**St. Virgil and the Antipodes Case:**

**The Church Confronts Science in the Middle Ages**

**By**

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In 748, Pope Zachary authorized Boniface, bishop of Meinz and primate of Germany, to “take counsel” and excommunicate the abbot of St. Peter’s Monastery in Salzburg – an Irishman called Virgil.

Boniface had accused Virgil of teaching that there was “another world and other men beneath the earth.” Virgil, considered the most learned man of his age and called the Geometer because of his mastery of classical mathematics, was probably teaching the mathematics of the Antipodes – a point exactly on the other side of the globe. Thus, the pope and Boniface set the church on a collision course with what little science there was in the Middle Ages.

 But that collision never took place. Instead of being excommunicated, Virgil was made bishop, and the 8th century Church side-stepped the kind of confrontation which brought so much criticism of the Catholic Church as anti-science 900 years later.

 Although Virgil’s case was used as fuel for the attacks on the church in the 17th and 18th centuries, Virgil was never disciplined. The 8th century Church may have handled science better then the 17th church did.[[1]](#footnote-1) But we can’t be absolutely sure, because there is no record of what happened to the charge.

 This is just one of the many mysteries surrounding Virgil: saint and scholar, scientist and bishop. Less than 100 years after his death, his tomb had been buried, almost all memory of him seems to have been erased, and all of his papers and writings disappeared. So Virgil is largely a mystery.

 But the Antipodes case is intriguing, especially as an example of the Church vs. science, and we can reconstruct the most important elements. There are a few things which are clear: the pope authorized Boniface to begin excommunication proceedings, Boniface had no sympathy for Virgil, Virgil was not excommunicated, and shortly after this case he was made bishop of Salzburg.

**Who Was Virgil:** Born Fergal, probably in Trim, County Meath, he was descended from Irish high kings. He was educated in Iona, the isolated monastery off the windswept coast of Scotland which became one of the most important Celtic monasteries outside of Ireland. It was at Iona that Virgil earned the reputation as the “most learned man of his age”, and was called “the Geometer” because of his mastery of classical mathematics. Virgil was abbot of Aghaboe Monastery in County Lois before joining the flood of “wandering Irish saints” who educated most of Europe.

Virgil led a missionary band to the continent, including at least seven bishops according to an old legend. They made their way to the court of Pepin, son of Charles Martel and father of Charlemagne. Attracted by his scholarly reputation, Pepin appointed Virgil one of his advisors for a few years and then named him abbot of St. Peter’s Monastery in Salzburg, Bavaria.

**The Boniface-Virgil Feud:** Virgil ran the Salzburg Diocese from his abbacy through one his Irish companions who was a bishop. This practice of the Celtic Church where authority resided with abbots was opposite the European model where bishops exercised authority over their diocese, answering to Rome. The Celtic church was not hierarchical, and abbots were independent authorities. Virgil did things in “the Irish way”.

After only a few months in Salzburg, Virgil had his first run-in with Boniface.

Boniface – the Saxon saint and martyr known as the apostle to Germany -- was the papal legate who had reformed and structured the Frankish and German churches, setting up a strict hierarchy looking to Rome. He established the four diocese of Bavaria, including Salzburg, and had nominal authority over the Bavarian church.

A rural priest in the Salzburg Diocese had mispronounced the Latin in performing Baptism, and Boniface ordered everyone re-baptized. Virgil refused, Boniface insisted, and Virgil appealed to the pope. Pope Zachary not only backed Virgil’s decision, but also rebuked Boniface for misinterpreting doctrine.

 This must have been a harsh blow to the man who had spent his entire career in Europe organizing the European Church for Rome. There is also a history of conflict between Boniface and wandering Celtic priests and bishops. One historian calls Boniface Virgil’s “great enemy.”

 In less than two years after he was rebuffed in the language of Baptism dispute, Boniface – now the primate of the German church which included Bavaria and Salzburg -- brought a series of charges against Virgil directly to the pope. The most serious of these was the potentially heretical “another world and other men…” charge.

**What Would Virgil Have Known?** Virgil was a scholar with full mastery of classical mathematics , including Pythagoras, Aristotle and Eratosthenes, all of whom argued for a round Earth. Pliny the elder in the first century claimed that there was general agreement on the spherical shape of the earth, but disagreement about the Antipodes. The astronomer Ptolemy argued for the round earth in the second century. Macrobius, in the 400’s, wrote about a spherical earth, including the Antipodes. Both of Virgil’s near contemporaries, Isidore of Sevile and the Venerable Bede, wrote of the round earth. These were all familiar to Virgil.

The Antipodes concept was more controversial then the round Earth. The term, first used by Aristotle, was familiar to classical scholars including Strabo and Plutarch. Lucretius argued against the concept of a spherical Earth because he considered the idea of the Antipodes as absurd.

St. Augustine, a doctor of the church and revered as one of the great minds of the first millennium, had no objection to the round earth, but disputed the Antipodes

*But as to the fable that there are Antipodes, that is to say, men on the opposite side of the earth, where the sun rises when it sets to us, men who walk with their feet opposite ours, that is on no ground credible. And, indeed, it is not affirmed that this has been learned by historical knowledge, but by scientific conjecture, on the ground that the earth is suspended within the concavity of the sky, and that it has as much room on the one side of it as on the other: hence they say that the part which is beneath must also be inhabited. But they do not remark that, although it be supposed or scientifically demonstrated that the world is of a round and spherical form, yet it does not follow that the other side of the earth is bare of water; nor even, though it be bare, does it immediately follow that it is peopled .*

Augustine also said that there is no way for people to get to the Antipodes:

*... it is too absurd to say, that some men might have taken ship and traversed the whole wide ocean, and crossed from this side of the world to the other, and that thus even the inhabitants of that distant region are descended from that one first man.*

And St. Augustine’s opinion was tantamount to doctrine for the medieval church.

**The Church’s Problems with the Antipodes:** The cards were stacked against Virgil in the Antipodes complaint.

First, he was teaching what seemed like a logical impossibility. The medieval perception of the Antipodes is demonstrated in a drawing from the period showing people standing at right angles and upside down in a globe (see Cosmas Indicopleutes illustration). This was difficult to imagine for the medieval mind.

Second, his teaching directly contradicted St. Augustine, and St. Augustine was THE church authority during the middle ages.

Third, his church hearing was in the hands of a man who was clearly antagonistic to Virgil. And,

Fourth, his teachings could be interpreted as heretical.

The potential heresy in the Antipodes concept focuses on who these “other men” were who could be living on the other side of the globe. The Church taught that Christ died to save all men, referring to the descendants of Adam and Eve --“Adamites.” Many believed as St. Augustine did, that men could not travel from the known world across the terribly hot “torrid climes” to the south. If men could not travel to the Antipodes, then Virgil’s “other men” could not have been Adamites and thus not saved by Christ – a heresy.

Pope Zachary contacted Duke Odillo, the ruling duke of Bavaria including Salzburg, and summoned Virgil to Rome.

**What Happened to Virgil’s Excommunication?** Pope Zachary authorized Boniface to “take counsel and then expel him (Virgil) from the church, stripped of his priestly dignity.” Boniface had every reason to consider Virgil an enemy and had used excommunication as a tool against Celtic priests in the past. As primate of Germany, in charge of the Salzburg Diocese, he had all of the power and motivation to rid himself of this annoying Irishman.

 But there is no record of Boniface calling a church council to bring the charges against Virgil. In fact, there seems to be no further mention of the charges at all.

 What happened?

 Given Virgil’s history, he would have defended himself to the pope. He had done so successfully in the much less serious language of Baptism incident only a few years earlier. The logical scenario has Virgil, probably with one or more of his Irish companions, travelling to Rome to plead his case to the pope who had upheld his previous appeal. This case was far too important and complicated to leave to a written message or to a messenger.

There are three likely outcomes to this visit to Rome: Virgil could have recanted his science; he might have backed down and agreed to stop teaching about the Antipodes; or he successfully defended his teaching.

 Virgil’s history shows that he was a strong-willed and persistent Irishman. When he took over as abbot, he fought the Bavarian dukes about the ownership of church property -- refusing to back down and ultimately winning all of the property he claimed for the church. When he disagreed with Boniface’s order to re-baptize, he appealed to Rome, and won the pope’s support.

Considering Virgil’s scholarship, his strong personality, and his track record, he almost certainly chose to defend his science. And obviously he defended it successfully: he returned to Salzburg, there was no further mention of excommunication, and he was rewarded with elevation to bishop.

How did he defend himself?

The simplest explanation seems the best. Virgil demonstrated that a round Earth logically had to have a point on the opposite side; and if there was habitable land on this side of the globe, there could be habitable land on the other. Virgil was only teaching the mathematical possibility of life in the Antipodes, not that there was another race of men. (Remember that the wording in the pope’s letter was his re-phrasing of Boniface’s original charges – not an accurate recording of Virgil’s words.)

As a devout priest and abbot, Virgil would have proclaimed that if there was human life on the other side of the globe, they were men who were saved by Christ.

**Why Would the Pope Accept an Argument Based on Science?** The papacy in the 740s was in a far different position then it was in the 17th century. At the time of the Galileo trial and imprisonment in the 1630s, the pope was dealing with the Reformation, so any challenge to papal authority was a significant threat. The Galileo case can be seen as more about defiance of papal authority then it was about scientific truth.

But in the 740s, the pope was dealing with the physical threat of the armed Lombards, and looking for help wherever he could find it. The papacy was openly courting Pepin as the commander of the army of the Franks, the most powerful military force in Europe. The pope would welcome allies anywhere in Europe, including the Bavarian dukes. In this case, Virgil had been Pepin’s advisor, was his appointee to Salzburg, and worked closely with the rulers of Bavaria.

Allowing Virgil to continue to teach his science neither threatened nor weakened the papacy -- an argument about the possibility of life on the other side of the earth was not a challenge to Pope Zachary. But Virgil’s political connections to both Pepin and Duke Odillo could be seen as possible advantages. Political expediency may have made Pope Zachary far more understanding then his successor 900 years later.

 But whether it was politics, some other internal Church dynamic or an open-minded pope, Virgil’s science won the day.

**Virgil the Antipodist and the Attacks on the Church as Anti-Science:** Virgil is credited with popularizing the idea of the Antipodes, both by persisting against the Boniface charges and as the probable author of a popular fable about a voyage around the world called the *Aethicus Ister*. Virgil also influenced enlightenment scientists such as Johannes Kepler and others who saw his defense of his science as heroic and inspiring.

Virgil had a short-lived popularity in the Enlightenment when he was hailed as among the greatest of mathematicians and a “hero of modern science” partially because he was seen as a victim of the Church’s anti-science attitude. Thomas Paine, in his *Age of Reason*, connects Virgil with Galileo, and says “And prior to that time Virgilius was condemned to be burned for asserting the Antipodes, or in other words, that the earth was a globe, and habitable in every part where there was land; yet the truth of this is now too well known even to be told.”

**What Does the St. Virgil Antipodes Case Prove?** Paine was wrong. Virgil was not tried, and rather than being condemned, he was named bishop of Salzburg. While the lack of records and the destruction of all of Virgil’s writings make it difficult to prove a definitive conclusion about the Antipodes case, there are some things which are clear.

Virgil was a priest and abbot, who became a great bishop and evangelist and was canonized in 1233. But this saint was also a scholar and scientist. Virgil stubbornly defended his science against Church censure and was rewarded rather than punished. Virgil is proof that science and saintliness can co-exist and are not antithetical. The Virgil case argues strongly that science need not be seen as a threat to the Church or faith.

**Virgil’s Lesson:** Saint and scientist, scholar and bishop, St. Virgil of Salzburg was an amazing man. He is as much of an inspiration to the 21st Century as he was to the 17th, and certainly far more then he was allowed to be to the middle ages. The destruction of Virgil’s writings robbed the world of a great intellect, a man who was centuries ahead of his time and who successfully mated reason with faith.

If Virgil’s writings had survived, he would have told us that the human intellect is a gift from God which must be used to its maximum potential in the service of God and stubbornly defended with confidence in God’s gifts. Virgil is a model of faith: faith in God, faith in God’s gifts of intellect and reason, and faith in our own abilities to use those gifts.

1. Disclaimer from Magistra Robinson: this statement by Professor McKenna seems to echo the prevailing propaganda that the Church was unjust to Galileo. For other opinions on that, consult Dr. O’Brien! Also note that the 8th Century church was not wrestling with the fallout of the Protestant Revolt as was the 17th century church. As noted in our introduction, the historical context of the Church’s actions must always be considered. [↑](#footnote-ref-1)