

sediments, whose remains are traceable across parts of the plateau. Remnants of the old consequent river system established before the isolation of the three blocks are still preserved in the southern region, of which the Nith is the finest example.

On the south side of the plateau the subsequent or longitudinal system of drainage has been set up by rivers attacking the weak sediments in flank. Thus the Tweed, working from the east, along the less resistant Carboniferous and Upper Old Red Sandstone strata, eventually followed the grain of the Silurian rocks, and by these means was able to intercept all the old consequent drainage westwards to beyond the centre of the plateau. South of the plain of the Merse, remnants of the old transverse streams again appear; for the Coquet, Rede, and Tyne, rising on the north side of the Cheviot range, cross it in well-marked hollows.

The tributary of the North Channel River, flowing along what is now the plain of the Solway Firth, cut its way backwards along the younger sediments. In the higher reaches of this stream, the Liddel, by following the grain of the Lower Carboniferous rocks, captured some of the smaller streams belonging to the Tweed system. The Solway-Liddle tributary deflected, from Luce Bay eastwards to the Esk, the old consequent rivers that crossed the Southern Block.

On the north side the development of the Central Plain has obliterated most of the courses of the old consequent streams, but the Doon on the west and the Clyde in the middle have maintained the old direction of their valleys by becoming obsequent streams. Frequent reference has been made in geological literature, and particularly by Sir A. Geikie, to the remarkable course of the river Nith. The infant stream rises on the north slope of the Southern Uplands, and flows northwards from the Silurian plateau to the plain of Carboniferous strata, along which it runs in an easterly direction for five miles to New Cumnock, where it changes its course to the south-east in the direction of the Solway. The easterly course of the stream above New Cumnock was doubtless determined by a subsequent tributary of the old consequent river that crossed the plateau before the isolation of the three blocks.

As in the northern and central regions already described, there is evidence to show that, in the Southern Block, the eastward-flowing streams extended farther to the west than at present, and that portion of their territory has been captured by rivers draining to the west and south-west. The Tweed may be instanced as an excellent example of these mutations. By means of its tributary, now represented by the Biggar Water, it cut backwards till it captured the old consequent Clyde, a large part of which it rendered obsequent. It also appears to have receded far to the west by appropriating the