



RUDOLF KAUFMANN

3. April 1909 — between June 1941 and 1944.

News has been received of the death of RUDOLF KAUFMANN at the hands of Nazi soldiers some time between 1941 and 1944. In him our science has lost one of its most promising students.

RUDOLF KAUFMANN will be best remembered by his fundamental research on the evolution of *Olenus* in the Upper Cambrian of Sweden and the island of Bornholm. These beds are characterized by numerous species of that genus, each distinctive of its own biozone. With immense care KAUFMANN collected a large material of cranidia and pygidia from carefully selected beds, usually not more than 3 cm apart and, with the help of a specially constructed device, measured the proportions of a number of comparatively easy recognizable features. He found that each species possesses a number of features that are constant and others that are variable. The latter command considerable interest, because it was shown that these variable feature undergo certain directional modifications during the geological history of each species and that, surprisingly, the trend of these modifications is more or less identical in successive species, that is it is usually the same set of features which is being modified in the same way. KAUFMANN called this process "Artabwandlung", an admirably short and precise term for which the writer is elsewhere proposing the unavoidably

more cumbersome term "intraspecific-directional-modification". Intraspecific modification anticipates (in the earlier species) and repeats (in the later species) the phylogenetic evolution of the genus.

Unfortunately KAUFMANN's papers were published in German periodicals with a limited publication abroad. They make worthwhile reading for everybody interested in evolutionary paleontology.

RUDOLF KAUFMANN was born in East Prussia in 1909. The infinite variety of boulders of northern origin in the Pleistocene drift of northern Germany provides the budding geologist with a field museum of extraordinary dimensions which was KAUFMANN's playground since early childhood. Play developed into serious work and soon KAUFMANN studied at Königsberg, Munich, and finally at Greifswald under BUBNOFF. When he left the university his training was comprehensive and his knowledge unusually wide for a man of his age. He never lost his interest in drift boulders to which one of his first publications was devoted. But gradually he went farther afield. His evolutionary studies have already been mentioned. As a by-product of his field work in Scandinavia there appeared a study of the joint system of the Palaeozoic sediments in southeastern Sweden. He was familiar with granite tectonics and petrofabric studies and applied his knowledge to the study of the tectonics and mechanism of intrusion of the Bornholm granite. Only a preliminary account of the results was published. The main paper was later suppressed and is now presumably lost.

Thus the background was set for a splendid career when catastrophe came in 1933, shortly after KAUFMANN's graduation from Greifswald University. Of Jewish descent, though Christian in second generation, he was now a "non-Aryan". A position in Germany was out of the question, Jewish organizations washed their hands, scientific emergency committees found that young men without experience" were not wanted abroad. Desperately he tried to commercialize one of his many hobbies—he was an accomplished photographer and a certified teacher in sports and athletics—, first in Denmark, then in Italy and Danzig, finally back in Germany as teacher in a Jewish school. There followed years of prison and hard labour which his remarkable constitution enabled him to survive. From prison he maintained a scientific correspondence with friends abroad. Genetic problems and their application to paleontology were closest to his heart and a manuscript began to take shape, full of interesting suggestions and possibilities, but now lost forever. An Australian visa was waiting, but all efforts to obtain his release were in vain. In the general confusion following the outbreak of war in September 1939 he managed somehow to make his escape to Lithuania, only to find that the country to which he longed to go had closed its doors—he found that he was now a "German of military age".

After months of uncertainty and suspense he was allowed to settle down in Lithuania and once more he returned to geological work. When Lithuania was incorporated in the U.S.S.R. in 1940 he was finally appointed to the staff of the Geological Survey at Kaunas and with characteristic zeal he at once attacked problems of the Pleistocene drift with modern methods.

After the German invasion of Lithuania in 1941 KAUFMANN continued his field work for some time, until one unlucky day two Nazi soldiers recognized him on a country road as the "Jew Kaufmann from Königsberg", took him away and murdered him. Owing to present difficulties of communication it has as yet been impossible to obtain information about the exact date of his death which must have occurred sometime after June 1941.

Those who knew RUDOLF KAUFMANN will remember him as a cheerful companion, an indefatigable worker, and a sincere and mature scientist. He shared the fate of millions and his senseless death stands as a monument to human wickedness and ignorance alike.

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3. Variationsstatistische Untersuchungen über die "Artabwandlung" und "Artumbildung" an der Oberkambrischen Trilobitengattung *Olenus* DALM. Abh. Geol.-Pal. Inst. Univ. Greifswald, Heft X. 1933. pp. 1-54.
4. Die Einstufung der *Olenus*-Arten von Bornholm. Palaeont. Zeitsch., vol. 15, pp. 57-63. 1933.
5. Exakt nachgewiesene Stammesgeschichte. Die Naturwissenschaften, vol. 22, pp. 803-807. 1933.
6. Exakt-statistische Biostratigraphie der *Olenus*-Arten von Südöland. Geol. Fören. Stockholm Förhandl., 1935, pp. 19-28.
7. Zur Tektonik des Grundgebirges von Bornholm. Geol. Rundschau, vol. 24, pp. 379-389. 1935.

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