trench of 1988 (Fig 3. A, B, C). The latter layers belong to a subaeric sequence situating 18 m away of the cave entrance and are composed of the superposition of paleosoils and loess loams. The intermediate accumulated deposits consisting of limestone fragments belong to intensive Upper Pleistocene periglacial climate oscillations. In this stratigraphy (Fig 3. C), there is a significant hiatus between layers 6 and 7.

We refer in connection with the paleosoils of the stratigraphy to the third paper in this volume written by Á. Ringer, which discusses the chrono-stratigraphy and paleohuman ecology of Northeastern Hungary.

The MS1–MS2, MS3 paleo-soils and the M1 pedo-complex are equivalent to Arcy-Stillfried B, Hengelo and Warnenton. The equivalents of these in cave are the Sz S2, S3 and L cave soils.

The bio- and archaeo-stratigraphy of Diósgyőr-Tapolca cave confirm the chronology of these stratigraphical formations.

S. Gaál paleontologist dated layer 4 and the lower part of layer 3 of the 1932–34 excavation on the basis of fauna consisting of hyena and mammoth, according to the 1930's knowledge, to the beginning of the Würm.[3]

L. Kordos, on the basis of the excavation of 1973, re-interpreting the paleontological vertebrata assemblage of the 1932–34 excavation as well, placed the fauna between Lambrecth and Tokod climatozone in the Upper Pleistocene bio-stratigraphy established by M. Kretzoi and D. Jánossy.[4] These climatozones are equivalent to the 5c–5a substages and the end of stage 3 in the oxigen-izotope stratigraphy (see also the third paper in this volume, written by Á. Ringer).

Archaeo-stratigraphy

A. Saád classified the Paleolithic assemblages of Diósgyőr-Tapolca cave into the Magdalenian culture (layer 2) and the Hungarian Solutrean.[5]

L. Tóth classified the Paleolithic artifacts coming from trenches I and II of the excavation in 1973 as Middle and Upper Paleolithic. According to him, pieces of layers 4 and 5 of trench II are similar to those of Weimar-Taubach, and chronologically belong to the *"Quartz-Mousterian"* of Lambrecht Kálmán Cave.[6] The artifacts of layers 3 and 4 of this trench, after sorting out the Gravettian elements, were identified as Szeletian.

Á. Ringer collated the industry found during the excavation in 1988 in layer 12 and on the border of layers 11 and 12 with the collection of layer 5 and of the border of layers 4 and 5 of trench II of 1973, and with that of layer 4 and the bottom of layer 3 of the

[3] Gaál-Saád 1935.
[4] Hellebrandt et al. 1976.
[5] Gaál-Saád 1935.
[6] Hellebrant et al. 1976.