of the city.

At this new site the Institute will be able to provide generally larger offices and improved laboratory space, while retaining considerable room for future expansion. In addition, all of the Institute's functions will be consolidated on one level instead of being spread across parts of two floors as previously. As this newsletter is being prepared, the tasks of laying out a new overall floorplan, placing equipment and furniture, installing the IHO cast collections and library, and so forth are proceeding while the staff works to maintain our usual operations as well.

The move has required changes in IHO's phone numbers as well as address. All members and correspondents, please note the following: IHO's new mailing address is 1288 Ninth Street, Berkeley, California 94710. Our new telephone number is (510) 525-0500; the new fax number is 525-0668.

All of our e-mail addresses remain unchanged.

The sketch map which accompanies this announcement shows the location of the new Institute building, nine blocks from Interstate 80 in northwestern Berkeley. Members and visitors to IHO will find off-street parking adjacent to the Gilman Street side of the building.

Preparations before the move were greatly aided by many of IHO's local volunteers, who performed a significant part of the necessary packing. Volunteers have also been helping in many ways during the transitional period at our new location. (See "At the Institute" on page 4.)

Bibliography of Human Evolution

We receive many requests from members and the general public for information, reference sources, or suggested reading on human evolution. In the past we have printed occasional book reviews in the Newsletter. However, we don't have room to review all the new books appearing on this subject. For some years I have maintained a bibliography to mail out in response to inquiries. Below is a very briefly annotated list of good books published in the last decade. It contains some, but by no means all, of the recent references relevant to human evolution and related fields.

— Eric Meikle


Newsletter Change

Longtime readers may have noted changes in the numbering of the IHO Newsletter. Early issues, from the mid-1980s, were designated in several different fashions. In recent years each Newsletter has borne a Volume and Number, although publication has been at irregular intervals. We have decided to begin using a more simple and straightforward system, with each issue bearing a consecutive number. This Newsletter is the 22nd to be published since 1982. The previous Newsletter was Volume XII, No. 1, dated Summer, 1994. The next issue will be Number 23.
President's Report: Lucy's Grandparents

Last Fall, the announcement of 4.4 million year old hominids from Ethiopia graced the cover of Nature (September, 22, 1994) and made headlines around the world. The new human fossil finds were recovered from Aramis, a site in the Afar located about 75 kilometers south of Hadar, where Lucy was found. In the Nature paper authored by Tim White, Gen Suwa, and Berhane Asfaw the remains were assigned to a new species, *Australopithecus ramidus*, named after the Afar word for “root”.

These hominids are most interesting since they come from geological deposits dated to 4.4 million years. Lucy’s species, *A. afarensis* is known to have existed from about 3.9 to 3.0 million years. This means that the new species is roughly 500,000 years older than the oldest known *A. afarensis*.

The majority of the published fossil hominid collection from Aramis consists of teeth and tooth fragments. Portions of two different skull bases and parts of several arm bones were also recovered. The locomotor capabilities, anatomy of the lower jaw, body proportions, and other aspects of the Aramis hominids are still poorly understood. However, the Middle Awash Team recently announced the discovery of a partial skeleton from Aramis which promises to provide important new data.

When *A. afarensis* was announced as a new species in 1978, we predicted that eventually there would be found a more primitive species — Lucy’s ancestor. Since *Australopithecus afarensis* exhibits ape-like features in the skull, teeth and jaws, we postulated that older human fossils would be still more ape-like, and this is exactly what is seen in the fossils from Aramis.

These hominid fossils have a number of characteristics which suggest a more primitive evolutionary status that those seen in *A. afarensis* — sort of Lucy’s grandparents. Such features include a primitive lower first milk molar, similar to those seen in extant chimpanzees. Also, the dental enamel is thin, more ape-like, and not thick as in all later hominids.

Fossil animals and plants found associated with the Aramis fossil hominids suggest that the paleoenvironment was not open savanna, but more densely wooded. This is also the sort of environment envisioned for Hadar.

The Aramis finds are important because there has been considerable debate about a creature as primitive as Lucy being our ancestor. Some scientists have thought that a more advanced human existed at the same time. The discovery of Lucy’s direct ancestor, which is more ape-like and more primitive, bolsters Lucy’s place on the family tree. The new finds from Aramis vindicate earlier views that Lucy was a transitional hominid between more primitive forms and more advanced forms like *Homo* and robust *Australopithecus* which appear around 2.5 million years ago. *A. afarensis* occupies a pivotal place on the human family tree, since it is the last common ancestor of all later hominids.

Whenever a new fossil hominid species is named debate is sure to arise. This is certainly true for the Aramis finds. Not everyone accepts the name *A. ramidus*, because in 1989 an Israeli scientist suggested that a jaw fragment of roughly the same geological age as Aramis should be given a distinctive name, “*praegens*”. If this fossil jaw from Tabarin, northern Kenya, cannot be distinguished from the Aramis finds, then the name *A. ramidus* must be dropped and replaced with *A. praegens*.

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Grandparents

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The new Ethiopian hominid fossil finds bring us one step closer to the common ancestor for African apes and humans, but I suspect that we will find even more primitive species. If the African ape and hominid lineages diverged 5 to 8 million years ago, there may still be room in the evolutionary record for additional unknown species.

IHO at the AAPA

The 1995 Annual Meeting of the American Association of Physical Anthropologists (AAPA) was held in Oakland, California from March 29 to April 1 this year, and IHO was deeply involved in preparations for the event. AAPA is the largest professional association of physical anthropologists. The annual meeting brought together more than 900 academics and students for four days of scientific presentations, informal gatherings, and association business functions.

This year, Don Johanson was the invited speaker at the annual Association Luncheon on March 31. His talk will be printed in the next edition of the Yearbook of Physical Anthropology. Bill Kimbel and Yoel Rak presented a paper entitled "Diagnostic Neandertal Characters in the Amud 7 Infant" in a symposium on "Ontogeny and the Emergence of Modern Humans". (The Fall, 1993, issue of the IHO Newsletter discussed this fossil specimen from Israel.) Eric Meikle was IHO's representative on the Local Arrangements Committee which planned and coordinated the meetings. Numerous IHO Volunteers helped with on-site registration and with preparation of information and materials supplied to attendees.

Each year the AAPA convention is held in a different city and organized by a different group of local members. The 1995 meeting took place at the Parc Oakland Hotel. The Local Arrangements Committee, with eight members, was headed by Dr. Robert Jurmain of San Jose State University and Dr. Eugenie Scott of the National Center for Science Education, Berkeley.

Bibliography of Human Evolution

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Johanson, Donald C. & Kevin O'Farrell (1990) Journey from the Dawn: Life with the World's First Family (Villard). Fiction, but with explicit explanations of scientific basis


Lewin, Roger (1988) In the Age of Mankind (Smithsonian Books). Beautifully illustrated, wide-ranging


Lewin, Roger (1993) The Origin of Modern Humans (Scientific American Library). Reviews recent evidence and controversies, for a general audience


At the Institute

Volunteers contribute effort and time each year in support of IHO. They help with the Lecture Series, assist in the casting laboratory, aid research, perform general office chores, and contribute to special events. These generous friends donate time, expertise, patience, strong backs, humor and unflagging enthusiasm for tasks that augment our small staff. We could not succeed half so well without them, and they are a welcome presence in our lives. In 1994 our volunteers were especially important in helping with the move to new quarters (see page 1) and in preparing for the 8th International Congress of Geochronology, Cosmochronology, and Isotope Geology.

The following individuals gave volunteer service to the Institute during 1994. Some have been supporters of IHO for many years. Those marked by an * have been volunteers for over five years.

Jeremy Banford; Jim Carty; Amy Council; Patricia Davis*; Trevor Edwards; Keith Fullington; Lee Gasparetti; Judy Gregg; Victor Herbert; David Hoffman; Barbara Miller*; Anne Monk; David Sanford; Jeff Selk; Lisa Smeneck; Carey Terry; Susan Toth; Jane Webber; Richard Weiss*; Frank Zima*; Sue Zima*; Carrie Zontine.

Many inevitable tasks accompany a major office move such as ours: installation of cabinets and furniture; sorting and organizing; arranging and finishing. Much of this labor at the new Institute has been performed by hard-working staff members Al Miller, Ann Blair, and Alisa Reynolds.

Lecture Update: Recent IHO Speakers

On March 8, 1995, Dr. Paul Bahn gave a public lecture entitled "Cave Art Without the Caves" at the Institute. Dr. Bahn is an English archeologist with special interests in Upper Paleolithic and other rock art whose best known publication is the book Images of the Ice Age. His presentation was the first installment of the IHO Lecture Series to take place at our new Berkeley location.

Dr. Bahn's talk concerned the significance of the "open air" rock art sites of southwestern Europe. Only six such sites are known from Spain, Portugal, and France compared to the several hundred cave (or "closed") sites famous for their paintings and engravings. Sites in the open were probably common during the Upper Paleolithic (between about 35,000 and 10,000 years ago in Europe), but have generally been destroyed by erosion. Cave environments tend to be much more protected and constant, preserving the remains of such activities as painting and carving.

All of the open rock art sites have been discovered since 1980. Dr. Bahn considers them to represent a new and very poorly known phenomenon in prehistoric art. He believes they represent a normal or characteristic manifestation of Paleolithic art. Cave art may be quite atypical of what originally existed. One of the most important such sites, in the Coa River valley of Portugal, may soon be submerged behind a dam now under construction.

The IHO Lecture Series has now completed ten years of presenting the latest research and interpretations in paleoanthropology, earth sciences, primate behavior, and evolution to the general public. The first lecture in the series was given in January, 1985, by Dr. Nick Toth of Indiana University. Since that time there have been a total of 54 lectures presented by distinguished speakers. Capacity crowds have been the rule, with enthusiastic audiences drawn from throughout the greater Bay Area.

We would like to acknowledge the participation of the following speakers who contributed to the success of the IHO Lecture Series during 1994:

- Dr. Steven Brandt (University of Florida) 
  "Woman the Toolmaker: Contemporary Use of Flaked Stone Tools in Ethiopia"; February 22.
- Dr. Richard Klein (Stanford University) 
  "Modern Human Origins"; April 11.
- Dr. Carl Swisher and Dr. Ganniss Curtis (Institute of Human Origins) "Java Journeys: New Dates and Older Ages for Homo erectus"; April 25.
- Dr. Li Tianyuan (Hubei Archeological Institute) and Dr. Dennis Eler "In Search of Asian Ancestors"; September 19.
- Dr. Colin Groves (Australian National University) "Identifying Our Ancestors (and Their Sisters and Their Cousins and Their Aunts)"; November 3.