

HUMANITIES INSTITUTE  
Michael O'Sullivan, Ph.D.

## DOCTOR COPERNICUS (1976)

John Banville

### OVERVIEW

The novel tells the story of the life of the famous Polish cosmologist, mathematician and scientist, Nicolaus Copernicus (1473-1543). Copernicus is one of the most famous scientist to have lived and his discoveries about planetary motion changed the course of history. Copernicus's reordering of the universe according to his heliocentric model where the sun, and not the earth, is located at the centre of our solar system is perhaps the most influential scientific discovery ever made. It is popularly described as the Copernican revolution. Banville's novel retells the story of the life and times of Copernicus a man who lived through the early days of the Reformation and also through the latter days of the European Renaissance.

The novel is divided into 4 sections. Parts I and II – *Orbitas Lumenque* and *Magister Ludi* – tell the story of Copernicus's life up until the age of 36. The third part of the novel – *Cantus Mundi* – is told by a character called Von Lauchen Joachim von Lauchen, aka Rheticus, who is a researcher and admirer of the work of Copernicus who finally persuades Copernicus to publish his great work *De revolutionibus orbium coelestium*. The fourth and final part of the novel *Magnum Miraculum* details the final weeks and days of Copernicus's life.

### LITERARY/HISTORICAL NOTES

*Doctor Copernicus* is Banville's third novel and the first novel in the Revolutions Trilogy, the others being *Kepler* and *The Newton Letter*. The novel won the James Tait Black Memorial Prize for 1976 and it has been described as a work of historiographic metafiction by the critic of postmodernism Linda Hutcheon. The work is regarded as metafictional in the sense that many of the reflections that Banville puts in the head of his character Copernicus can also be regarded as Banville, the author's, own reflections on writing what was to be his first great novel.

### MAIN CHARACTERS

Nicolaus Copernicus	The main protagonist and the famous scientist and cosmologist.
Andreas Copernicus	Copernicus's brother who suffers from a severe case of syphilis for much of his time in the novel.
Rheticus	Also known as Von Lauchen. Georg Joachim von Lauchen (Rheticus) appears in the 3 <sup>rd</sup> section of the novel. The third section is told from his perspective. He writes an account of Copernicus's great work.
Anna Schelling	Copernicus's cousin who comes to work for him as a housekeeper and becomes a partner.
Andreas Osiander	A scientist who writes the preface to the first published edition of Copernicus's great book. He changes the title of the book to <i>de revolutionibus orbium coelestium</i> .
Uncle Lucas	Copernicus's uncle and the Bishop of Ermland.
Barbara Canon Giese	Copernicus's sister who becomes a nun A fellow Canon at the Chapter at Frauenburg who accompanies Copernicus to negotiate with Grand Master Albrecht.
Professor da Novara	One of the professors who lectures Copernicus at the University of Padua. Together with his colleagues he puts together a plan to support Copernicus so his work will lead to the downfall of the Pope.

## PLOT

[Note: The novel follows a more or less chronological order in the first two sections. These detail the life of Copernicus up to the age of 36. The novel is divided into 4 books. Book 1 details the early life of Copernicus. Book 2 tells us more about the public life of Copernicus. Book 3 jumps forward in time and is told by Rheticus 36 years after the publication of his account of the great theory of Copernicus. It describes the difficult process of persuading Copernicus to publish his work. The final book details the final days of Copernicus's life.]

### Book I Orbitas Lumenque

*Growing up* The novel opens with the young Copernicus's first encounters with language. He is the youngest child of his parents. We learn that the young Copernicus is aware of some enigmatic connection between objects and the words that name them. The novel recounts the young boy's memories of his mother's death. We learn that the family lives in the town of Torun in Royal Prussia. The young boy's impressions of his father's merchant business Koppernigk & Sons is described in the first sections. His uncle on his mother's side, the Waczelrodt side, is also going to become bishop of the region.

*Sibling rivalry* We meet Nicolaus's older brother Andreas. His father dislikes his older son who he calls a "wastrel". As the elder son, Andreas is destined to inherit the company but his father would rather that he become a priest like his uncle Lucas. He would rather that Nicolaus inherit the company. This creates great enmity between the two boys.

*His father dies of a heart attack* After his father dies, Nicolaus and his siblings are separated and sent away from Torun. His Uncle Lucas, the Canon Waczelrodt of Frauenburg Cathedral, arrives to tell Nicolaus that he is being sent to School at Wloclawek and then to the University of Cracow where he will study Canon Law and become a priest. His career has been decided for him. We learn that his father's business has failed. The house will be the only thing that will not be sold off and they will each receive small annuities.

*Canon Wodka inspires the young Copernicus* Canon Wodka, whom the boys in the school nickname as Abstemius, sees that Copernicus has great potential. Wodka teaches the *quadrivium* - or the four subjects arithmetic, geometry, astronomy and music theory. He teaches Copernicus about cosmology. He teaches Copernicus about the theories of Ptolemy, from 13 centuries earlier, that all still believe and that state that the earth stands at the centre of the universe.

*Belief and truth* Copernicus listens to what Canon Wodka tells him about the workings of the universe according to all the different cosmologists who have preceded him. He can't understand how these different scientists actually *believed* in the theories they came up with. For example, he can't believe how Ptolemy actually believed that universe was made of the "strange image of wheels within wheels" that he suggested as a true picture of planetary motion. He finds it difficult to relate the real world he inhabits and feels all around him with these fantastic images of the cosmos.

*Copernicus experiences a sexual awakening* In the school Copernicus has a nightmare during which he experiences some kind of sexual awakening. He discovers that his desire is not to be fulfilled by "ordinary flesh" but by something visionary made of "light and air and marvellous grave gaiety".

*Copernicus becomes Preceptor of the Frauenburg Chapter* At 22, after 4 years of university, Nicolaus is summoned to Torun by his uncle who is now Bishop of the diocese. He is to be made the Preceptor of the Frauenburg Chapter which is the first step in his religious career.

*The winds of change are blowing across Europe* The known physical world is expanding. Portuguese explorers had finally rounded the Cape of Good Hope and the immensity of the African continent is revealed. There are also rumours from Spain of a vast new world in the west. Meanwhile Europe is hit by a terrible plague once again.

*The spheres of thought and action won't connect* Copernicus has a realisation that for him the two spheres of thought and action simply won't connect. He feels out of sync with his times which tell him that that heaven and earth should meet in his own self. No matter how hard he tries he can't bring together his mind among the stars with his "worthless fork of flesh" planted firmly in the earth. He feels the world will not regain the classical spirit of divine unity between spirit and matter.

*Copernicus challenges the Professors* Copernicus challenges the existing theories of the cosmos in a debate with Professor Brudzewski and other professors. Copernicus realises that Brudzewski knows that the Ptolemaic system is wrong but that he refuses to admit it. Copernicus launches into his speech in front of the professor, referring to Paracelsus to claim that man should occupy the centre. The professor eventually argues that Copernicus is confusing philosophy and astronomy. He tells Copernicus that astronomy does not describe the universe as it is, but only as we observe it.

*Copernicus and Andreas go to Italy* Copernicus is offered a position at the Chapter in Frauenburg but first he is granted leave to go to Italy and Rome with Andreas on a pilgrimage. They quickly lose numbers to plague and disease and then they are attacked and robbed by a band of Crusaders. They would have died had they not chanced on a monastery in the Alps. When they get to Bologna, Copernicus enrolls at university. He joins Andreas and his drinking friends on a night out and loses his virginity.

*Copernicus talks astronomy with Professor Domenico Maria da Novara* Copernicus tells Professor da Novara how he finds his ideas on the dimensions of the universe and the intervals of the planets original. Novara invites Nicolas back to his house to speak with some of the greatest scientists and astronomers in Italy. They discuss the philosophy of Trismegistus and the decadence of the age. They discuss their dream of a strong and united Holy Roman Empire and how they are willing to finance Nicolas's research since he is a researcher of great promise who is also a churchman whose uncle is a Bishop (Bishop Lucas) of a Prussian principedom. Their aim is to support Copernicus so that his controversial theories can shake up the Church and lead to the removal of Pope Alexander. The meeting leads to Nicolas leaving Bologna for Rome in 1500.

*Copernicus and Andreas move to Rome then Padua* In Rome Nicolas and Andras act as unofficial ambassadors of the Frauenburg Chapter. In Padua Copernicus meets the Italian scientist and poet Fracastoro. Copernicus completes his doctorate at the University of Padua. Copernicus realises that he wants the closed system of science to transcend itself; he wants it to be an instrument to postulate the possible rather than verifying the real. He wants a "new science" that is objective, open-minded and honest. And he knew this could only be realised by first plotting a sound theory of planetary motion. And then one morning when he awoke out of a "come of exhaustion" the theory came to him: "the Sun, and not Earth, is at the centre of the world, and secondly that the world is far more vast than Ptolemy" had imagined.

## Book II *Magister Ludi*

*Copernicus returns to Prussia* Copernicus arrives at Heilsberg wracked by fever. He had just left Torun where he had been staying with his sister Katharina and her husband. They had expected him to return to the Chapter as a canon but instead he left for Heilsberg, aged 33, where he was appointed as physician-in-residence at the castle.

*Andreas visits Copernicus* Andreas visits Copernicus at Heilsberg. He is now very sick with syphilis. Copernicus finds somewhere for Andreas to stay away from the Bishop and he visits him once and gives his financial assistance.

*Copernicus visits Cracow and then leaves for Frauenburg* Copernicus takes up residence in the Chapter with the fifteen fellow canons. He was appointed Visitor. He would rarely leave the confines of the castle at Frauenburg. While he is there Andreas visits again, unbeknownst to Copernicus. The Chapter give him 1200 gold florins and send him off to Italy.

*He loses faith in his book on planetary motion* His book goes through two complete revisions or rewritings but he didn't feel he was getting any closer to the truth.

*His sister informs him that his Uncle is dying* Copernicus returns to Torun to attend to his Uncle the Bishop who is ill. Copernicus as physician does what he can but his Uncle the Bishop of Ermland dies.

*Nicolas completes his book, the Commentariolus* He completes his book on planetary motion and prints it and has copies made by a scribe in the town. The book's foundation is the seven axioms which together form the basis of his theory on a sun-centred universe. Copernicus awaits in trepidation for the response to the publication. He feared mostly from the response of the public, not the academics. He wanted the public to know that by banishing the Earth from the centre of the Universe he was passing no judgments. In the end, there is no backlash to his Preface. He is delighted and he now returns to working on the main book.

*Andreas returns again to Frauenburg* The Chapter meet to discuss Andreas's presence in the town. He had caused the public to start rumours about the Chapter being weighed down by black magic. The Chapter decide to banish Andreas from the town. As he refuses to leave, the Chapter is made to increase his annuity and withdraw the seizure of his prebend. Andreas returns to Italy where he will die shortly later.

*The Teutonic Knights push westwards to break Poland's hold on Royal Prussia and unite the three princedoms of the southern Baltic under the rule of Albrecht and in 1516 the Knights make the first excursions into the east of the country* Copernicus is appointed Land Provost and he transfers his residence to the great fortress of Allenstein. The public duties he must assume in the new role take him away from his astronomy and science.

*His fame spreads as war looms* The Pope writes to Copernicus and asks him to publish his works. In 1519 the invading forces of Grand Master Albrecht are summoned to Torun for peace talks with Bishop Waczelrodt. However, Albrecht refuses to negotiate so Poland mobilised and marched on Prussia. The Knights suggest that the Bishop of Ermland should negotiate between the warring parties but since the Bishop was unwell Canons Giese and Copernicus must negotiate.

*Copernicus negotiates with Albrecht at Königsberg* The negotiations break down and Copernicus learns that Albrecht had poisoned his uncle the bishop of Ermland. As they await the Teutonic Knights, they learn that the armed forces had passed their town by and had instead razed the town of Neumark where they slaughtered 2,341 souls. It was Copernicus's duty to record the names of the dead.

*Anna Schillings arrives at Frauenburg* Anna Schillings the future aid and partner of Copernicus arrives at Frauenburg with her town children, her husband having been killed in the war. Her friend, Hermina Hesse, is a housekeeper to one of the Canons in the Chapter. It turns out that she is a cousin to Copernicus and she is therefore allowed to stay in the Chapter to attend to her cousin.

*Copernicus is elected Administrator General* Upon the death of Bishop von Lossainen, the Chapter elects Copernicus as Administrator General of the region. He writes a treatise explaining how the monetary system of Prussia might be reformed. He receives news that his sister Barbara and his brother Andreas have died.

*Letters:* In a series of letters back and forth between Johannes Danticus, who becomes Bishop of Ermland and the Head of Copernicus's Chapter we discover that Copernicus is being considered for the Bishopric of Ermland. A number of false rumours arise about his treatment of patients and about his relationship with his housekeeper Anna Schillings. In the end, Schillings is ordered to leave his household but she refuses.

### *Book III Cantus Mundi*

*This book tells the story of Von Lauchen Joachim von Lauchen – also known as Rheticus – the man tasked with translating and editing all of Copernicus's work for publication.* Von Lauchen arrived at Frauenburg for the first time in 1539. At 22 he held the chair of mathematics and astronomy at the great University of Wittenberg. Copernicus is 69 when he Von Lauchen meets him.

*Copernicus and Von Lauchen stay at Löbau* They spend a relaxing time there in the company of Giese. After a bout of illness, Von Lauchen tells Copernicus that he intends to return to Frauenburg, retrieve the great work of Copernicus, make a copy of it and take it to a printer in Nuremberg. However, Copernicus responds that there is no need to go to Frauenburg as the book is here with them in Löbau. Copernicus takes Von Lauchen into an adjoining room and hands him the manuscript of his life's work – *De Revolutionibus Orbium Mundi*.

*Von Lauchen shares his excitement and joy at seeing the manuscript* Von Lauchen has a feeling of sorrow looking at the manuscript, sorrow at the fact that the old Earth is being deposed, and "cast out into the darkness of the firmament" with the sun at the centre.

*Copernicus allows Von Lauchen to take a book of astronomical tables to his printer in Nuremberg* Von Lauchen is allowed to take a new manuscript of astronomical tables to his printer in Nuremberg. However, Copernicus warns him that the book will contain no proofs. Copernicus knew if he published proofs he could be accused of heretical ideas.

*Copernicus refuses to allow Von Lauchen to take the book or a copy of it to Nuremberg for fear it would be lost* He allows Von Lauchen to go to Nuremberg and to there right down an account from memory of the book.

*Von Lauchen looks back on his account of Copernicus's De revolutionibus entitled Narrativa prima.* We learn that Von Lauchen the narrator of this book is writing 36 years since the publication of his account of Copernicus's great theory in 1539. He tells us that he started writing the account that very night when Copernicus gave him permission. He tells us that Copernicus's book is divided into 6 parts, each one more intricate and more difficult than the one before. Each evening, when Von Lauchen had finished work for the day, Copernicus would come along and remove his manuscript. Copernicus also directed Von Lauchen to refer to him in the book as Doctor Nicolas of Torun.

*Von Lauchen goes to Danzig to publish his Narrativa prima* Von Lauchen publishes his first edition in 1540. Copies were sent to Frauenburg and to Lobau Castle and then on to the Lutheran Duke Albrecht of East Prussia. These volumes were delivered gratis and Von Lauchen also had no control over second editions of the book that were published rapidly. Von Lauchen also discovers that Giese himself has made copies of the book without informing him. He meets with Danticus and finds that he already has a copy of his book. Von Lauchen then lies to Danticus that Copernicus will himself be publishing his own edition of *De Revolutionibus* very soon. He feels it is the only way to regain some sense of authority.

*Von Lauchen returns to Frauenburg in 1540 and stays with Copernicus for a year* He keeps trying to persuade Copernicus to publish. Copernicus tells him that his book is not science – "it is a dream. I am not even sure if science is possible".

*He is given permission to publish* Copernicus finally relents and allows von Lauchen to publish the book. He tells von Lauchen that "science aims at constructing a world which shall be symbolic of the world of commonplace experience". Once he has given von Lauchen permission to publish he departs and Von Lauchen never sees him again. When Von Lauchen returns to Wittenberg he is made Dean of the Faculty of Mathematics.

*Scandal hits when Von Lauchen goes to Nuremberg to publish De Revolutionibus!* Osiander confronts Von Lauchen about his behaviour at Lobau. Von Lauchen is accused of sodomy with a boy while at Lobau and also of bringing his university into disrepute by publishing the theories of Copernicus. He is made to accept an offer of employment in academic department in Leipzig. In the

end the book is published by Osiander with a preface by Osiander and a new title: *De revolutionibus orbium coelestium*.

*Von Lauchen describes the book as a pack of lies* He describes the book of revolutions as an engine which destroys himself. He writes that the centre of the universe in Copernicus's theory is not the sun but the centre of the Earth's orbit.

*Lucius Valentine Otho is sent to Von Lauchen as an amanuensis* Just as Von Lauchen is launching into a strong diatribe against the work of Copernicus, an amanuensis, named Otho, arrives to work for him and bring his theories to the world. Von Lauchen is exultant, and we learn that the story he has related to us about him being accused of sodomy with a boy was all lies. He made it up simply to get back at Copernicus.

#### *Book IV Magnum Miraculum*

*The last book deals with the last days of Copernicus's life* We learn that Copernicus is now 70 and he realises he is dying. He has become afflicted with a disease that clouds his mind and his thinking. He falls into a long sleep and in that sleep he finds himself looking back at his past like it is a "forsaken land". He has visions of all his dear departed.

*Copernicus is visited by the God of Revels and Oblivion* The god tells Copernicus he is here to help him prepare for death. We learn that he has paralysed on one side and that he has suffered something like a stroke. He falls into a long stream of reveries and memories.

*Andreas Osiander brings him on his deathbed the published book* Andreas Osiander shows him the leather-bound volume and tells Copernicus that he has changed the title by substituting the word coelestium for mundi. He feels it is safer to speak of the heavens as it is more distant. He also tells Copernicus that he has added a preface to explain that the hypotheses in the book are not true but are in fact the "most convenient to calculate the apparent composite motions".

On his deathbed Copernicus tells Osiander not to publish his book Copernicus tells Osiander that he feels the book is a failure and that he does not want it to be published. Osiander tries to placate him and to convince him that the book is ground-breaking. In the end, Copernicus asks for water and apologises for what he has said. He then drifts into a dream where he meets his brother Andreas. His brother preaches redemptive despair to him. He tells Copernicus not to focus on the individual object apart from its proper context.

Copernicus has a vision of his brother Andreas Andreas then holds up a copy of his book and guides Copernicus's hand until the slack fingers touched its pages. Andreas then reveals himself as the angel of redemption. Having given Copernicus some final peace in relation to his great work, he asks Nicolas to now come with him. Copernicus departs with the voices calling him away.

#### THEMES

**The spirit of discovery** Copernicus is devoted to his work. He devotes his life to establishing a theory to describe the orbits of the planets around the sun. He is conscious of how science has become mired in political and religious disputes that have stalled its progress. He wants science to be less about explaining events and more about pursuing what is possible. Copernicus is frustrated that the world of science is still beholden to the work of Ptolemy, the ancient mathematician and astronomer. The novel sets up a contrast between Copernicus and his brother Andreas and this brings out all the stronger all the things Copernicus has given up to follow his dream.

**The Public and the Private** Even though Copernicus is an incredibly gifted mathematician and astronomer and yet he struggles with the idea of how – or indeed whether – to make his work public. Nowadays we take it for granted that revolutionary theories are expected to be published and shared online. It goes without question that new ideas should be shared with the public. In fact, for many researchers the only way they can pursue their research is by claiming that it will have a big impact in society. But Copernicus is very different. He devises possibly the most revolutionary and controversial

scientific theory ever discovered and yet he spends his whole life debating whether he should publish it. We learn towards the end of the novel that he is not afraid to publish it because of the religious or political persecution he may experience but instead because he feels the theories are incomplete and a failure. He also tells us that it is the opinion of the general public that he really fears. He feels they will not understand why he came up with these theories.

**The nature of good and evil** The novel also toys with the notion of how we decide what is good and what is bad. Despite the fact that Copernicus is about to publish some of the most controversial and heretical ideas, ideas that no longer put the Earth at the centre of the universe, ideas that are likely to be regarded in some way as blasphemous, the novel demonstrates how religious figures are constantly using Copernicus's ideas, not to question religious dogma but to win power and influence within their societies. We are therefore made to question what the role of the Church is in this society. At the same time Copernicus's brother Andreas is presented as a vile figure who gives in to appetite too often and pays the price by picking up syphilis a deadly disease at the time. The Church figures at the Chapter try to banish Andreas from their town. He is regarded as a blight on the character of the town. And yet, when Copernicus is dying, Andreas appears to him in a vision as the angel of redemption. The novel therefore makes us reflect on the nature of good and evil.

## CHARACTER ANALYSIS

**Copernicus** Copernicus is a gifted and talented individual who is also uneasy with his fame and with the expectations that come with being a famous scientist and public figure. In the end he becomes something of a recluse. He barely ever leaves his town and he refuses to have any of his ideas published right up until the end.

*Conflicted* Copernicus is driven to pursue his scientific ideas and theories. He is a precocious and fiercely intelligent student at university. He challenges the teachings of his professors. At the same time, he spends the whole novel debating whether he should publish his theories for the general public, something that is inevitable given the fact that his ideas will change science forever. He finds it difficult to accept the responsibility his talent asks of him. He understands that the general public must learn of his ideas but he struggles to accept that he must publish the work in his lifetime. He fears publication not only for religious and political reasons but because he believes his ideas are incomplete and therefore are not suitable for public consumption. For this reason, he is quite a conflicted character.

*Reclusive* The last two books of the novel demonstrate clearly how reclusive Copernicus becomes. He lives on his own with his housekeeper Anna Schilling and 15 other canons in a remote castle in the small town of Frauenburg. He could easily have worked for an emperor or a king but he chose to live in Frauenburg and to withhold his ideas from the public for almost the duration of his life. It is only on his deathbed that he finally sees his work published in book form.

**Andreas** Andreas is the brother of Nicolas. He is a reckless and impulsive character who is fond of socialising and what was described as debauchery at the time. He was a free thinker who was unwilling to bend to the authority of the Church and its value system.

*Reckless* In many ways Andreas is the polar opposite of Nicolas. He is a social animal who spends all his time drinking and womanising. He moves from country to country spending money on socialising, money he has often begged from others including his brother and uncle. He is interested in the vulgarity of the commonplace what he says his brother Nicolas despises. However, despite knowing that he was ill, he continued to engage in a way of life that put his life at risk. In the end, he picks up syphilis and it kills him. For this reason, he can be described as a reckless character.

*Worldly-wise* However, at the end of the novel he appears in a vision to Copernicus as the angel of redemption. He is the figure who can finally explain to Copernicus in a vision that he needs to give up the endless questions about the worth of his research. Andreas tells Nicolas in his dream before death that it is time for him to accept that he twisted his system to fit a unique vision of the world. He questions what he calls Nicolas's "manner of knowing". He tells him – in this final vision before death – that we "know the singular thing only so long as we content ourselves with knowing it in the middle of other meanings". Andreas is then something of an antagonist to Nicolas throughout the novel. Whereas Nicolas locks himself away from the world, Andreas goes out to meet all it has to offer.