

The ‘Turning’ of Scotland

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ABSTRACT

Scotland is misaligned on Ptolemy’s map because it was believed that life would be impossible north of 63°N.

The ‘Turning of Scotland’ in Ptolemy’s map has been much discussed¹, without ever being explained. This is probably because attention has tended to be concentrated on the mechanics of ancient map-making. What we perhaps need to do is to look at the assumptions of Greek society as expressed in Greek attitudes to the natural world.

Basically of course, the Greeks had no real conception of man as simply a deviously ingenious but integral part of the natural world. On the contrary, to the Greek the natural world, living as well as inanimate, merely formed an arena for the activities of man. The world in which he found himself was simply there for his use, totally at his command, a naively arrogant view reflected in Genesis².

When the Greeks began to explore the limits of the earth, they took this unspoken assumption with them: the world they found would be suitable for the activities of mankind. It was but a small step to the conclusion that, where the climate, through excessive heat or excessive cold, made it impossible for man to survive, there would be no need for land in those areas. Therefore there would be no land there. Thus while the Greeks early learnt by observation that the continent on which they lived stretched as far as Spain and the Tin Islands to the west, and as far as China to the east, their explorations to north and south were totally coloured by the potential of the land to support human life. Thus they evolved the theory that these continents did not stretch south of about 10°N of the equator – simply because, in their opinion, the land to the south would be too hot to support life, therefore there would be no land south of 10°N. Similarly, they apparently reached the conclusion that human life would be impossible north of 63°N (on Ptolemy’s scale), and thus there would be no land north of 63°N. When Marinus of Tyre collected information from Agricola’s men, his attitude will have been coloured by these assumptions. It is now agreed that, whereas elsewhere he was able to use astronomical observations – the elevation of the sun for latitude and lunar occultation for longitude – it is quite improbable that he had any such observations for Thule or places in the north of Britain, and that all he had were simple measurements from places further south (Tierney 1959, 132). When Marinus found that these measurements would take him well north of 63°, he decided that this would take Thule and parts of Britain well into the uninhabitable zone. Since this could not be correct, he apparently decided that the direction of his northern measurements was wrong, and turned the northern part of Britain through 90° to the east. This allowed him to place Thule on the inhabitable limit, at 63°N.

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These assumptions and measurements were retained by Ptolemy, even though he elsewhere departed from the speculative theorizing of his predecessors: the belief in a long, sausage-shaped continent between Spain and China, but confined between 10° and 63°N, had not merely led to theories that this continent must be balanced by another on the far (south) side of the globe (therefore called the Antipodes), but even to the view of Crates that there must be *four* separate continents, all balancing each other, and all lying between 10° and 63°, North or South. As reconstructions of Ptolemy's map show, he moved on from this to postulate instead continuous land from Africa round to China, making the Indian Ocean a second '*mare internum*', while he also postulated the extension of Eurasia well into Siberia. But he did not attempt to alter the information he had got from Marinus – he was not prepared to challenge the apparently solid statistics which the latter had passed on – and so Scotland remained improperly misaligned to the east. Internally its measurements are correct, and Scotland in Ptolemy's map can be put straight by a simple 90° turn to the left.

NOTES

- 1 Summary of discussion in Rivet & Smith 1979, 111–14; see also Smith 1987.
- 2 I, 26–28, cf II, 19.

REFERENCES

- Rivet, A L F & Smith, C 1979 *The Place-Names of Roman Britain*. London.
 Smith, I G 1987 *The first Roman invasion of Scotland*. Edinburgh.
 Tierney, J J 1959 'Ptolemy's map of Scotland', *J Hellenic Stud*, 79 (1959), 132–48.