

2017

Fancis Bacon

William Travis Beall
Ouachita Baptist University

Follow this and additional works at: <http://scholarlycommons.obu.edu/math>

 Part of the [Christianity Commons](#), [History of Science, Technology, and Medicine Commons](#),
and the [Mathematics Commons](#)

Recommended Citation

Beall, William Travis, "Fancis Bacon" (2017). *Math Class Publications*. 6.
<http://scholarlycommons.obu.edu/math/6>

This Class Paper is brought to you for free and open access by the Department of Mathematics and Computer Sciences at Scholarly Commons @ Ouachita. It has been accepted for inclusion in Math Class Publications by an authorized administrator of Scholarly Commons @ Ouachita. For more information, please contact mortenson@obu.edu.

Francis Bacon

Travis Beall

History of Mathematics

9/29/17

Abstract

This paper will give the reader an insight into the life of the mathematician, Francis Bacon. We will start by looking into his early life, leading into what he became famous for in mathematics and who he worked professionally with. Then we will look into the faith life of Francis Bacon and see how he expressed his faith. Then there will be a section about how I could let faith drive my life as a mathematician and I can show it in my work life. The hope to help the reader further understand the impact Francis Bacon had on mathematics and how we can incorporate our faith into our work lives.

Francis Bacon was born the year 1561 into a very influential family in London. He was the “youngest son of Queen Elizabeth I's Lord Keeper and nephew to Lord Burghley, her chief minister” (Broadway). This meant that Bacon grew up surrounded by politics and intellectual people. At only 12 years old, Bacon went to Cambridge university to study where he would live in the household of an English Ambassador in France. He also studied at Trinity College of Cambridge. During this time “he encountered the new logic of Ramus, an alternative to the then-dominant Aristotelian logic” (Wray). Ramus was a Frenchman who had a big impact on logic and educational reforms. Bacon then made a return to England due to the loss of his father in 1579 and decided to stay there for the remainder of his time. Bacon went on to finish his education studying common law at Gray's Inn. Being raised surrounded by politics for most of his early life meant that he was engaged in politics and the government. Later in his career he became Lord Chancellor in 1618. He was later accused of bribery and lost his position in office.

Along with his political career, he also began a literary career in which he wrote many essays. These essays covered the topics of history, law, and science. His first of his most important scientific and philosophical essays was “Of the Proficiencie and Advancement of Learning” which was published in 1605. This essay was “set out in detail a plan for the overhaul of education and research in England.” (Broadway). After his advancement plan was originally denied by Queen Elizabeth I, he dedicated this to King James I in hope that he would endorse his plan. His next piece of work was published in 1620 and was known as “Novum Organum” also known as, “The New Organon”. In this piece of work he summarizes the results he found on the fundamental principles of scientific thought. “He demonstrated the inadequacies of Aristotelian science and of reasoning based on logical deduction from causes rather than the observation of

effects.” (Broadway). The most important contribution he made to mathematics was the use of induction, which was already something widely known, but Bacon gave a structure of how to use induction. Bacon’s structure for induction was very similar to what we know as the scientific method. The structure he used was describe the requirements, make observations to acquire facts, then uses the facts to make at least one axiom, and then collect more facts and use the remaining facts to create more axioms. This was shown through his essay “The New Organon”. Some of the other pieces of works he wrote were *De Augmentis Scientiarum* in 1623, otherwise known as, “Of the Dignity and Advancement of Learning”, and *New Atlantis* in 1627. Throughout his career, Bacon did not work or collaborate with any others. He might get an idea from someone that he would then use to apply to his works, but he never directly worked with anyone. If he did work with anyone, it is not known by anyone of who he did work with.

Bacon wanted to help humanity get back on the right track when it came to scientific inquiry, in which he called this plan “The Great Instauration”. Bacon divided the project into six different tasks, “(1) to classify the existing sciences; (2) to devise a method of inquiry; (3) to catalog all known facts and all experiments conducted; (4) to present applications of his new method; (5) to catalog the results of his new method; and (6) to present a new science of nature.” (Wray). This allowed him to make a distinction between natural matters and supernatural matters. “Mistakenly, some critics and commentators have assumed that Bacon was antireligious. In fact, Bacon believed that a better understanding of nature would give us a better understanding of God.” (Wray). This helps lead us into discussion about his religion and how he felt about it.

Bacon was raised as a Protestant by his mother while his father was Catholic. After his father passed away his mother kept a close eye on him to make sure that he didn’t follow in the

way of his brother and abandon the Protestant faith for the Catholic faith. It is said that he seemed to have similar views to his father rather than the views of his mother. Some believe that after his father's death and the launch of his political career he just acted as if he believed in God. "For, although his grand project (the Instauration Magna) of restoring man's dominion over nature rested upon a distinction of faith and reason, the separation of religion and science, and the giving of priority to the advancement of inductive scientific studies, there is no reason to question the sincerity of the frequent expressions of Calvinistic piety that are to be found in some of his writings, like the Religious Meditations and the 1603 Confession of Faith." (Francis Bacon 1561-1626). It is said that his Christian faith was what drove him to look for more meaning to life. After nearly facing death and being accused of bribery, Bacon wrote his last will, "Bequeathing His Soul to God Above". In his will, he confessed his sins to God and how he loved the Christian community, cared for the poor, and sought out for God not just through scriptures but in all of nature as well.

As a mathematician, I hope for my faith to drive me to help my students not only learn in the classroom, but to also grow into adults and strive to be the best they can. While the content being taught is important, as teachers we can make an impact in these kids' lives and can help lead them in the right directions. The plans I have for exemplifying my faith in my work life is by treating each student equally and showing love for every student. With all the hate going on in our world, I believe it is important for educators to make sure that we don't promote hate but rather show loving and caring values. Even though in public schools you can't lead a prayer or anything you can show your faith in God by the way we act. To show my faith in my home life, I plan to read the bible with my kids and have prayer before we go to bed to thank God for

everything he has given me and my family. I plan to raise my kids in the Catholic church and hope they will fall in love with the Catholic church as much I have.

Reference Page

"Bacon, Francis (1561-1626)." *Encyclopedia of Philosophers on Religion*, Bernard J. Verkamp, McFarland, 1st edition, 2009. *Credo Reference*,

Broadway, Jan. "Francis Bacon." *Great Thinkers A-Z*, Julian Baggini, and Jeremy Stangroom, Continuum, 1st edition, 2004. *Credo Reference*,

Wray, K. BRAD, and K. BRAD WRAY. "Bacon, Francis." *Encyclopedia of Empiricism*, edited by Don Garrett, and Edward Barbanell, Routledge, 1st edition, 1997. *Credo Reference*,