

continued in the Taurus Mountains of Asia Minor. The islands of Crete, Carpathos and Rhodos represent a part of this chain.

The Apennines branch off from the western end of the Alps and stretching along Italy and Sicily, they join the eastern end of the Atlas in North Africa.

Between the Tertiary ranges there are very old rocks to be found. Such are the Spanish Meseta, the Italian Tirreno Massif, the Balkan Massif in the central part of the Peninsula, the Massif of Asia Minor or Anatolium between the Taurus and the Black Sea. Between the ranges and the old rocks, there are distinctly small separate basins to be found, which in the ancient times of history were suitable for the development of regular states. /Athenes, Sparta, Rome, Toscane./

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These three basically differently built up areas meet in the Hungarian Basin. This basin cannot be ranged to

Geological Map of Central Europe.

Due to the scale of the map, the occurring formations can be plotted out only in a strongly generalized manner. Only the old or most important formations are emphasized, the younger and less important ones to some extent, neglected. As the older rocks are usually harder and more resistant than the younger ones, they are morphologically more prominent. So, the darker colours in the map indicate higher mountainous regions.

Cristalline rocks, belonging to the oldest geological formations: in the depth solidified magmatic masses or later overcrystallized /metamorphic/ or schistous deposits. Almost on all indicated places, granite, gneiss or mica schist occur. Syenite, gabbro, peridotite and serpentine, and among the metamorphosed sediments, phyllites and marbles are of common occurrence, and are not separately indicated. The resting part of the old igneous such as: quartzporphyrites, phonolites, melaphir, diabase, amphibolites etc. are of more local importance and occurrence.

The Paleozoic formations and rocks belonging to the old age of geological history. The oldest of them, the Cambrian formation can be found only in Bohemia, Moravia and Podolia. In other places they are metamorphosed and so changed into cristalline rocks. The beds of the Silurian and Devonian periods are known in the Alps, Southern Carpathians, in the Balkan Mountains and in Western Silesia. Carboniferous and Permian beds are more widespread in the blockmountains surrounding the Hungarian Plain and in Bosnia.

The Mesozoic, representing formations belonging to the middle age of geological history. In the table land of

any of the above areas, as it is surrounded by Eurasian chains, in his inner part relics of the Variscian system can be found in great extension. Such are the Szepes-Gömör and in broader sense the Bihar, Gyula, Radna and Bánság Mountains. The chain of the Carpathians crossed the eroded and down-worn Variscian chains. Therefore the cristalline region of the Carpathians falls to different pieces.

Indeed, the Hungarian Basin is situated in the confluence of three differently built-up European areas, and as such, deserves justly the name of "Central Europe", because it cannot be joined to any of the other large regions.

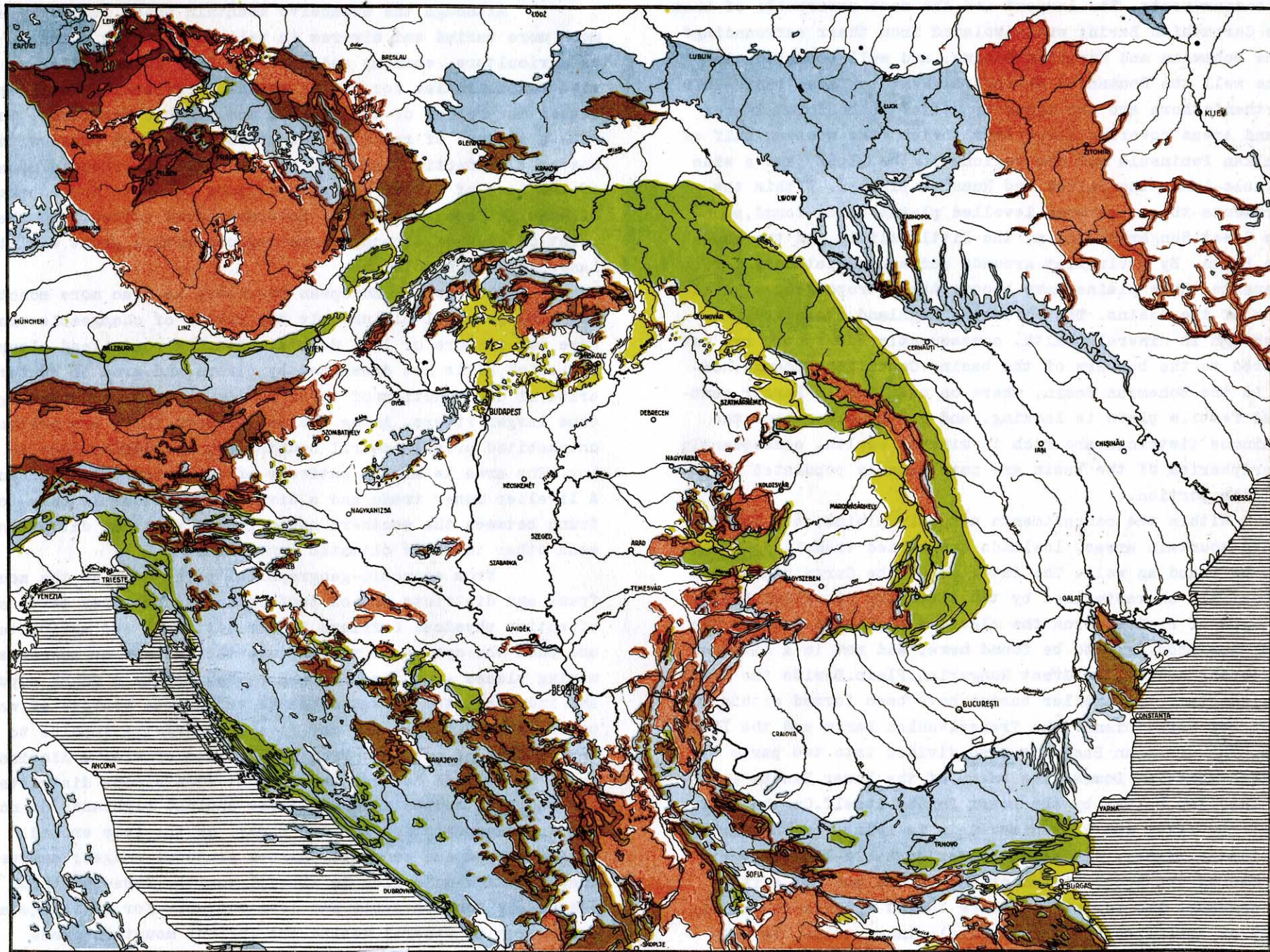
The parts of the three differently built-up areas, which make contacts with the Hungarian Basin can be counted, just due to their transient character, to Central Europe, but of course with completely arbitrary boundaries. /Map by Dr. Francis Szentés, text by Prof. Dr. Eugene Cholnoky./

Podolia and in the mapped parts of Italy the Triassic formations are lacking. Except the Russian table, where only beds of the upper Cretaceous are deposited, we find on other places complete Triassic-Jurassic-Cretaceous series developed. The Flysh formation deposited along the outer rim of the younger folded mountain chains, consisted of huge and thick masses of conglomerates, sandstones, shales and clays, shows especially great structural mobility, is therefore strongly folded and even pressed into covers. There is often great difficulty in the determination of the age of this formation, as fossil contents are mostly lacking. Flysh-hills are mostly flat and show broad forms. This formation appears on the northern rim of the Alps and especially of the Carpathians /"Carpathian sandstone"/, in the Balkans and in Croatia in regional extension.

Kainozoic deposits of the new age of geology or Tertiary /Eocene-Oligocene-Miocene-Pliocene/ and the Quaternary /Pleistocene-Holocene/ are the youngest. These more or less continuous sequence of beds are composed by marine, brackish, freshwater or terrestrial deposits. In the Quaternary, in the north and in the higher mountains, diluvial deposits were formed, while in the plains river terraces, loess, peatbogs and sanddunes originated. The youngest igneous rocks are indicated by a special colour. These are the volcanos of the Graz-basin, and the Little Alföld and on the inner rim of the Carpathians, in Bulgaria and Bohemia.

/Map and text by Dr. Francis Szentés, Chief geologist/

GEOLOGICAL MAP OF CENTRAL EUROPE



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| <p> Crystalline rocks, crystalline slates and crystalline intrusives (gneiss, mica-schist, granite, syenite, diorite, gabro etc.)</p> | <p> Paleozoic rocks: clay-slates, limestones, sandstones etc.</p> | <p> Mesozoic rocks: sediments and eruptives</p> | <p> Flysch: Cretaceous-Paleozoic sandstones</p> | <p> Tertiary-Quaternary sediments and eruptive rocks</p> |
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