## **Commanding Nature**

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by Charles Strohmer

The seventeenth century was an extraordinary period in Europe. Changes occurred on the Continent that shoved the entire western world into a different orbit. In a revolt against the prevailing intellectual paradigms of Aristotelianism and Scholasticism, philosophers such as Locke, Descartes, Newton, and Pascal virtually created the modern western mind. Consequently, an epistemology that had stood for centuries fell out of favor and another arose, which shapes the entire western world to this day (despite what our post-modernists are telling us).

Fundamental shifts of this sort are rare, and one of the significant forces behind this one was Sir Francis Bacon (1561-1626), whose method of induction, for which he became well known, gave Europeans a systematically new way of discovering how people could learn from nature. Bacon took issue with what we might call the hands-off approach to knowledge of nature within Aristotelianism and Scholasticism. He believed that the great failure of those reigning paradigms was that their abstract systems could not reduce human suffering or increase human well-being.

To Bacon, Philosophy had been governed by human self-indulgence. Half a dozen Greeks had locked themselves away in scholars' cells and earned themselves fame by devising ?pompous systems? of all-inclusive knowledge of the world. (Something of the ?foolishness? of early Greek rhetoric is behind St. Paul's comment in 1 Cor. 2:1.) These abstract systems, Bacon said, had not produced a Christian relation to nature. Bacon, who entered Trinity College at 13, was well aware that his New Organon contradicted the reigning paradigms of the universities.

For theories of natural philosophy (what we today call science), Bacon proposed a hands-on knowledge of nature, a systematic approach in which knowledge would be derived and built up from people's experiences with the natural world. Through this method of induction, Bacon explained, one would examine a multitude of particular experiences and from them develop general laws of nature. ?Nature can only be commanded by being obeyed,? was his lovely way of putting it.

But this was not to be an exercise in selfish ambition or mercenary exploitation. Bacon let the surrounding Christian wisdom play upon his theory. One of his tenets was that, when discovered, we must then use the laws of nature in a ?holy? manner as we develop our sciences. By this he meant two things. One is that the created world must be approached with humility; that is, we begin in ignorance, by not knowing, and proceed by studying from the creation what God has actually wrought in creation. Second, our science should produce works motivated by Christian charity. Knowledge gained, Bacon said, ought to be used to serve others by alleviating human suffering and increasing human well-being.

To his opponents, he responded with one of his many metaphors, comparing ?method? to a ?path.? Many runners are very fast, he said, but if you put them on the wrong path their speed only takes them further away from where they want to be more quickly. You can take someone who is slow, and if you put that person on the proper path, he will arrive at the desired place. Method serves the function of a path. Place genius in possession of a wrong method of learning from nature and genius will fly to error.

We're very fast today. And there are many wrong paths; well, superhighways surely, by now. Over the centuries, Bacon's scientific method has, in the hands of a fallen world, come to serve the purposes of various idolatries, among them materialism, naturalism, and rationalism. Perhaps as part of fulfilling their obediences to God, our Christian theorists could offer the alternative goal of a holy science, methods to link the mind to the things of the natural world, humbly and in service to others. In the meantime, perhaps we could take a cue as individuals and begin someplace ourselves.

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