

Homo Erectus in Europe

Stuart Harris, February 2013

Homo Erectus culture, called Acheulian, originated in Africa some 1,500,000 years ago, from whence they migrated to Europe, Asia and America. The current thinking is that we descend from slim-bodied H. erectus in the following sequence:

H. erectus / H. antecessor / H. heidelbergensis / H. helmei / H. sapiens.

How, where and when this descent occurred is open to widespread debate inasmuch as these people can be found in Africa, Europe, Asia and America. Using Darwin's theory, each new species must have originated in isolation, away from the main body. For humans, this meant in a different continent.

Europe's sequence has gaps between each dominant species (ka = thousand years):

1100 ka -700 ka, H. antecessor
600 ka to 250 ka, H. heidelbergensis
230 ka to 48 ka, H. neanderthalis
47 ka to 37 ka, H. helmei
36 ka to 0 ka, H. sapiens

Homo erectus had a thick brow ridge, big flat nose, massive jaws and a mouth that looked modern. Their large brain grew steadily during evolution, so that H. heidelbergensis possessed a brain the size of ours. H. heidelbergensis gets credit for inventing writing.

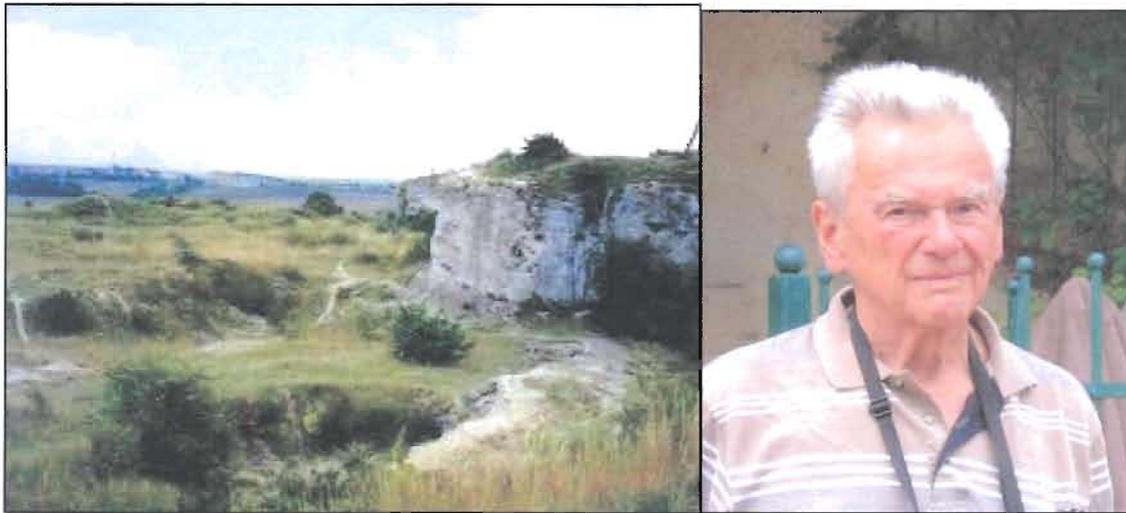
Important sites include

Moravia: Stránská skála, Růženin dvůr and Červený kopec in Brno, Moravia (600 ka),
Germany: Bilzingsleben in Thuringia (350 ka), Shöningen (400 ka).
France: Caune de l'Arago in the Pyrenees (450 ka), Menez Dregan dans le Finistere (420 ka)

In 1970s, archaeologist Dietrich Mania researched the site of Bilzingsleben in Thuringia. There he unearthed a 350,000 year-old settlement of H. erectus / H. heidelbergensis which yielded bones of both people and animals, many artifacts and three round ground plans of dwellings with hearths by their entrances. Animal bones belonged to small, medium and large animals, including elephant, rhinoceros, horse and buffalo. To pierce holes in leather clothing and tents, they made small burrins from microliths by encasing the side opposite the point in a thick glob of pine resin. Two artifacts have inscriptions in Old European.

At Shöningen, to make a composite knife or sickle, they glued microliths into grooves in hard wood from the branch base of European silver fir. Eight heavy wood spears with a sharp point were found at Shöningen, as well as in England and Spain. Weighing over 2 kilos, they may have been thrown with the assist of a leather strap. Without the strap, javelin hurlers could throw them only 70 meters. Wood came from the heart of the trunk of young spruce trees, selected to be without branches. The center of gravity was near the tip, to maintain stable flight. Length varied from 1.8 m to 2.5 m. The site had 16,000 butchered bones, of which 90% were horse, the rest red deer and European bison. To hunt rabbits and birds, they used a short, balanced stick, sharpened at both ends, that spun like a boomerang.

Stránská skála is a complex of open-air loess sites on the outskirts of the Brno Basin in the Czech Republic adjacent to Stranska Rock, a limestone ridge that rises 50m above the flood plain. The site was occupied twice: 600,000 years ago by *H. erectus* / *H. heidelbergensis*, and 34,000 years by *H. sapiens*. At the end of the Pleistocene, Stranska Rock was steep and rocky with several small and large caves. In the valley below, the Svitava meandered back and forth, its numerous arms leaving abandoned riverbeds. With a warmer climate than today, Stranska Rock and the White Mountains were covered with steppe vegetation and scattered shrubs, while the valley harbored a deciduous park forest. Large herbivores grazed in the valley, including forest elephants, steppe rhinoceros, bison, large horse and deer. Carnivores included tiger, hyena, wolf and a forerunner of the cave bear. A bone artifact has inscriptions in Old European.



Dr. Karel Valoch oversaw the excavation of Stránská skála. He published in 1987 “The early palaeolithic site Stránská skála near Brno”, *L’Anthropologie*, 25, p. 124-142. Beginning in the 1960’s, Professor Valoch wrote and edited many articles and books about Moravian archaeology, frequently published by Brno Moraveske Muzeum, where he is emeritus staff of Paleolithic and Mesolithic in Central Europe, and Quaternary geology of Moravia. kvaloch@mzm.cz.

Jiri Svoboda and Ofer Bar-Yosef edited a compilation of articles about many aspects of the site in 2005, entitled “Stránská skála: Origins of the Upper Paleolithic in the Brno Basin, Moravia, Czech Republic”; American School of Prehistoric Research, paperback, 232 pages, Peabody Museum Press, \$50 on Amazon. This multi-disciplinary report covers the excavations from 1980 through 1990’s. Leonid Vishnyatsky of the Institute for the History of Material Culture in St.Petersburg reviewed the book in *Paleo Anthropology*, 2006.

Rudolf Musil published a book in 1995 entitled “Stránská Skála Hill: excavation of open-air sediments, 1964-1972”; Brno-Moravian Museum, Litera Foundation, 221 pages.

600 ka, Stránská skála: ‘Eternal Star Spirit, I shall make an enclosure’

An elephant vertebrae recovered from Stránská skála, Brno, Moravia, preserves inscriptions by two different people in an alphabet called Old European. On the top surface, a heavy inscription in large letters partially overwrites a light inscription in small letters.

- Stránská skála was occupied at two different times, 600,000 years ago and 34,000 years ago. The earliest was by Homo erectus, sub-named Homo heidelbergensis, while the latest was by Homo sapiens, sub-named Aurignacian. Archaeologist Karel Valoch places the vertebrae with writing among the H. heidelbergensis artifacts.

The site is not a cave but an open-air bed of gravel beside a river bed subject to periodic flooding and abrading by the meandering Svitava River. Nor are the oldest artifacts very deep, so it is possible that old and new have become mixed. In a review of the book “Stránská Skála: Origins of the Upper Paleolithic in the Brno Basin, Moravia, Czech Republic”, Russian archaeologist Leonid Vishnytsky cautions that “the collection of Stránská skála IIIc is analyzed as if its homogeneity was beyond any doubt, whereas it is quite possible that it has an admixture of Aurignacian materials, as shown by G. Monnier in Chapter 5, page 53.”

Yet ancient writing may still be possible. The same alphabet was used by H. heidelbergensis 350,000 years ago at Bilzingsleben in Thuringia. H. heidelbergensis had brains the size of ours, bodies like ours, mouths that looked like ours for ease of speech, but a pronounced brow ridge, wide nose and strong jaw. They sewed leather clothing and lived in portable skin tents. They invented new tools such as a sickle, made by gluing sharp microliths into a groove of a hard stick of silver fir. Traditionally, sickles cut hay for storage to feed domestic animals in winter, like cattle which is mentioned in the text.

Translation

Light inscription (A) lamets an evil star that has sent heavy hailstones and disease to lay-low many people. The star is drawn with five points, which spells ‘evil’.

Heavy inscription (B) occurs in two parts. Part I, which partially overwrites the light inscription, announces a plan to build a treasure with magic skill. Part II is addressed to Eternal Star Spirit, whose name is not completely spelled out. It details how to build a cattle pen out of shallows, whose shape is shown by writing the inscription in the shape of an oval.

Old European:

A) PA NY KA Ä RA-KA RA. PA Ä RÄ TA. TÄ [-TÄ-RE] I.

B1) LY RA-SE TA TA.

B2) TÄ [-TÄ-RE] I, TE TA. TA LY TA-RA KA RA.

Finnish:

A) Paha nyt kaa’an äijä rankka rae. Pahoja äijä rähjä tauin. Tähet[tären] iän.

B1) Lyöen rahaisen taon taion.

B2) Tähet[tären] iän, teen ta’han. Taion lyön tarha karjan raian.

English:

A) The Evil One now lays low many [with] heavy hailstones. An unhappy old man, dilapidated from disease. Star [Spirit] Eternal.

B1) A striking treasure I shall forge with magic skill.

B2) Star [Spirit] Eternal: I shall make an enclosure. With magic skill I shall forge a pen for cattle from salloes [in the shape of an oval].

Notes: Writing goes from left to right, top to bottom. Punctuation is added. Finnish has no articles. The name Star Spirit is not spelled completely to avoid unwanted attention.

Figure 1: Light engraving (A) on Stránská skála elephant vertebrae.¹

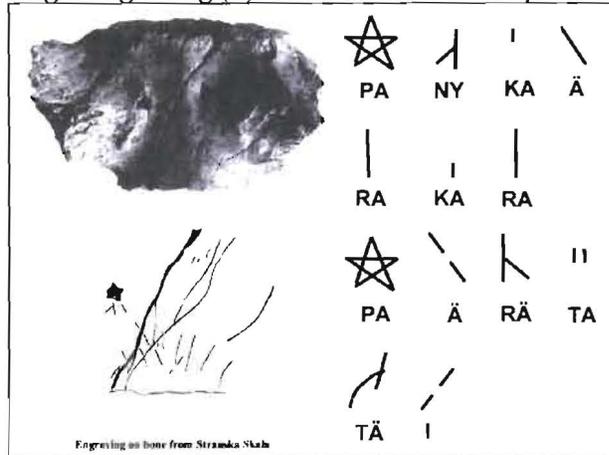
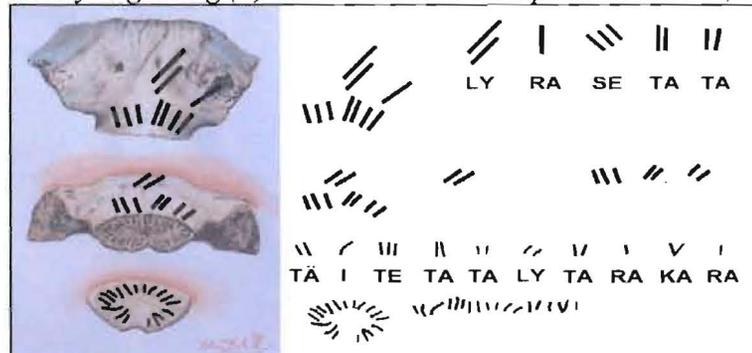


Figure 2: Heavy engraving (B) on Stránská skála elephant vertebrae, drawn by x.



350 ka, Bilzingsleben: ‘A blade I will make with magic skill’

In 1970s, archaeologist Dietrich Mania excavated Bilzingsleben in Thuringia in central Germany. Built 350,000 years ago, the settlement yielded bones of **Homo erectus**, animals, many artifacts, and three round ground plans of dwellings with hearths by their entrances. Among the artifacts were two with inscriptions. Animal bones belonged to small, medium-size and large animals (elephants, rhinoceroses, horses and buffaloes). Microlithic tools from Bilzingsleben such as the awl shown below do fit the Acheulian tradition, so this culture has been called **Clactonian**.

¹ Source: Donald Thomas Burgoyne, Reading Europe’s Paleolithic Writing, Comparative Civilization Review, p 112

Figure 3. A microlithic awl from Bilzingsleben could pierce leather or inscribe bone.



The campsite had equipment to kindle a fire. Besides heavy spears for hunting large animals the people used small, pointed throwing rods to hunt waterbirds and rabbits; when thrown, it rotated around its centre of gravity like a boomerang.

The inscription on this Bilzingsleben artifact reads the same, whether right side up or upside down, wherein the scribe plans to make a blade with magic skill. If this blade was made by gluing razor-sharp microliths into a slot in a wood handle, then the magic skill would be in the formulation of the glue. This secret recipe was eventually lost, only to be re-discovered in 2005 by Lyn Wadley: mix one part powdered red ochre and three parts sticky tree sap, glue the parts together, cure over low heat for four hours.²

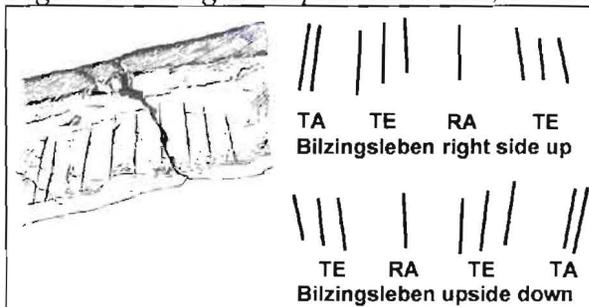
Translation

Old Eur: TA TE-RA TE. / TE-RA TE TA.

Finnish: Taion terä teen. / Terä teen taion.

English: With magic skill a blade I will make. / A blade I will make with magic skill.

Figure 4: Bilzingsleben parallel strokes, 350 ka.



² The secret was lost until 2005, when Lyn Wadley deduced how it was made by examining the residue on backed blades. “When water was mixed with fresh Acacia gum and red coloring in the first stage of manufacture, it formed successful glue after it was heated – the stone inserts could not be pried from their shafts. Wet resins require more loading agent than drier resins in order to make them manageable.” Wadley, Lyn; Putting ochre to the test: replication studies of adhesives that may have been used for hafting tool in the Middle Stone Age; 2005; Journal of Human Evolution, V 49, Issue 5, pp 587-601.