

foliation in varying degree. In all of them the amount of change varies from place to place. In a rude degree all the intrusive masses show greater metamorphism toward their edges than at their centers, and because of this the large masses are apt to show a larger proportion of slightly metamorphosed rock than the small masses do. All of them also show local variations in this respect. As a general rule the anorthosite is the least metamorphosed of all the intrusives. If it were younger than the others, its condition in this respect would find ready explanation; and, not only that, but its condition furnishes a perfectly valid argument in favor of its younger age. Such evidence as exists that it is the oldest, rather than the youngest of the intrusives, has already been given in detail, and, if this be the case, other evidence must be produced to account for its apparent lesser degree of metamorphism. This evidence is of threefold character and derived from the distribution, the original texture and the composition of the rock. The main anorthosite of the district occurs as a single great intrusive mass, while the other intrusives are found in a number of smaller, disconnected masses, hence, for the reason just outlined, the rude relationship between size of intrusion and thoroughness of metamorphism, the anorthosite should in general be less metamorphosed than the others.

The anorthosite was originally a vastly more coarsely crystalline rock than were any of the other intrusives. The granulation of these rocks begins at the margins of the separate crystals and works inward by degrees, so that the amount of granulation necessary to completely obliterate the original crystals is, other things being equal, dependent on their size, since the smaller they are the more margins there are where the process can be initiated, and the greater the rapidity of destruction.

The anorthosite has also a simpler mineral composition than the other intrusive rocks, since it is mainly or wholly made up of the one mineral, labradorite. Hence there is afforded comparatively little opportunity for the development of new minerals by corrosion, so that recrystallization has not gone on to the extent that it has in the other rocks, and in so far as it has occurred, can mostly only give rise to more labradorite.