

localities, in ascending order, Néocomien, Aptien, Albien (Gault), Turonien, Senonien. In D'Orbigny's *Elementary Course* and his *Prodrome*, he inserted two additional stages: Urgonien, between Neocomien and Aptien; and Cenomanien, as the equivalent of the Upper Greensand between Albien and Turonien.

The horizons defined by D'Orbigny were soon generally accepted in France, in spite of some resistance shown by D'Archiac. They were also gradually adopted in other European countries, with the exception of Great Britain, where geologists still continued to use the classificatory horizons and terminology introduced by W. Smith, Conybeare and Phillips, and Fitton.

In the year 1876, Barrois made a very successful effort to identify in the Upper Cretaceous deposits of England and Ireland the same zonal sequence as had been established by Hébert for those deposits in the Paris basin. The systematic arrangement drawn up by Barrois found recognition in England, and the comparison was carried out by Horace Woodward in his *Geology of England and Wales* (1887) for the complete series of Cretaceous deposits. It seems, therefore, at the present day, as if the stratigraphical succession of the youngest Mesozoic system had been fairly well worked out in England and the Paris basin.

In Germany also, the comparative aspect of the groups and zones in the different areas has become much better known. In 1849, Geinitz published a general survey of the Cretaceous formation in Germany, tracing the four main sub-divisions which he had previously recognised in Saxony and Bohemia in their further extension towards the Baltic, the Rhine, Poland, and Hungary. In the course of his researches, he corrected several blunders that had been made by previous authors; for example, he identified the true age of the greensand at Essen, and the Pläner marls at Priesen in Bohemia; and Geinitz also compared all the horizons of the German Cretaceous deposits with the "Stages" established by D'Orbigny for the French development.

Beyrich's study of the Cretaceous system in Silesia and the northern skirt of the Harz mountains elucidated the stratigraphical and tectonical relations of that region in a masterly way. Beyrich's memoir was published in the *Zeitschrift* in 1849, and in this and several later contributions, Beyrich