of granite. In some granite bosses a striking gradation can be traced even into picrites and serpentines.

A detailed study has been made by Dr. Charles Barrois of the granulites (*i.e.* granites with two micas) of the Morbihan in Brittany. He has shown that the large bosses measuring some hundreds of square kilometres present certain well-marked modifications not only of structure but of composition as they are traced from the centre to the periphery, while the smaller bosses show no such modifications and are to be regarded merely as apophyses from those of large size. The modifications along the contact do not arise from any exchange of substance between the granite and the surrounding rock, but solely from the influence of cooling which has affected the orientation of the minerals, their grouping and their order of crystallization. Where the granite has risen parallel to the strike of the adjacent strata it usually passes from its ordinary granular into a porphyroid structure, with its large constituents arranged parallel as in flow-structure; where, on the other hand, it breaks across the bedding it has assumed a finely granular massive character (aplite) with its crystalline constituents showing regular geometric forms. These variations are thus proved in this particular instance to depend on the influence of the surrounding envelope, which, though chemically inactive, offers considerable diversity as a conductor of heat and of pressure. The crystallization of the constituents of the rock took place progressively from the outside inward, that is, from a mass still in motion across a magma that had come to rest and which shows now no trace of flow. But besides this marginal band of "porphyroid granulite," the external portions of the southern flanks of the bosses present a remarkable schistose structure which, likewise limited to a peripheral zone, resembles that of gneiss, both fine-grained and glandular (angen-gneiss). Examined in detail the mica-flakes of this gneissic band are found to be torn and drawn out, the felspar crystals deformed, broken, and blunted, indicating the powerful mechanical forces which have affected the rock. These crushed constituents have subsequently been recemented by membranes and fibres of white sericitic mica, sometimes of black mica, and by sheets of secondary granular quartz, formed out of the triturated débris of the older ingredients. Considering the gradual passage of these schistose selvages into the ordinary granular rock, and the