

Appendix

Recent observations on the southern shore of Skjervøy and the opposite coast of Kågen

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In the summer of 1967 brief visits were made to the shores of the low lying peninsula extending eastwards from the main mass of Kågen by P.R.H. and D.E.P., while D.L. independently spent a day on the good exposures on the southern shore of Skjervøy in a search for primary sedimentary structures.

Sedimentary structures were not found owing to the severe F_1 tectonism. However, while confirming the persistent sense of vergence of the F_1 minor folds over the greater part of the island as recorded by Ash, D.L. noted many clear and persistent examples of these folds verging in the opposite sense south of a line running through the centre of the lens of augen gneiss. He was thus able to confirm Ash's suggestion that the augen gneiss represents an F_1 fold closure.

On Kågen, to the south, the foliation is similar to that on Skjervøy (dipping gently south-east) with psammites in the north overlain to the south by a thin band of pelite and then limestone. Strongly developed minor F_1 folds have a sense of vergence similar to that recorded by D.L. south of the augen gneiss on Skjervøy. On the basis of the correlation suggested by Ash (above) and by Hooper and Gronow (in press) the major isoclinal F_1 fold thus identified crossing the southern end of Skjervøy is an anticline facing and closing westwards with an axial plane trace trending ENE-WSW and with a southerly overlying limb in the correct stratigraphic position. The apparent closure east-

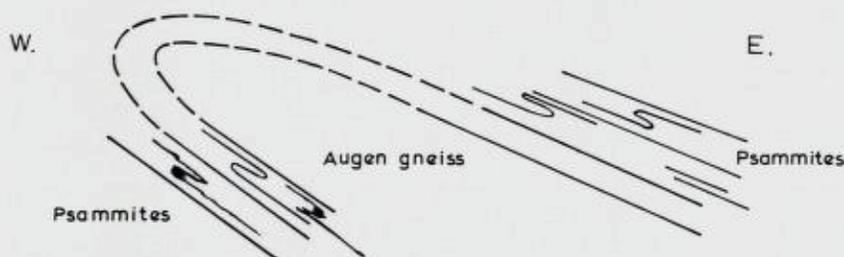


Fig. 1. Section of the F_1 anticline on the south of Skjervøy. The sense of vergence of the minor folds indicates that the anticline closes and faces west. The axis plunges gently to the south-east.

wards of the augen gneiss on Ash's map appears to be fortuitous. Augen gneiss typically develops as impersistent lenses in the Loppen District. The drag folds in fact indicate a closure westwards as indicated in Fig. 1. The apparent incongruous nature of the minor folds on Plate V of Ash's paper is not real. It is a consequence of recording "drag sense" as if the observer were looking north, when in fact the folds are plunging gently south. The "drag sense" should always be recorded on a map looking down plunge.

It is of particular importance to note that this major fold is not accompanied by a significant change in the foliation on a regional scale and can only be identified by repetition of lithological units and the sense of vergence of the minor F_1 folds. It would be surprising if other examples of major isoclinal F_1 folds, capable of repeating the succession on a regional scale, were not present in North Troms.