

Why Study the History of Science and Religion?

- There is a common misunderstanding of the relation of the scientific method and religious belief: that they are fundamentally at odds.
- This has led to a serious misunderstanding of both areas:
 - Religion is usually presented in a way which does not acknowledge its flexibility and diversity.
 - Science is presented in a way which ignores the role of religious belief in its development, and minimizes the continued role of personal beliefs and worldviews in favor of the image of complete objectivity.
- This topic is especially significant given the prominent role which “science” holds as a feature of modern, western society and culture.
- For many, “science” takes the place of a belief system at some level.
- Understanding how our present perceptions came to be will always help us think critically about our assumptions, and help us understand who we are in the perspective of “time.”

Francis Bacon (1561-1626)

- Courtier and lawyer under Elizabeth I.
- Rose to Lord Chancellor under James I.
- Sought to lay a new philosophical foundation for science (“natural philosophy”) based upon observation and experiment.
- He has been considered a pivotal figure in the development of modern experimental method.
- The Royal Society, founded in 1660, hailed him as the originator of their mission -- to examine the natural world in close detail for the increase of knowledge and the good of mankind.
- In most accounts he is credited with drawing a sharp line between matters of “faith” and matters of “science” and focusing his work solely on “science.”
- (What his actual religious views were is not agreed upon: he has been called an atheist, a puritan, and someone who was simply unconcerned with religious questions.)
- My first question: If that is so, then why are Bacon’s “scientific” writings saturated with Biblical quotations and theological arguments?
- My second question: Given the religious context of Tudor and Stuart England is there a more historically valid understanding of Bacon?



Where I Looked for Answers

- Bacon’s non- ‘scientific’ writings, including his Confession of Faith, Prayers, Essays and Sacred Meditations, and comments on religious controversies.
- His home life as a child, and subsequent developments surrounding a letter in which his Puritan mother expressed concern about him falling away from the “Faith.”
- His literary circle, those whom he chose to help him with his work on his “Instauration Corpus” -- the writings in which he proposed a new method for the study of nature.
- His use of Bible passages and his theological statements in the Instauration Corpus itself.

What I Found:

- Bacon was *not* a Puritan.
- He had turned his back on all forms of Calvinism because of his rejection of “Determinism” and especially the doctrine of “Predestination.”
- In place of the common Protestant understandings of his society, Bacon looked to the “Church Fathers” -- the Christian writers of the first seven centuries -- and especially the newly recovered writings of Irenaeus of Lyon.
- Bacon’s literary circle had *no* fellow natural philosophers, but had many Biblical scholars and clergy, all of whom had also rejected Calvinism at some level, and all of whom were interested in recovering the Christianity of the Church Fathers.
- Bacon regarded science itself as a form of theology, and saw the study of it as necessarily presided over by a new “priesthood.”
- Bacon had developed a unique view of the ‘end times’ in which the recovery of scientific knowledge, which had been lost in the Fall into sin, would usher in a new age of peace and prosperity, which would end in the Second Coming of Christ.
- By rejecting the determinism of Calvin, Bacon had cleared the way to allow for the free will of the experimenter in choosing the method of experiment.

From the Advancement of Learning (1605)

- For our Saviour saith, You err, not knowing the Scriptures nor the power of God; laying before us two books or volumes to study, if we will be secured from error; first the Scriptures, revealing the will of God, and then the creatures expressing his power; whereof the latter is a key unto the former; not only opening our understanding to conceive the true sense of the Scriptures, by the general notions of reason and rules of speech; but chiefly opening our belief, in drawing us into a due meditation of the omnipotency of God, which is chiefly signed and engraven upon his works.

From his Unpublished Notes (Valerius Terminus)

- This is a thing which I cannot tell whether I may so plainly speak as truly conceive, that as all knowledge appeareth to be a plant of God's own planting, so it may seem the spreading and flourishing or at least the bearing and fructifying of this plant, by a providence of God, nay not only by a general providence, but by a special prophecy, was appointed to this autumn of the world: for to my understanding it is not violent to the letter, and safe now after the event, so to interpret that place in the prophecy of Daniel where speaking of the latter times it is said, Many shall pass to and fro, and science shall be increased; as if the opening of the world by navigation and commerce and the further discovery of knowledge should meet in one time or age.

The Twofold Fall

- Bacon's vehement insistence that the messages of the two books not be confounded is an outgrowth of his unique reading of the Genesis Fall narrative. The Fall of man, according to Bacon, was twofold in nature: "For man by the fall fell at the same time from his state of innocence and from his dominion over creation."
- As man's fall was twofold, falling from "innocency" and "dominion over creation," so the means of recovery is twofold. Thus the recovery of Edenic perfection for Bacon follows two separate yet interrelated paths toward a double solution, spiritual recovery through God's action of the Incarnation, and material recovery, even in this life, through the cooperative effort of God and man in the Instauration.

Man's mastery over nature would be limitless:

- Let no man presume to check the liberality of God's gifts, who as was said, hath set the world in man's heart. So was whatsoever is not God but parcel of the world, he hath fitted it to the comprehension of man's mind, if man will open and dilate the powers of his understanding as he may.
- Unpublished notes

Correspondences of the
Double Fall and Double Recovery according to Francis
Bacon

Incarnation

"Innocency": State of Grace
or "Right relationship with
God"

Gen. 3:15 (Protoevangelion):
"And I will put enmity
between you and the woman,
And between your seed and
her seed; He shall bruise
your head, and you shall
bruise his heel."

The event of Incarnation: In
the "fullness of time" God
comes in the Flesh to restore
the relationship between God
and Man.
The Way of God is prepared
by the Forerunner, John the
Baptist, who turned people to
the right path, and pointed
them toward the spiritual
solution to the Fall, Christ.

What was lost?

**Promise Given
after the Fall**

**Fulfillment of the
Promise**

Instauration

Dominion over Nature

Gen. 3:19: "In the sweat of your
brow shall you eat bread."

The event of Instauration: God
"renews the face of the earth" (*et
instaurabis faciem terrae*) Ps. 104:30,
by providentially appointing a time
after the restoration of "right
religion" in the Reformation, when
"right reason" would be restored.
Man would then journey through the
entire globe and recover mastery over
nature, according to Daniel 12:4.
The Way would be prepared by the
Forerunner, Francis Bacon.

"1st Scripture" (the Bible)
carries the message of God's
will, and the means of
spiritual recovery

Eternal Kingdom of God
in the New Heaven and
New Earth

Scripture

Culmination

"2nd Scripture" (the Book of Nature)
carries the "secrets" of God's power, which
will be learned by the "sweat of the brow,"
and contains the means of material
recovery.

Temporary period:
"The Kingdom of Man" when
mastery of nature would be
completely restored and human
suffering would be overcome. This
would give way to the New Heaven
and the New Earth.

What has Bacon Contributed to Science?

- A sense that we are living in a special age
- A sense that things only get better
- A sense that we must work hard, through science to transform the world, and master all of the universe.
- But we have stripped away the religious reasons why Bacon thought this would happen.