

ince, embracing the Pyrenees, Alps, and Carpathians, with all the tracts lying to the south. One of the biological characters of this area was the great abundance of Ammonites belonging to the groups of Heterophylli (Phylloceras) and Fimbriati (Lytoceras), and the presence of forms of *Terebratula* of the family of *T. diphya* (janitor). (2) The central European province, comprising the tracts to the north of the Alpine ridge, including France, England, Germany, and the Baltic countries, and marked by the comparative rarity of the Ammonites just mentioned, which are replaced by others of the genera *Aspidoceras* and *Oppellia*, and by abundant reefs and masses of coral. (3) The boreal or Russian province, comprising the middle and north of Russia, Petchora, Spitzbergen, and Greenland. The life in this area was less varied than in the others; in particular, the widely distributed species of *Oppellia* and *Aspidoceras* of the middle-European province are absent, as well as large masses of corals, showing that in Jurassic times there was a perceptible diminution of temperature toward the north.

Neumayr subsequently extended these three provinces into homoiozoic zones or belts stretching round the globe, and showing the probable distribution of climate and life during Jurassic and early Cretaceous times. (1) The Boreal Zone descends as far as lat. 46° in North America, whence it bends northeastward, coming as high as lat. 63° in Scandinavia; but then taking a remarkable bend toward the southeast across Russia, the Kirghiz Steppes and Turkestan into Tibet, about lat. 29° N. and long. 85° E. This curious projection is explained by the fact that the fauna of the Juras-

interesting speculation regarding zoological distribution, organic progress and vicissitudes of climate during the Jurassic and Neocomian periods. The last memoir contains two successive maps of Jurassic geography.