of the limbs of the smallest-scale folds (fig. 19, *a*). This schistosity (b–b, fig. 19, *b*) is more stable than the original (a–a), but it is rapidly rotated toward the plane of the latter. For a schistosity developed in this way Kienow used the term "glide-fold schistosity" (*Gleitfaltschieferung*). I believe that this kinematic analysis is correct for the intrafolial folds in the primary mylonitic rocks. The inclined schistosity (b–b) and the disintegration of small-scale folds are discernible, however, only in a few folds near the Stack of Glencoul (e.g., pl. 2); elsewhere it is not generally represented by megascopically visible surfaces, but only by the general alignment of chlorite flakes in more pelitic layers. This mechanism has probably played an important role in the production of the rapidly alternating color layering in the primary mylonitic rocks.

It is evident that a number of the folds in the primary mylonitic rocks do not fit into the movement picture deduced above. Polyclinal folds indicate shortening parallel to the foliation in a direction normal to the fold axis, and the folds overturned to the north-northeast suggest a sense of movement opposite to that postulated for the area as a whole. These folds may have been produced by local reversals in the movement during the main phase of deformation, or they may have resulted from slight displacements with the opposite sense at a later date. The style of the small kink zones dipping to the south in the Loch Ailsh and Cnoc a' Chaoruinn areas, and the consistent overturning to the north of the folds in the Loch Ailsh dolomites, suggest that the latter alternative is probable. At Knockan Crag the folds above the Moine thrust are commonly associated with shear surfaces and cataclastic deformation (fig. 18, *a–c*), indicating that they were produced after the main movements in the primary mylonitic rocks. The shear surfaces dip at variable angles to the north and the south. There is little displacement on the shear surfaces, and the impression conveyed by the folding is of slight shortening of the rocks in a north-south direction.

The possibility that there was extensive elongation parallel to the fold axes, as claimed by Read (Read *et al.*, 1926) and Anderson (1948), is discussed after the grain orientation in the rocks is described. But it should be noted that such an elongation would not invalidate the conclusions drawn above regarding the direction and the sense of shear displacement or "transport." In terms of symmetry this would mean that a movement with axial or orthorhombic symmetry was superimposed on the monoclinic movement described, the axis of greatest elongation coinciding with *B*. This would not lessen the over-all symmetry of movement, and the resulting symmetry of fabric should still be monoclinic. The strain would, however, be triaxial instead of biaxial. Axial elongation or "axial flow" (Weiss, in Turner *et al.*, 1954, p. 76) does not constitute tectonic transport, in the strict sense, as there is ideally no shear movement parallel to *B*.

The movement during the secondary phase of deformation was discontinuous, in contrast to the main movements in the primary mylonitic rocks. The deformation is localized in zones that cut across both the primary mylonitic rocks and the Moine schists. The horizon mapped as the Moine thrust was not generally active as a shear surface during the secondary deformation, though there is evidence of movement on or near the horizon at several localities, notably at Knockan Crag. The slickensides in the phyllonitic rocks indicate that the direction of movement was east-west, and the sense of movement, given by the folds in the secondary mylonitic rocks and the deformed quartz veins in the Moines east of Knockan Crag, is such that the overlying rocks moved to the west. The form of the folds (B_n and B_s) in the phyllonites above the Ben More thrust reflects primarily the movements on the underlying thrusts and reverse faults, but this may have been combined with some translation from east to west on surfaces parallel to the Moine thrust.

The Zone of Dislocation*

Introduction

In addition to the major thrusts that outcrop in the zone of dislocation—the sole, the Glencoul thrust, the Ben More thrust, and the Assynt thrust—there are a large number of minor thrusts and faults of variable orientation. A prominent system of steep reverse faults with east-southeast strike cuts the syenites of the Loch Ailsh mass. The faults are well exposed on the eastern slopes of the Black Rock and Sail an Ruathair, where they are seen to dip between 50° and 70° toward the north. Portions of the faults are shown on the 1-inch Assynt map (1923), but no mention is made of the nature and the orientation of the faults in the memoir (Peach *et al.*, 1907). There is a considerable degree of cataclasis along the fault surfaces, and associated with the most northerly of the faults, which is exposed on Sail an Ruathair, there is a well-defined shatter zone approximately 4 feet thick.

The most important group of minor faults in the area is the parallel system of steep reverse faults with northerly strike, which transacts the whole zone of dislocation; some of the faults are almost vertical, but more commonly they dip toward the east at steep angles. Some of the faults are shown on the 1-inch Assynt map (1923), chiefly in the Lewisian gneiss, and a larger number appear in Peach's sections across the area. The faults are well seen in the steepest parts of the mountains, where the rocks are well exposed, as on the south face of Ben Uidhe and in the sides of Coire a' Mhadaidh, north of Ben More. On the flat tops of the mountains and in the lower parts of the valleys and the corries, however, the structures are frequently obscured by the deep covering of scree and peat; it is probable, in my opinion, that these eastward-dipping faults are more persistent than their distribution on the maps would suggest.

Nomenclature of Thrusts and Nappes

The classical (Survey) interpretation of the structures between the Moine thrust and the sole, and subsequent modifications of this interpretation by Bailey and Sabine, have been outlined in my historical review. It is necessary now to discuss the relative significance of the thrusts and the nature of the structural units in the zone of dislocation before the folds and other structures in the zone can be described.

The Glencoul thrust is well exposed at the classic locality on the south shore of Loch Glencoul (pl. 6, *a*). It is here represented by a sharply defined, planar

* The term "zone of dislocation" refers to the zone between the Moine thrust and the lowest thrust, the sole (cf. Peach *et al.*, 1907), and must not be confused with the "zone of dislocation metamorphism" of Read (1934).