C. Emiliani. Dating Human Evolution. The Evolution of Man. (ed.) Sol Tax, Univ. of Chicago Press, 1960. p. 64

Some interesting, though tentative, conclusions may be drawn from Figure 1. Modern man (Homo sapiens sapiens) appears already to have been present on the earth 50,000 years ago. The Fontschevade remains are about 100,000 years old, and the Swanscombe skull bones about 125,000 years old. If these are assigned to an ancestral subspecies of H. sapiens sapiens, the latter appears to have originated between 100,000 and 50,000 years ago. Pithecanthropus extended through the Günz/Mindel interglacial. If Pithecanthropus is ancestral to Homo, the first Homininae may have appeared sometime between 200,000 and 125,000 years ago. The older limit is uncertain, however, because the early Homininae may have been contemporaneous with the late Pithecanthropinae. A similar relationship exists between the Australopithecinae and the Pithecanthropinae.— If the former are ancestral to the

latter, speciation might have occurred substantially earlier than the time when the late Australopithecinae were in existence.

Homo sapiens neanderthalensis may have originated between 125,000 and 100,000 years ago. In any case, the Neanderthals were already in existence 100,000 years ago.

Part II: Anthropologie, (Inst. Pal. Humaine, Arch., Mem. 29.)

C. Emiliani. Dating Human Evolution. The Evolution of Man. (ed.) Sol Tax, Univ. of Chicago Press, 1960. p.64/5

The Pleistocene glaciations undoubtedly had a profound significance for the evolution of man. One may even venture the opinion that, if glaciations had not occurred, modern man might have failed to develop. Pithecanthropus, which was already in existence before the beginning of the major Pleistocene glaciations, was, in fact, a remarkably evolutionary type. He was apparently quite capable of taking care of himself and of disposing suitably of his enemies. If glaciations had not created uncomfortable conditions, Pithecanthropus might have developed into a large, interbreeding population, occupying the whole earth. Glaciation favored migrations and the splitting-up of populations into small groups. Conditions for efficient evolutionary processes were thus created. These resulted, ultimately, in the production of

modern man. Today, modern man is a very large, interbreeding population. No further evolution seems likely, except by artificial means or by isolation on planets outside the solar system.