CHAPTER ELEVEN

“AND KNOWLEDGE SHALL BE INCREASED”
BACON, THE ROYAL SOCIETY AND TRAVEL LITERATURE

When John Evelyn was designing a coat of arms for the new Royal Society one of his proposals was a ship with the motto *Et Augebitur Scientia.* It was a reference to Francis Bacon’s *Novum Organum* in which he quoted from the Book of Daniel, “Many shall run to and fro and knowledge shall be increased.” Bacon thought this Biblical prophecy had been realized in his own day and that the text was clearly intimating that the thorough passage of the world (which now by so many distant voyages seems to be accomplished, or in course of accomplishment), and the advancement of the sciences, are destined by fate, that is, by Divine Providence, to meet in the same age.

Bacon passed on the pursuit of knowledge of the world through scientific experiment and the study of travellers’ observations as a dual research project to the Royal Society. Although Bacon’s library was dispersed soon after his death and no record of it survives it is clear from his writings that travel literature exercised an influence over him. References to travel and exploration appear in all his works. In the preface to the *Great Instauration* he noted that in ancient times when man could only navigate by the stars they were confined to the Mediterranean and that before the ocean could be traversed and the new world discovered, the use of the mariner’s needle, as a more faithful and certain guide, had to be found out.

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2 Daniel, 12: 4.
He compared the discovery of the compass to the “more perfect use of the human mind and intellect” that must be introduced before new discoveries could be made in “the remoter and more hidden parts of nature.” The same theme appeared in the *Novum Organum*:

> By distant voyages and travels which have become frequent in our times many things in nature have been laid open and discovered which may let in new light upon philosophy.7

It would be disgraceful, he argued, if new regions of the material globe were discovered but the intellectual globe should remain confined to the narrow limits of the old discoveries. He compared himself to Columbus in setting out his ideas about the way to achieve new philosophical knowledge just as Columbus set out his conjectures before “that wonderful voyage of his across the Atlantic.”8

He saw the mariners compass as one of three discoveries that had changed the world. Printing had changed the face of literature, gunpowder had changed warfare and knowledge of the magnet had made the compass possible and with it oceanic navigation. In Bacon’s opinion,

> …no sect, no star seems to have exerted greater power and influence in human affairs than these mechanical discoveries.9

While the ancient Greeks and Romans had known of the antipodes they had never traveled there so that

> …it may truly be affirmed to the honour of these times, and in a virtuous emulation with antiquity, that this great building of the world had never through-lights made in it till the age of us and our fathers.10

Previous generations had never circled the earth “as the heavenly bodies do.”11 The present age could justifiably take the motto “plus ultra” in distinction to the ancient “non ultra” and “imitabile fulmen” rather than “non imitabile fulmen” and even “imitabile coelum.” Bacon bequeathed to the Royal Society the sense that the discoveries of his

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6 Ibid. 13.
8 Ibid. xcii.
9 Ibid. i, cxxix.
11 Ibid. 184.