

Pleistocene is the matter of the origin of Neanderthal man and its relation to *H. erectus*; it has been argued in a recent research report in this journal (Cuenca and Walker 1980, and see Cuenca and Walker 1981 for statistical comparisons) that in Western Europe hominids which can variously be called atypical *H. erectus*, ante-Neanderthals, or archaic *H. sapiens* are quite widespread, some of which are perhaps as near to later, modern *H. sapiens* as they are to Neanderthal, notwithstanding their late Middle Pleistocene age. If, indeed, the Krapina crania are as early as Smith and many other palaeo-anthropologists feel, then their breadth perhaps has its parallel in Fontéchevade and the Alicante object (ectocast?), which in other respects are hard to reconcile with classic Neanderthal forms. Perhaps a degree of lability or heterogeneity existed during the penultimate glacial and the last interglacial. If Krapina is, indeed, last interglacial or very early in the last glacial, the occurrence of Carabelli's cusps (a "European" characteristic of modern craniology) is also intriguing; it is less so if the Krapina collection is Neanderthal-Upper Palaeolithic transitional in nature, of course. What all this boils down to is that one of the most important Neanderthal collections known (and probably the most important from Europe) cannot be properly dated. Whatever the stratigraphic care with which recent excavations have been conducted in Central Europe, this awkward lacuna in our knowledge cannot be overcome. Indeed, there is a conspicuous dearth of radiometric dates even from some of these other, more recently excavated sites. This is reflected in the vagueness of the chronology ("Riss-Würm," "Early Würm," "Lower Würm stadial," etc.), which looks very amateurish compared with Western European schemes. In short, there is much that is usefully summarized in this review, but one feels that it might have addressed itself to a wider range of problems and to the formulation of an agenda for their future investigation rather than contenting itself with arguing a position most people have long since come to accept.

by MILFORD H. WOLPOFF

*Department of Anthropology, University of Michigan, Ann Arbor, Mich. 48109, U.S.A. 15 VI 82*

Smith's overview of hominid evolution in the Upper Pleistocene of South-Central Europe could not have come at a more appropriate time. The demonstration of a Western European Neanderthal associated with the Châtelperronian at Saint-Césaire has set the stage for reevaluation of the European Neanderthals as potential ancestors of modern European populations (Wolpoff 1981), and South-Central Europe is a critical region for testing the competing hypotheses. Moreover, this region has also provided new evidence bearing on these hypotheses. Vindija Cave in Croatia has yielded what is probably the best case of a transitional *sample* spanning the supposedly distinct morphologies of European Neanderthals and early modern populations (Wolpoff et al. 1981). Yet, excepting Vindija, this review deals with specimens and sites that have been known for a long time. Why this region has been systematically ignored in virtually all considerations of Upper Pleistocene European hominid evolution may be of as much interest to historians of science as the Neanderthal problem is to paleoanthropologists.

Smith's review is both sufficiently broad and detailed and suitably cautious. My comments should be taken as supplementary and mainly concern some thoughts regarding the fate of the Neanderthals and the origin of the more modern populations in this region.

Mladeč, in my view, is one of the critical sites in the European Upper Pleistocene sequence, and the fact that it has been completely ignored in the development of European paleo-anthropology must surely be one of the great historic mysteries of our field. Szombathy's (1925) publication was relatively complete and well illustrated for the time, and the fact that it

was written in *German* made it accessible to most Western European and American scholars. Yet, with rare exceptions, beginning with Morant (1930) the specimens are usually completely ignored or, when mentioned, only the females are dealt with. "Mladeč man" would have been so much more appropriate than "Cro-Magnon man" as the appellation for the earliest European modern *sapiens* population, and one wonders how the Neanderthal problem would have developed had this been the case.

As Smith points out, the Mladeč material is not Neanderthal. Yet, the approach of morphological details to the Neanderthal condition is even closer than he indicates, including in addition to the points he mentions the extraordinarily marked midfacial prognathism that is indicated by the projection of the upper face and the small mastoids that seem to characterize most of the truly early European modern *sapiens*. The Mladeč 1 female has a facial size that is a reasonable match for the Cro-Magnon 1 male's, an indication of the amount of facial reduction that took place within the European early Upper Palaeolithic.

Moreover, the Mladeč morphology also appears at Zlatý Kůň, in the Brno 2 male, and in the Brno 1 and Velika Pečina females. This early sample cannot be simply written off as extraordinarily robust Europeans, with characters that may "seem" Neanderthal-like because they are more robust than the modern condition. The fact is that variation in supraorbital morphology, total facial prognathism (indicated by the nasion projection and retromolar space), frequency of lambdoidal flattening and actual occipital bunning, nasal breadth, expanded canine size, and small mastoids specifically approach the European Neanderthal condition as a complex. This complex does *not* resemble any other alleged ancestral population such as Skhül/Qafzeh or Border Cave.

Regional candidates for the ancestors of this early sample do not seem to be lacking. The Neanderthals of South-Central Europe show clear evolutionary trends in the modern direction; as Smith discusses, the presence of these trends can be ascertained from the sequence of the relevant sites and does not depend on the (somewhat more problematic) absolute dates. The late remains from Vindija Cave provide as transitional a sample as one could hope to find.

It seems to me that by itself this evidence should be sufficient to disprove the contention of significant population movement or other forms of gene flow from outside of Europe as a contributing factor to the appearance of modern European populations. What model could account for the appearance of a gradual transition in South-Central Europe, close to the alleged source of "invading genes," but the complete replacement of one distinct population by another farther from this alleged source?

On the other hand, these data could support the contention that modern Europeans evolved in South-Central Europe and then invaded the west. This would limit the replacement model to the western fringes of the continent. Whether or not such an idea can be sustained depends on the further reanalysis of evolutionary trends in *Western* Europe, and these were not the focus of this survey. However, I concur with Smith's contention that the Western Neanderthals show the same evolutionary trends and that what is lacking in this region is the truly early modern populations whose analysis might resolve the problem in this region as well. Yet, given the likelihood that population replacements and gene flow are normal events in the human evolutionary process, one wonders how small the region of Neanderthal replacement must become before it can be said that as a general process the origin of modern Europeans can be found mainly in the European Neanderthals.

improve our understanding of Upper Pleistocene human evolution. We have much more to learn. Therefore, I certainly do not offer the interpretations presented in this paper as statements of fact. On the basis of what we know at present, however, I believe that a largely indigenous origin of modern Europeans is eminently defensible.

## References Cited

- ABSOLON, K. 1929. New finds of fossil human skeletons in Moravia. *Anthropologie* (Prague) 7:79-89.
- . 1933. O pravé podstatě paleolitických industrií ze Šipky a Čertovy díry na Moravě. *Anthropologie* (Prague) 11:253-72.
- . 1938. *Výzkum důlního stáncí lovců mammutů v Dolních Věstonicích na Pavlovských kopcích na Moravě: Pracovní zpráva za druhý rok 1925.* (German summary.) Brno.
- ABSOLON, K., and B. KLÍMA. 1978. *Předmostí: Ein Mammuthjägerplatz in Mähren.* Brno: Archeologický Ústav ČSAV v Brně.
- ALEXEEV, V. P. 1979. Horizontal profile of the Neandertal crania from Krapina comparatively considered. *Collegium Anthropologicum* 3:7-13.
- APSIMON, A. 1980. The last Neandertal in France? *Nature* 287:271-72.
- BÁNESZ, L. 1963. Quelques considérations sur l'origine, la subdivision et l'extension de l'Aurignacien en Europe. *Slovenska Archeologia* 12:305-18.
- BARTUCZ, L., J. DANUCZA, F. HOLLENDONNER, O. KADIC, M. MOTT, V. PATAKI, E. PÁLOSI, J. SZABO, and A. VENDL. 1940. *Die Musso-lini-Höhle (Subalyuk) bei Cserépfalu.* Geologica Hungarica, Series Paleontologica, 14.
- BAR YOSEF, O., and B. VANDERMEERSCH. 1980. "Notes concerning the possible age of the Mousterian layers in Qafzeh cave," in *Pré-histoire du Levant.* Paris: CNRS. [CBS]
- BAYER, J. 1922. *Das Aurignac-Aller der Artefakte und menschlichen Skelettreste aus der Fürst-Johanns-Höhle bei Lautsch in Mähren.* Mitteilungen der Anthropologischen Gesellschaft in Wien 52.
- BAYER, J. 1924. Eine Mammuthjägerstation im Löss bei Pollau in Südmähren. *Die Eiszeit* 1:81-88.
- . 1925. Das jungpaläolithische Alter des Ochozkiefers. *Die Eiszeit* 2:35-40.
- . 1927. Eine Station des Eiszeitjägers im Miesslingstal bei Spitz a. d. Donau in Niederösterreich. *Die Eiszeit* 4:91-94.
- BEAUMONT, P. B. 1980. On the age of Border Cave hominids 1-5. *Paleontologica Africana* 23:21-33.
- BEAUMONT, P. B., H. DE VILLIERS, and J. C. VOGEL. 1978. Modern man in sub-Saharan Africa prior to 49,000 years B.P.: A review and evaluation with particular reference to Border Cave. *South African Journal of Science* 74:409-19.
- BILLY, G. 1976. "Les hommes du Paléolithique supérieur," in *La préhistoire française*, vol. 1. Edited by H. de Lumley. Paris: Centre National de la Recherche Scientifique.
- BIRKET-SMITH, KAJ. 1929. *The Caribou Eskimos.* Report of the Fifth Thule Expedition 1921-1924, vol. 5. [KL]
- BISCHOFF, J., and R. ROSENBAUER. 1981. Uranium series dating of human skeletal remains from the Del Mar and Sunnyvale sites, California. *Science* 213:1003-5.
- BOAZ, N. T., D. NINKOVICH, and M. ROSSIGNOL-STRICK. 1982. Paleoclimatic setting for *Homo sapiens neanderthalensis*. *Naturwissenschaften* 69:29-33. [NTB]
- BOSINSKI, G. 1967. *Die Mittelpaläolithischen Funde in Westlichen Mitteleuropa.* Köln-Graz: Fundamenta. [PAJ]
- BOULE, MARCELLIN. 1912. L'homme fossile de La Chapelle-aux-Saints. *Annales de Paléontologie* 7:21-56, 85-192. [CLB]
- . 1923. *Fossil men.* Edinburgh: Oliver and Boyd.
- BOULE, M., and H. V. VALLOIS. 1957. *Fossil men.* New York: Dryden.
- BRACE, C. L. 1962. Refocusing on the Neandertal problem. *American Anthropologist* 64:729-41.
- . 1964. The fate of the "classic" Neanderthals: A consideration of hominid catastrophism. *CURRENT ANTHROPOLOGY* 5:3-43.
- . 1967. *The stages of human evolution.* Englewood Cliffs: Prentice-Hall.
- . 1979a. Krapina "classic" Neanderthals and the evolution of the European face. *Journal of Human Evolution* 8:527-50.
- . 1979b. 2d edition. *The stages of human evolution.* Englewood Cliffs: Prentice-Hall.
- . 1979c. "Biological parameters and Pleistocene hominid life ways," in *Primate ecology and human origins.* Edited by I. Bernstein and E. O. Smith, pp. 263-89. New York: Garland. [CLB]
- BRACE, C. L., and A. MONTAGU. 1977. 2d edition. *Human evolution.* New York: Macmillan.
- BRACE, C. L., H. NELSON, and N. KORN. 1971. *Atlas of fossil man.* New York: Holt, Rinehart and Winston. [CLB]
- BRACE, C. L., H. NELSON, N. KORN, and M. L. BRACE. 1979. 2d edition. *Atlas of human evolution.* New York: Holt, Rinehart and Winston. [CLB]
- BRÄUER, G. 1980. Die morphologischen Affinitäten des jungpleistozänen Stirnbeines aus dem Elbmündungsgebiet bei Hahnöfersand. *Zeitschrift für Morphologie und Anthropologie* 71:1-42.
- . 1981. New evidence on the transitional period between Neandertal and modern man. *Journal of Human Evolution* 10:467-74.
- BRODAR, S. 1938. Das Paläolithikum in Jugoslawien. *Quartär* 1:140-72.
- BROSE, D. S., and M. H. WOLPOFF. 1971. Early Upper Paleolithic man and late Middle Paleolithic tools. *American Anthropologist* 73:1156-94.
- BUTZER, K. 1971. Revised edition. *Environment and archaeology.* Chicago: Aldine.
- CADIEN, J. 1972. "Dental variation in man," in *Perspectives on human evolution 2.* Edited by S. Washburn and P. Dolhinow. New York: Holt, Rinehart and Winston.
- CHMIELEWSKI, W. 1972. "The continuity and discontinuity of the evolution of archaeological cultures in central and eastern Europe between the 55th and 25th millenaires B.C.," in *The origin of Homo sapiens.* Edited by F. Bordes. Paris: UNESCO.
- COLES, J., and E. HIGGS. 1969. *The archaeology of early man.* New York: Praeger.
- COON, C. S. 1962. *The origin of races.* New York: Knopf.
- CORRUCCINI, R. 1975. Metrical analysis of Fontéchevade II. *American Journal of Physical Anthropology* 42:95-98.
- CUENCA PAVÁ, A., and M. J. WALKER. 1980. A possible hominid fossil from Alicante, Spain? *CURRENT ANTHROPOLOGY* 21:795-800. [MW]
- . 1981. "Datos para el estudio de un posible cráneo pleistoceno de Alicante, España." *Union International de Ciencias Prehistóricas y Protohistóricas X Congreso, México, D.F., Octubre 19-24, 1981. Comisión VII, Los homínidos más antiguos.* Edited by Y. Coppens and M.-A. de Lumley, pp. 87-106. México: UICPP. [MW]
- DAY, M. 1969. Omo human skeletal remains. *Nature* 222:1135-38.
- DELPORTE, HENRI, and FRANÇOIS DJINDJIAN. 1979. "Note a propos de l'outillage aurignacien de la couche 11 de Bacho Kiro," in *Middle and Upper Paleolithic in Balkans.* Edited by J. Kozłowski, pp. 101-3. Prace Archeologiczne 28. [FBH]
- DE LUMLEY, J. 1973. *Antiéandertaliens et Néandertaliens du bassin méditerranéen occidental européen.* Etudes Quaternaires (Université de Provence), Mémoire 2.
- . 1976. "Les Néandertaliens dans le Midi méditerranéen," in *La préhistoire française*, vol. 1. Edited by H. de Lumley. Paris: Centre National de la Recherche Scientifique.
- ENDO, B., and T. KIMURA. 1970. "Postcranial skeleton of the Amud man," in *The Amud man and his cave site.* Edited by H. Suzuki and F. Takai, pp. 231-406. Tokyo: Academic Press of Japan. [ET]
- FARRAND, W. R. 1979. Chronology and paleoenvironment of Levantine prehistoric sites as seen from sediment studies. *Journal of Archaeological Science* 6:369-92.
- FELGENHAUER, V. F. 1959. *Willendorf in der Wachau.* Mitteilungen der Prähistorischen Kommission (Wien) 8-9.
- FLINT, R. F. 1971. *Glacial and Quaternary geology.* New York: Wiley.
- FRAYER, D. W. 1978. *Evolution of the dentition in Upper Paleolithic and Mesolithic Europe.* University of Kansas Publications in Anthropology 10.
- FRENZEL, B. 1965. Über die offene Vegetation der letzten Eiszeit am Ostrande der Alpen. *Verhandlungen Zoologische-Botanische Gesellschaft in Wien* 103-4:110-43.
- . 1968. The Pleistocene vegetation of northern Eurasia. *Science* 161:637-49.
- . 1973. *Climatic fluctuations of the Ice Age.* Cleveland: Case Western Reserve University Press.
- FRÍČ, A. 1885. Über einen Menschenschädel aus dem Löss von Podbaba bei Prag. *Sitz. berichte koenigliche böhm. Gesellschaft von Wissenschaften der Prag, Jahrgang 1884*, 17:152. [NTB]
- FRIDRICH, J. 1973. Počátky mladopaleolitického osídlení Čech. *Archeologické Rozhledy* 25:392-442. [PAJ]
- FRIDRICH, J., and K. SKLENÁŘ. 1976. *Die paläolithische und mesolithische Höhlenbesiedlung des Böhmisches Karstes.* Prague: National Museum. [PAJ]
- GÁBORI, M. 1976. *Les civilisations du Paléolithique moyen entre les Alpes et l'Oural.* Budapest: Akadémiai Kiadó. [PAJ]
- GÁBORI-CSÁNK, V. 1968. *La station du Paléolithique moyen d'Érd, Hongrie.* Monumenta Historica Budapestinensia 3.
- . 1970. C-14 dates of the Hungarian Paleolithic. *Acta Archaeologica Academiae Scientiarum Hungaricae* 22:1-11.

- GIESELER, W. 1937. Bericht über die jungpaläolithischen Skelettreste von Stetten ob Lontal bei Ulm. *Verhandlungen der Deutschen Gesellschaft für Physische Anthropologie* 8: 41-48.
- . 1941. Die urgeschichtlichen Menschenfunde aus dem Lontal und ihre Bedeutung für die deutsche Urgeschichte. *Jahrbuch der Akademie der Wissenschaften Tübingen* 1: 102-27.
- GORJANOVIČ-KRAMBERGER, D. 1906. *Der diluviale Mensch von Krapina in Kroatien: Ein Beitrag zur Paläoanthropologie*. Wiesbaden: Kriedel.
- . 1913. Život i kultura diluvijalnoga čovjeka iz Krapine u Hrvatskoj. (German summary.) *Djela Jugoslavenske Akademije Znanosti i Umjetnosti* 23: 1-54.
- GREGORY, W. 1922. *The origin and evolution of the human dentition*. Baltimore: Williams and Wilkins.
- GROOTES, P. M. 1978. Carbon-14 time scale extended: Comparison of chronologies. *Science* 201: 11-15.
- Hahn, J. 1970. Recherches sur l'Aurignacien en Europe centrale et orientale. *L'Anthropologie* 74: 195-220.
- . 1973. Das Aurignacien in Mittel- und Osteuropa. *Acta Praehistorica et Archaeologica* 3: 77-107.
- . 1977. *Aurignacien: Das ältere Jungpaläolithikum in Mittel- und Osteuropa*. Fundamenta 9, series A.
- HARROLD, FRANCIS B. 1978. A study of the Chatelperronian. Unpublished Ph.D. dissertation, University of Chicago, Chicago, Ill. [FBH]
- . 1982. The Chatelperronian and the Middle-Upper Paleolithic transition. Paper delivered at the 47th annual meeting of the Society for American Archaeology, Minneapolis, Minn. [FBH]
- . n.d. New perspectives on the Chatelperronian. MS. [FBH]
- HEIM, J.-L. 1974. Les hommes fossiles de La Ferrassie (Dordogne) et le problème de la définition des Néandertaliens classiques. *L'Anthropologie* 78: 81-112, 321-77.
- . 1976a. *Les hommes fossiles de La Ferrassie*. Vol. 1. Archives de l'Institut de Paléontologie Humaine Mémoire 35.
- . 1976b. "Les Néandertaliens en Périgord," in *La préhistoire française*, vol. 1. Edited by H. de Lumley. Paris: Centre National de la Recherche Scientifique.
- HENKE, W., and R. PROTSCH. 1978. Die Paderborner Calvaria: Ein diluvialer *Homo sapiens*. *Anthropologischer Anzeiger* 36: 85-108.
- HIGGS, E. 1961. Some Pleistocene faunas of the Mediterranean coastal areas. *Proceedings of the Prehistoric Society* 27: 144-54.
- HIGGS, E., and D. BROTHWELL. 1961. North Africa and Mount Carmel: Recent developments. *Man* 61: 138-39.
- HILLEBRAND, J. 1914. Ergebnisse meiner Höhlenforschungen im Jahre 1913. *Barlangkutatas* 2: 115-24, 147-53. [PAJ]
- HOWELL, F. C. 1951. The place of Neanderthal man in human evolution. *American Journal of Physical Anthropology* 9: 379-416. [NTB]
- . 1952. Pleistocene glacial ecology and the evolution of "classic Neanderthal" man. *Southwestern Journal of Anthropology* 8: 377-410.
- . 1957. The evolutionary significance of variation and varieties of "Neanderthal" man. *Quarterly Review of Biology* 32: 330-47.
- . 1978. "Hominidae," in *Evolution of African mammals*. Edited by V. J. Maglio and H. B. S. Cooke, pp. 154-248. Cambridge: Harvard University Press.
- HOWELLS, W. W. 1973. *Evolution of the genus Homo*. Reading: Addison-Wesley.
- . 1974. Neanderthal man: Facts and figures. *Yearbook of Physical Anthropology* 18: 7-18. [CLB]
- . 1976. Explaining modern man: Evolutionists versus migrationists. *Journal of Human Evolution* 5: 577-96.
- HRDLIČKA, A. 1907. *Skeletal remains suggesting or attributed to early man in North America*. Bureau of American Ethnology Bulletin 33.
- . 1927. The Neanderthal phase of man. *Journal of the Anthropological Institute* 57: 249-74.
- . 1930. *The skeletal remains of early man*. Smithsonian Miscellaneous Collections 83.
- IVANOVA, S. 1979. "Cultural differentiation in the Middle Paleolithic on the Balkan peninsula," in *Middle and Upper Paleolithic in Balkans*. Edited by J. Kozłowski. Prace Archeologiczne 28.
- JÁNOSSY, D. 1960. Wirbeltierkleinfauuna aus den Moustérien Schichten der Subalyuk-Höhle (Nordostungarn). *Anthropos*, supplement, pp. 71-75. [PAJ]
- JELÍNEK, A. 1982. The Tabūn Cave and Paleolithic man in the Levant. *Science* 216: 1369-75.
- JELÍNEK, J. 1954. Nález fosilního člověka Dolní Věstonice III. (English summary.) *Anthropozoikum* 3: 37-91.
- . 1957. La nouvelle datation de la découverte de l'homme fossile Brno II. *L'Anthropologie* 61: 513-15.
- . 1960. "The oldest finds of the primitive *Homo sapiens fossilis* and their chronology." *Proceedings of the VIIth International Congress of Anthropological and Ethnological Sciences, Paris*.
- . 1965. Srovnávací studium šipecke čelisti. (German summary.) *Anthropos* 17: 135-79.
- . 1966. Jaw of an intermediate type of Neanderthal man from Czechoslovakia. *Nature* 212: 701-2.
- . 1967a. Der Fund eines neandertales Kiefers (Kůlna I) aus der Kůlna-Höhle in Mähren. *Anthropologie* (Brno) 5: 3-19.
- . 1967b. A new discovery of the jaw of an intermediate type of Neanderthal man in Czechoslovakia. *Anthropos* 19: 148-49.
- . 1969. Neanderthal man and *Homo sapiens* in central and eastern Europe. *CURRENT ANTHROPOLOGY* 10: 475-503.
- . 1976. The *Homo sapiens neanderthalensis* and *Homo sapiens sapiens* relationship in central Europe. *Anthropologie* (Brno) 14: 79-81.
- . 1978. Earliest *Homo sapiens sapiens* from Central Europe (Mladeč, Czechoslovakia). Paper presented at the Xth International Congress of Anthropological and Ethnological Sciences, Delhi, India.
- . 1980. "Neanderthal remains in Kůlna Cave, Czechoslovakia," in *Physical anthropology of European populations*. Edited by I. Schwidetzky, B. Chiarelli, and O. Nerasov. The Hague: Mouton.
- . 1981. Neanderthal parietal bone from Kůlna Cave, Czechoslovakia. *Anthropologie* (Brno) 19: 195-96.
- JELÍNEK, J., J. PELÍSEK, and K. VALOCH. 1959. Der fossile Mensch Brno II. *Anthropos* 9: 5-30.
- KLEIN, RICHARD G. 1969. The Mousterian of European Russia. *Proceedings of the Prehistoric Society* 35: 77-111. [KL]
- . 1973. *Ice Age hunters of the Ukraine*. Chicago: University of Chicago Press. [FBH]
- KLEINSCHMIDT, A. 1965. Wichtigste Untersuchungsergebnisse der paläolithischen Grabung Salzgitter-Lebenstedt. *Eiszeitalter und Gegenwart* 16: 257. [PAJ]
- KLÍMA, B. 1955. Přínos nové stanice v Pavlově k problematice nejstarších zemědělských nástrojů. (German summary.) *Památky Archeologické* 46: 7-29.
- . 1959a. Zur Problematik des Aurignacien und Gravettien in Mittel-Europa. *Archeologia Austriaca* 26: 35-51.
- . 1959b. Objev paleolitického sídliště u Pavlova v roce 1956. *Archeologické Rozhledy* 11: 305-16, 337-44.
- . 1962. "The first ground-plan of an Upper Paleolithic loess settlement in middle Europe and its meanings," in *Courses toward urban life*. Edited by R. J. Braidwood and G. R. Willey. Chicago: Aldine.
- . 1963. *Dolní Věstonice: Výzkum tábořiště lovců mamutů v letech 1947-1952*. (German summary.) Prague: Československá Akademie Věd.
- KLÍMA, B., R. MUSIL, J. PELÍSEK, and J. JELÍNEK. 1962. *Die Erforschung der Höhle Svědáv stůl 1953-1955*. *Anthropos* 13.
- KNUSSMANN, R. 1967. Die mittelpaläolithischen menschlichen Knochenfragmente von der Wildscheuer bei Steeden (Oberlahnkreis). *Nassauische Annalen* 68: 1-25.
- KOZŁOWSKI, J. 1975. Badina nad przejściem od środkowego do górnego paleolitu na Balkanach. (English summary.) *Przeglad Archeologiczny* 23: 5-48.
- . 1979. "Le Bachokirien: La plus ancienne industrie du Paléolithique supérieur en Europe," in *Middle and Upper Paleolithic in Balkans*. Edited by J. Kozłowski. Prace Archeologiczne 28.
- KŘÍŽ, M. 1909. Die Schwedentischgrotte bei Ochoz in Mähren und Rzehaks Bericht über Homo primigenius Wilseri. *Verhandlungen d. k. k. Reichsanstalt* 10: 217-32.
- KUKLA, J. 1954. Složení pleistocenních sedimentů v kontrolním profilu v Šipce z roku 1950. *Přirodovědecký Sborník Ostravského Kraje* 15: 105-24. [PAJ]
- . 1968. Comment on: Evolution of the Paleolithic in Central and Eastern Europe, by K. Valoch. *CURRENT ANTHROPOLOGY* 9: 378-80.
- KURTÉN, B. 1968. *Pleistocene mammals of Europe*. Chicago: Aldine.
- LAPLACE, G. 1958-61. Recherches sur l'origine et l'évolution des complexes leptolithiques. *Quaternaria* 5: 153-240.
- . 1970. "Le niveaux aurignaciens et l'hypothèse du syntétype," in *L'homme de Cro-Magnon*. Edited by G. Camps and G. Olivier. Paris: Arts et Métiers Graphiques.
- LAVILLE, HENRI, JEAN-PHILIPPE RIGAUD, and JAMES SACKETT. 1980. *Rock shelters of the Perigord*. New York: Academic Press. [FBH]
- LÉVÊQUE, F., and B. VANDERMEERSCH. 1980. Découverte de restes humains dans un niveau castelperronien à Saint-Césaire (Charente-Maritime). *Comptes Rendus de l'Académie des Sciences, Series D*, 291: 187-89.
- . 1981. Le néandertalien de Saint-Césaire. *La Recherche* 12: 242-44.
- LOVEJOY, C. O., and E. TRINKAUS. 1980. Strength and robusticity of the Neanderthal tibia. *American Journal of Physical Anthropology* 53: 465-70. [ET]
- LUCHTERHAND, KUBET. 1974. Mid-Pleistocene hominid distribution and adaptation in eastern Asia. Unpublished doctoral dissertation, University of Chicago, Chicago, Ill. [KL]
- . 1978. "Late Cenozoic climate, mammalian evolutionary patterns, and Middle Pleistocene human adaptation in eastern Asia," in *Views of the past*. Edited by L. G. Freeman, pp. 363-421. The Hague: Mouton. [KL]
- MAKOWSKY, A. 1888. Der Löss von Brünn und seine Einschlüsse an

- diluvialen Tieren und Menschen. *Verhandlungen des Naturforschungs Vereins in Brünn* 26:207-43.
- . 1892. Der diluviale Mensch im Löss von Brünn. *Mitteilungen der Anthropologischen Gesellschaft in Wien* 22:73-84.
- MALEZ, M. 1965. Pećina Veternica u Medvednici. 1. Opći speleološki pregled. 2. Stratigrafija kvartarnih taložina. (German summary.) *Acta Geologica* 5:175-237.
- . 1967. Paleolit Velike Pećine na Ravnoj gori u sjeverozapadnoj Hrvatskoj. (German summary.) *Arheološki Radovi i Rasprave* 4/5:7-68.
- . 1970a. "Novi pogledi na stratigrafiju krapinskog nalažišta," in *Krapina 1899-1969*. Edited by M. Malez. (English and German summaries.) Zagreb: Jugoslavenska Akademija Znanosti i Umjetnosti.
- . 1970b. "Rezultati revizije pleistocenske faune iz Krapine," in *Krapina 1899-1969*. Edited by M. Malez. (English and German summaries.) Zagreb: Jugoslavenska Akademija Znanosti i Umjetnosti.
- . 1970c. "Paleolitska kultura Krapine u svjetlu novijih istraživanja," in *Krapina 1899-1969*. Edited by M. Malez. (English and German summaries.) Zagreb: Jugoslavenska Akademija Znanosti i Umjetnosti.
- . 1974. Noviji rezultati istraživanja paleolitika u Velikoj Pećini, Veternici, i Sandalji. (German summary.) *Arheološki Radovi i Rasprave* 7:7-44.
- . 1975. Die Höhle Vindija: Eine neue Fundstelle fossiler Hominiden in Kroatien. *Bulletin Scientifique* (Yougoslavie), Section A, 20:5-6.
- . 1978a. "Stratigrafski, paleofaunski, i paleolitski odnosi krapinskog nalažišta," in *Krapinski pračovjek i evolucija hominida*. Edited by M. Malez. (German summary.) Zagreb: Jugoslavenska Akademija Znanosti i Umjetnosti.
- . 1978b. "Populacije neandertalaca i neandertalcima sličnih ljudi u Hrvatskoj," in *Krapinski pračovjek i evolucija hominida*. Edited by M. Malez. (German summary.) Zagreb: Jugoslavenska Akademija Znanosti i Umjetnosti.
- . 1978c. Fossile Menschen aus Nordwestkroatien und ihre quartärgeologische, paläontologische und paläolithische Grundlage. *Collegium Anthropologicum* 2:29-41.
- MALEZ, M., and D. RUKAVINA. 1975. Krioturbacijske pojave u gornjopleistocenskim naslagama pećine Vindije kod Donje Voće u sjeverozapadnoj Hrvatskoj. (German summary.) *Rad Jugoslavenske Akademije Znanosti i Umjetnosti* 371:245-65.
- . 1980. Položaj naslaga spilje Vindije u sustaru članjenja Kvartara šireg područja Alpa. *Rad Jugoslavenske Akademije Znanosti i Umjetnosti*.
- MALEZ, M., F. SMITH, D. RUKAVINA, and J. RADOVIĆ. 1980. Upper Pleistocene fossil hominids from Vindija, Croatia, Yugoslavia. *CURRENT ANTHROPOLOGY* 21:365-67.
- MALEZ, M., and J. C. VOGEL. 1970. Die Ergebnisse der Radio-karbonanalysen der Quartären Schichten der Velika Pećina in Nordwest-Kroatien. *Bulletin Scientifique* (Yougoslavie) 15:390-91.
- MALÝ, J. 1939. Lebky fosilního člověka z Dolních Věstonic. (German and French summaries.) *Anthropologie* (Prague) 17:171-92.
- MARTIN, RUDOLF. 1928. *Lehrbuch der anthropologie. Vol. 2. Kranio-ologie, osteologie*. Jena: Fischer. [CLB]
- MARTIN, R., and K. SALLER. 1956. *Lehrbuch der anthropologie*. Stuttgart: Fischer.
- MAŠKA, K. 1882. Über den diluvialen Menschen in Stramberg. *Mitteilungen der Anthropologischen Gesellschaft in Wien* 12:32-38.
- MATIEGKA, J. 1924. Lebka podbabská. *Anthropologie* (Prague) 2(1):1-16. [NTB]
- . 1929. The skull of the fossil man Brno III, and the cast of its interior. *Anthropologie* (Prague) 7:90-107.
- . 1934. *Homo předmostensis: Fosilní člověk z Předmostí na Moravě. 1. Lebky*. (French summary.) Prague: Česká Akademie Věd i Umění.
- . 1938. *Homo předmostensis: Fosilní člověk z Předmostí na Moravě. 2. Ostatní části kostrově*. (French summary.) Prague: Česká Akademie Věd i Umění.
- MORANT, G. M. 1930. Studies of Paleolithic man. 4. A biometric study of the Upper Paleolithic skulls of Europe and of their relationship to earlier and later types. *Annals of Eugenics* 4:109-99.
- MOVIUS, H. 1960. Radiocarbon dates and Upper Paleolithic archaeology in central and western Europe. *CURRENT ANTHROPOLOGY* 1:355-91.
- . 1969. The Abri Pataud, Les Eyzies (Dordogne), and the probable age of the contained burials on the basis of the nearby Abri Pataud. *Anuario de Estudios Atlánticos* 15:323-44. [FBH]
- MUSGRAVE, J. 1970. How dextrous was Neanderthal man? *Nature* 233:538-41.
- . 1977. The Neanderthals from Krapina, northern Yugoslavia: An inventory of the handbones. *Zeitschrift für Morphologie und Anthropologie* 68:150-71.
- MUSIL, R. 1965a. Zhodnoceni dřívějších paleontologických nálezů ze Šipky. (German summary.) *Anthropos* 17:127-34.
- . 1965b. Die Bärenhöhle Pod hradem: Die Entwicklung der Höhlenbären im letzten Glazial. *Anthropos* (Brno) 18:7-92.
- MUSIL, R., and K. VALOCH. 1966. Beitrag zur Gliederung des Würms in Mitteleuropa. *Eiszeitalter und Gegenwart* 17:131-38.
- NECRASOV, O., and M. CRISTESCU. 1965. Données anthropologiques sur les populations de l'âge de la pierre en Roumanie. *Homo* 16:129-61.
- OAKLEY, K., B. CAMPBELL, and T. MOLLESON. 1971. *Catalogue of fossil hominids. Pt. 2. Europe*. London: British Museum (Natural History).
- OLIVA, M. 1981. Die Bohunicien-Station bei Podolí (Bez. Brno-Land) und ihre Stellung im beginnenden Jungpaläolithikum. *Časopis Moravského Musea, Sc. Soc.* 66:7-45. [KV]
- PAUNESCU, A. 1965. Sur la succession des habitats paléolithiques et postpaléolithiques de Ripiceni-Izvor. *Dacia* 9:5-32.
- PROŠEK, F., V. ŠTÁRKA, L. HRDLIČKA, Z. HOKR, V. LOŽEK, and Z. DOHNAL. 1952. Výzkum jeskyně Zlatého Koně u Koněprus. *Československý Kras* 5:161-79.
- PROTSCH, R. 1976. "Comparison of absolute bone dates by radiocarbon and amino-acid dating on Upper Pleistocene hominids," in *Datations absolutes et analyses isotropiques en préhistoire: Méthodes et limites*. Edited by J. Labeyrie and C. Lalou. Paris: CRNS.
- RIGHTMIRE, G. P. 1978. Human skeletal remains from the southern Cape Province and their bearing on the Stone Age prehistory of South Africa. *Quaternary Research* 9:219-30.
- . 1979. Implications of the Border Cave skeletal remains for later Pleistocene human evolution. *CURRENT ANTHROPOLOGY* 20:23-35.
- . 1981. Later Pleistocene hominids of eastern and southern Africa. *Anthropologie* (Brno):19:15-26.
- RZEHA, A. 1905. Der Unterkiefer von Ochoz: Ein Beitrag zur Kenntnis des altdiluvialen Menschen. *Verhandlungen des naturforschenden Vereines in Brünn* 44:91-114.
- SAKURA, H. 1970. "Dentition of the Amud man," in *The Amud man and his cave site*. Edited by H. Suzuki and F. Takai. Tokyo: University of Tokyo Press.
- SANTA LUCA, A. P. 1978. A re-examination of presumed Neandertal-like fossils. *Journal of Human Evolution* 7:619-36. [NTB]
- SARNTHEIN, M. 1978. Sand deserts during glacial maximum and climatic optimum. *Nature* 272:43-46. [NTB]
- SCHAAPHAUSEN, H. 1885. Die Schädel aus dem Löss von Podbaba und Winaric in Böhmen. *Verhandlungen naturhistorische Ver. Bonn, Jahrgang 1885*, p. 364. [NTB]
- SCHWALBE, G. 1901. Der Neanderthalschädel. *Bonner Jahrbuch* 106:1-72. [NTB]
- SCHWARCZ, H., and I. SKOFLEK. 1982. New dates for the Tata, Hungary, archaeological site. *Nature* 295:590-91.
- SERGI, S. 1962. "Morphological position of the 'Prophaneranthropi' (Swanscombe and Fontéchevade)," in *Ideas on human evolution*. Edited by W. W. Howells. Cambridge: Harvard University Press.
- ŠKERLJ, B. 1958. Were Neanderthals the only inhabitants of Krapina? *Bulletin Scientifique* (Yougoslavie) 4:44.
- SMITH, F. H. 1976a. A fossil hominid frontal from Velika Pećina (Croatia) and a consideration of Upper Pleistocene hominids from Yugoslavia. *American Journal of Physical Anthropology* 44:127-34.
- . 1976b. *The Neanderthal remains from Krapina: A descriptive and comparative study*. University of Tennessee Department of Anthropology Reports of Investigations 15.
- . 1976c. The Neanderthal remains from Krapina, northern Yugoslavia: An inventory of the upper limb remains. *Zeitschrift für Morphologie und Anthropologie* 67:275-90.
- . 1976d. On anterior tooth wear at Krapina and Ochoz. *CURRENT ANTHROPOLOGY* 17:167-68.
- . 1977. On the application of morphological "dating" to the hominid fossil record. *Journal of Anthropological Research* 33:302-16.
- . 1978. "Some conclusions regarding the morphology and significance of the Krapina Neandertal remains," in *Krapinski pračovjek i evolucija hominida*. Edited by M. Malez. Zagreb: Jugoslavenska Akademija Znanosti i Umjetnosti.
- . 1980. Sexual differences in European Neandertal crania with special reference to the Krapina remains. *Journal of Human Evolution* 9:359-75.
- SMITH, F. H., and G. C. RANYARD. 1980. Evolution of the supra-orbital region in Upper Pleistocene fossil hominids from South-Central Europe. *American Journal of Physical Anthropology* 53:589-609.
- SPENCER, F., and F. H. SMITH. 1981. The significance of Aleš Hrdlička's "Neanderthal phase of man": A historical and current assessment. *American Journal of Physical Anthropology* 56:435-59.
- SRDOČ, D., A. SLIPEČEVIC, B. OBELIC, and N. HORVATINČIĆ. 1979. Rudjer Bošković Institute radiocarbon measurements V. *Radiocarbon* 21:131-37.

- STEWART, T. D. 1962. Neanderthal scapulae with special attention to the Shanidar Neanderthals from Iraq. *Anthropos* 57:779-800.
- . 1964. The scapula of the first recognized Neanderthal skeleton. *Bonner Jahrbuch* 164:1-14.
- STONER, B. P., and E. TRINKAUS. 1981. Getting a grip on the Neanderthals: Were they all thumbs? (abstract). *American Journal of Physical Anthropology* 54:281-82. [ET]
- STRINGER, C. B. 1974. Population relationships of later Pleistocene hominids: A multivariate study of available crania. *Journal of Archaeological Science* 1:317-42.
- . 1978. "Some problems in Middle and Upper Pleistocene hominid relationships," in *Recent advances in primatology*, vol. 3. Edited by D. Chivers and K. Joysey, pp. 395-418. London: Academic Press.
- . n.d. Towards a solution to the Neanderthal problem. *Journal of Human Evolution*. In press. [CBS]
- STRINGER, C., F. C. HOWELL, and J. MELENTIS. 1979. The significance of the fossil hominid skull from Petralona, Greece. *Journal of Archaeological Science* 6:235-53.
- STRINGER, C. B., R. M. JACOBI, and R. G. KRUSZYNSKI. 1981. Allez Neanderthal. *Nature* 289:823-24. [CBS]
- SZOMBATHY, J. 1925. Die diluvialen Menschenreste aus der Fürst-Johanns-Höhle bei Lautsch in Mähren. *Die Eiszeit* 2:1-34, 73-95.
- THENIUS, E. 1962. Die Grossäugetiere des Pleistozäns von Mitteleuropa. *Zeitschrift für Säugetierkunde* 27:65-83.
- THOMA, A., 1963. The dentition of the Subalyuk Neanderthal child. *Zeitschrift für Morphologie und Anthropologie* 54:127-50.
- THORNE, A., and M. WOLPOFF. 1981. Regional continuity in Australian Pleistocene hominid evolution. *American Journal of Physical Anthropology* 55:337-49.
- TOBIAS, P. 1967. *Olduvai Gorge. Vol. 2. The cranium and maxillary dentition of Australopithecus (Zinjanthropus) boisei*. Cambridge: Cambridge University Press.
- TRINKAUS, E. 1976a. The morphology of European and Southwest Asian Neanderthal pubic bones. *American Journal of Physical Anthropology* 44:95-104.
- . 1976b. The evolution of the hominid femoral diaphysis during the Upper Pleistocene in Europe and the Near East. *Zeitschrift für Morphologie und Anthropologie* 67:291-319. [WWH, ET]
- . 1977. A functional interpretation of the axillary border of the Neanderthal scapula. *Journal of Human Evolution* 6:231-34.
- . 1978. "Functional implications of the Krapina Neanderthal lower limb remains," in *Krapinski pračovjek i evolucija hominida*. Edited by M. Malez. Zagreb: Jugoslavenska Akademija Znanosti i Umjetnosti.
- . 1980. Sexual differences in Neanderthal limb bones. *Journal of Human Evolution* 9:377-97.
- . 1981. "Neanderthal limb proportions and cold adaptation," in *Aspects of human evolution*. Edited by C. B. Stringer, pp. 187-224. London: Taylor and Francis. [ET, CBS]
- . 1982. Evolutionary trends in the Shanidar Neanderthal sample (abstract). *American Journal of Physical Anthropology* 57:237. [ET]
- . n.d.a. "A history of *Homo erectus* and *Homo sapiens* paleontology in America," in *A history of American physical anthropology, 1930-1980*. Edited by F. Spencer. New York: Academic Press. [ET]
- . n.d.b. *The Shanidar Neanderthals*. Peabody Museum Papers 76. [WWH, ET]
- TRINKAUS, E., and W. W. HOWELLS. 1979. The Neanderthals. *Scientific American* 241:118, 122-33.
- TRINKAUS, E., and M. LEMAY. 1982. Occipital bun among later Pleistocene hominids. *American Journal of Physical Anthropology* 57:27-35. [WWH, CBS]
- ULLRICH, H. 1978. "Kannibalismus und Leichenzerstückelung bei Neanderthalern von Krapina," in *Krapinski pračovjek i evolucija hominida*. Edited by M. Malez. Zagreb: Jugoslavenska Akademija Znanosti i Umjetnosti.
- VALLOIS, H.-V. 1952. Néanderthal-Néandertal? *L'Anthropologie* 55:557-58. [CLB]
- VALLOIS, H. V. 1954. Neanderthals and presapiens. *Journal of the Royal Anthropological Institute* 84:111-30.
- . 1958. *La Grotte de Fontéchevade II. Anthropologie*. Archives de l'Institut de Paléontologie Humaine, Mémoire 29.
- VALOCH, K. 1965a. Die Höhlen Šipka und Čertova díra bei Štramberk in Mähren. *Anthropos* (Brno) 17:5-125.
- . 1965b. Die altsteinzeitlichen Begehungen der Höhle Pod hradem. *Anthropos* (Brno) 18:93-106.
- . 1967. Die Steinindustrie von der Fundstelle des menschlichen Skelettrestes I aus der Höhle Kůlna bei Sloup (Mähren). *Anthropologie* (Brno) 5:21-32.
- . 1968. Evolution of the Paleolithic in Central and Eastern Europe. *CURRENT ANTHROPOLOGY* 9:351-90.
- . 1969. "Das Paläolithikum in der Tschechoslowakei," in *Quaternary in Czechoslovakia*. Edited by K. Žebera, pp. 69-149. Prague: Academia. [PAJ]
- . 1970. Early Middle Paleolithic (Stratum 14) in the Kůlna cave near Sloup in the Moravian karst (Czechoslovakia). *World Archaeology* 2:28-38.
- . 1972. "Rapports entre le Paléolithique moyen et le Paléolithique supérieur en Europe centrale," in *The origin of Homo sapiens*. Edited by F. Bordes. Paris: UNESCO.
- . 1976a. Die altsteinzeitliche Fundstelle in Brno-Bohunice. *Studie Archeologického Ústavu Československé Akademie Věd v Brně* 4(1):3-120.
- . 1976b. Neumittelpaläolithische Industrien in Südmähren. *Anthropologie* (Brno) 14:55-64.
- . 1977-78. Nové poznatky o paleolitu v Československu. *Sborník Prací Filozofické Fakulty Brněnské Univerzity E* 22-23:7-25. [PAJ]
- . 1978. Die paläolithische Fundstelle Bořitov I (Bez. Blansko) in Mähren. *Časopis Moravského Musea* 63:7-24. [PAJ]
- . 1980. La fin des temps glaciaires en Moravie (Tchécoslovaquie). *L'Anthropologie* 84:380-90, 673-74. [KV]
- . 1981. Beitrag zur Kenntnis des Pavloviens. *Archeologické Rozhledy* 33:279-98. [KV]
- VALOCH, K., and M. OLIVA. n.d. Das Frühaurignacien von Vedrovce II und von Kupařovice I in Südmähren. *Anthropozoikum*. In press. [KV]
- VALOCH, K., J. PELÍŠEK, R. MUSIL, J. KOVANDA, and E. OPRAVIL. 1970. Die Erforschung der Kůlna-Höhle bei Sloup im Mährischen Karst (Tschechoslowakei). *Quartär* 20:1-45.
- VAN DER HAMMEN, T. 1979. Changes in life conditions on Earth during the past one million years. *Biologiske Skrifter, Kongelige Danske Videnskaberne Selskab* 22(6):1-32. [CBS]
- VANDERMEERSCH, B. 1976. "Les Néandertaliens en Charente," in *La préhistoire française*, vol. 1. Edited by H. de Lumley. Paris: Centre National de la Recherche Scientifique.
- . 1981a. *Les hommes fossiles de Qafzeh (Israël)*. Paris: Centre National de la Recherche Scientifique.
- . 1981b. A Neanderthal skeleton from a Châtelperronian level at Saint-Césaire (France). Paper presented at the 50th annual meeting of the American Association of Physical Anthropologists, Detroit, Mich.
- . 1981c. "Les premiers *Homo sapiens* au Proche-Orient," in *Les processus de l'homínisation (Colloques Internationaux du Centre National de la Recherche Scientifique No. 599)*. Edited by Denise Ferembach, pp. 97-100. Paris: CNRS. [WWH]
- VAŇURA, J. 1965. Příspěvek k poznání jeskyně Svědův stůl v Moravském krasu. *Československý Kras* 15:59-63.
- VÉRTEŠ, L. 1955. Über einige Fragen des mitteleuropäischen Aurignacien. *Acta Archaeologica Academiae Scientiarum Hungaricae* 5:279-91.
- . 1961. Das Verhältnis des Aurignacien zum Szeletien in der Istállósköer Höhle. *Germania* 39:295-98.
- . Editor. 1964. *Tala, eine mittelpaläolithische Travertin-Siedlung in Ungarn*. Archaeologica Hungarica n.s. 43.
- VIRCHOW, R. 1882. Der Kiefer aus der Schipka-Höhle und der Kiefer von La Naulette. *Zeitschrift für Ethnologie* 14:277-310.
- VLČEK, E. 1951. Pleistocenní člověk z jeskyně Sv. Prokopa. (English summary.) *Anthropozoikum* 1:213-26.
- . 1953. Nález neandertálského člověka na Slovensku. (English summary.) *Slovenská Archeológia* 1:5-132.
- . 1955. The fossil man of Gánovce, Czechoslovakia. *Journal of the Royal Anthropological Institute* 85:163-71.
- . 1956. Kalva pleistocenního člověka z Podbaby (Praha XIX). (English summary.) *Anthropozoikum* 5:191-217.
- . 1957a. Pleistocenní člověk z jeskyně na Zlatém Koni u Koněprus. (English summary.) *Anthropozoikum* 6:283-311.
- . 1957b. Lidský zub pleistocenního Stáři ze Silické Brezové. (German summary.) *Anthropozoikum* 6:397-405.
- . 1958. "Die Reste des Neanderthalsmenschen aus dem Gebiete der Tschechoslowakei," in *Hundert Jahre Neanderthaler*. Edited by G. H. R. von Koenigswald. Utrecht: Kemink en Zoon.
- . 1961a. Posůstatky mladopleistocenního člověka z Pavlova. (German summary.) *Památky Archeologické* 52:46-56.
- . 1961b. Nouvelles trouvailles de l'homme du Pléistocène récent de Pavlov (CSR). *Anthropos* 14:141-45.
- . 1964a. Neuer Fund eines Neanderthalers in der Tschechoslowakei. *Anthropologischer Anzeiger* 27:162-66.
- . 1964b. Einige in der Ontogenese des modernen Menschen untersuchte Neanderthalmerkmale. *Zeitschrift für Morphologie und Anthropologie* 56:63-83.
- . 1967a. Die Sinus frontales bei europäischen Neanderthalern. *Anthropologischer Anzeiger* 30:166-89.
- . 1967b. Morphological relations of the fossil human types Brno and Cro-Magnon in the European late Pleistocene. *Folia Morphologica* 15:214-21.
- . 1967c. Der jungpleistozäne Menschenfund aus Svitávka in Mähren. *Anthropos* 19:262-70.
- . 1968. Nález pozůstatků neandertálců v Šali na Slovensku. (English summary.) *Anthropozoikum* 17:105-44.

- . 1969. *Neandertaler der Tschechoslowakei*. Prague: Academia.
- . 1970. "Étude comparative ontophylogénétique de l'enfant du Pech de l'Azé par rapport a d'autres enfants néandertaliens," in *L'enfant du Pech de l'Azé*, pp. 149-78. Archives de l'Institut de Paléontologie Humaine, Mémoire 33.
- . 1971. "Czechoslovakia," in *Catalogue of fossil hominids. Pt. 2. Europe*. Edited by K. Oakley, B. Campbell, and T. Molleson. London: British Museum (Natural History).
- VLČEK, E., F. PROŠEK, J. WOLFE, J. PELIKAN, V. KNĚBLOVÁ, O. FEJFAR, and V. LOŽEK. 1958. *Zusammenfassender Bericht über den Fundort Gánovce und die Reste des Neanderthalers in der Zips (ČSSR)*. Prague.
- VOGEL, J., and H. WATERBOLK. 1972. Groningen radiocarbon dates X. *Radiocarbon* 14: 6-110.
- VOGEL, J., and W. ZAGWIJN. 1967. Groningen radiocarbon dates VI. *Radiocarbon* 9: 63-106.
- VUKOVIĆ, S. 1935. Istraživanje prehistorijskog nalažista u spilji Vindiji kod Vocé. *Spomenica Varaždinskog Muzeja 1925-1935*, pp. 73-80.
- WEIDENREICH, F. 1937. *The dentition of Sinanthropus pekinensis: A comparative odontography of the hominids*. Paleontologia Sinica, n.s., D, 1.
- . 1943. The "Neanderthal man" and the ancestors of *Homo sapiens*. *American Anthropologist* 45: 39-48.
- . 1947. Facts and speculations concerning the origin of *Homo sapiens*. *American Anthropologist* 49: 187-203.
- WEISS, K. M., and T. MARUYAMA. 1976. Archaeology, population genetics, and studies of human racial ancestry. *American Journal of Physical Anthropology* 44: 31-49.
- WHITE, R. 1982. Rethinking the Middle/Upper Paleolithic transition. *CURRENT ANTHROPOLOGY* 23: 169-92. [ET]
- WOILLARD, G. M. 1978. Grand Pile peat bog: A continuous pollen record for the last 140,000 years. *Quaternary Research* 9: 1-21.
- WOILLARD, G. M., and W. G. MOOK. 1982. Carbon-14 dates at Grand Pile: Correlation of land and sea chronologies. *Science* 215: 159-61.
- WOLPOFF, M. H. 1978. "The dental remains from Krapina," in *Krapinski pračovjek i evolucija hominida*. Edited by M. Malez. Zagreb: Jugoslavenska Akademija Znanosti i Umjetnosti.
- . 1979. The Krapina dental remains. *American Journal of Physical Anthropology* 50: 67-114.
- . 1980a. *Paleoanthropology*. New York: Knopf.
- . 1980b. Cranial remains of Middle Pleistocene European hominids. *Journal of Human Evolution* 9: 339-58.
- . 1981. Allez Neanderthal. *Nature* 289: 823.
- WOLPOFF, M., F. SMITH, M. MALEZ, J. RADOVIČIĆ, and D. RUKAVINA. 1981. Upper Pleistocene hominid remains from Vindija Cave, Croatia, Yugoslavia. *American Journal of Physical Anthropology* 54: 499-545.
- ZAGWIJN, W. H. 1974. Vegetation, climate, and radiocarbon datings in the late Pleistocene of the Netherlands. Part 2. Middle Weichselian. *Mededelingen Rijks Geologische Dienst*, n.s., 25: 101-10.
- ZEUNER, F. 1959. *The Pleistocene period*. London: Hutchinson.
- ZOBECK, T. S. 1980. An analysis of the functional significance and sexual dimorphism of the Neanderthal mastoid process. Unpublished Ph.D. thesis, University of Tennessee, Knoxville, Tenn.
- ZOTZ, F., and G. FREUND. 1951. Die paläolithische und mesolithische Kulturentwicklung in Böhmen und Mähren. *Quartär* 5: 7-40.

## Wanted

■ Contributions to an anthology in preparation tentatively entitled *Being an Anthropologist: The Portrait of a Discipline through Life Histories*. The volume is to consist of selected life histories written by anthropologists about themselves and an overview and analysis of the material. The aim is to reveal how individuals become interested in anthropology, choose it as their life's work, learn the skills, values, and intellectual orientations of the discipline, respond to the challenge of fieldwork, and struggle to achieve a viable professional identity. At the same time it may be possible to elucidate how other aspects of individuals' life designs influence the anthropological experience. Potential contributors are encouraged to write, enclosing an up-to-date curriculum vitae, by December 1, 1982, to James N. Kerri, Barbara Watson, and Larry Watson, c/o Department of Anthropology, San Diego State University, San Diego, Calif. 92182, U.S.A.

■ Papers and audiovisual presentations for a symposium on the relationship between television and anthropology to take place at the XIth International Congress of Anthropological and Ethnological Sciences in Vancouver in August 1983. Organizers Jay Ruby and Asen Balikci are seeking presentations on such topics as (1) a critical review of such television series as "Odyssey" (U.S.A.), "Man" (Japan), "Disappearing World" (Great Britain), and "Face Values" (Great Britain), (2) models of collaboration between scholar and producer, (3) the scholar as producer and television entrepreneur, (4) the possibilities of international cooperation for co-production and distribution, (5) the telecommunication revolution and its potential for anthropology, and (6) teaching anthropology via television. Persons interested in participating are asked to write Jay Ruby, Department of Anthropology, Temple University, Philadelphia, Pa. 19122, U.S.A.