

All three have a much wider range and a more patchy distribution than the anorthosite. Their precise importance is however uncertain, since there are certainly granites and gabbros, and likely syenites also, of more than one age in the region, though quite similar to one another, so much so that no criteria have yet been developed for their discrimination. This difficulty has not to be met in the case of the anorthosite.

At some time after the cooling of these great intrusions the whole district was subjected to great compression, as a result of which all the existing rocks were profoundly changed in character, the intrusives as well as the older rocks. But, since the igneous rocks did not experience the earlier compressions, as did the others, and since these must have been profoundly affected by the heat and pressure of the intrusions themselves, the intrusives are less completely altered than are the older rocks, and frequently retain traces of their original structures and textures, often in considerable amount, so that usually their origin and nature are not open to question. This is specially true of the anorthosites, which are mostly very coarse grained, porphyritic rocks, but it is frequently true of the others also. The rocks were more or less mashed and recrystallized, and rendered gneissoid in greater or less degree, the same rock varying much from place to place in these regards. It is the more gneissoid phases which are most difficult to distinguish from some of the older rocks.

The character of the changes produced indicates that the rocks were under great load during the compression, or, in other words, were deeply buried beneath overlying rocks.

Great Precambrian erosion. Precambrian time was very long, not improbably comprising as much as or more than one half of the earth's geologic history. During most or all of the later part of this vast time interval the region was a land area and undergoing wear. The overlying great thickness of rock under which the present surface rocks lay buried at the time of compression, was removed in Precambrian time in greater part. Quite likely the time of elevation into a land area coincided with the time of compression, the two being effects from the same cause. The great