

## Angels & Demons (2010) : Damned Lies and Dan Brown

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*Quick, how did Copernicus die ?*

Dan Brown readers will know the answer : ‘*Outspoken scientists like Copernicus*’ were ‘*murdered by the Church for revealing scientific truths,*’ according to a history lesson by Harvard Symbolist Robert Langdon (**Tom Hanks**) and CERN director Maximilian Kohler in *Angels & Demons*, the predecessor to Brown’s blockbuster sequel, *The Da Vinci Code*.

The 2009 Ron Howard adaptation of *Angels & Demons* — reworked as a sequel rather than a prequel to *The Da Vinci Code* (2006) does maintain the ‘historical’ ideas set forth in Brown’s book, among which the **Church’s murderous persecution of science, especially in the Illuminati**, a secret society that Brown claims counted Copernicus, Galileo and Bernini among its members. Here’s how Langdon describes the relevant history in an exchange with Ernesto Olivetti : ‘*The Illuminati were physicists, mathematicians, astronomers. In the 1500s they started meeting in secret because they were concerned about the Church’s inaccurate teachings, and they were dedicated to scientific truth. And the Vatican didn’t like that. So the Church began to hunt them down and kill them*’. In another clip Langdon puts it even more succinctly : ‘*The Illuminati were a secret society dedicated to scientific truth. The Catholic Church ordered a brutal massacre to silence them forever*’.

Although Brown’s defenders sometimes demur that *Angels & Demons*, as well as *The Da Vinci Code*, is ‘*just fiction*’, Brown has always **insisted on the solid factual basis for his stories**. According to Brown’s own words : ‘*My goal is always to make the characters and plot be so engaging that readers don’t realize how much they are learning along the way*’. **Or how much misinformation they’re absorbing**. Personally I have with a **very low threshold for rampant disinformation**, especially after spending a few years studying theology, history and history of art *seriously*. This is why I have laboured to **set the record straight** on countless points muddled in the book and movie versions of Brown’s tales.

Brown’s inaccuracies start with the very point on which he claims **strictest reliability** : works of art and architecture — and their ‘*exact locations*’.

## ART AND ARCHITECTURE

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Although Brown did claim that his narrative use of works of art and architecture was ‘*entirely factual*’, you will find that a few mistakes have been introduced on the way...

### **1 – Santa Maria della Vittoria**

Brown locates Santa Maria della Vittoria in Rome at Piazza Barberini... which is a half mile from its real location.

### **2 – Santa Maria del Popolo**

He puts Santa Maria del Popolo at the southeast corner of the Piazza, though it’s actually on the north side, and describes Langdon looking up at its ‘*rose window*’, though the church’s circular window lacks the stone mullions and traceries characteristic of a rose window.

Brown also identifies Santa Maria del Popolo as a ‘*cathedral*’. Later he has Langdon straining to ‘*see a spire or cathedral tower jutting up over the obstacles*’. Possibly Brown doesn’t know what a cathedral is. There is only one cathedral in any diocese, that is the seat (*cathedra*) of the local bishop. The bishop of Rome is, of course, the Pope. And his *cathedra* is the Basilica of St. John Lateran.

### **3 – Bernini’s *Four Rivers Fountain***

Brown says that the rivers represented by Bernini’s Four Rivers fountain represent ‘*the four major rivers of the Old World — The Nile, Ganges, Danube, and Rio Plata*’. Actually that’s incomplete. The four rivers have been chosen not for themselves but to represent the **four continents of Renaissance cartography** : Africa, Asia, Europe and the Americas.

### **4 – Roman Tombs**

Brown’s claim of accuracy regarding tombs is equally false. *Angels & Demons* claims that a plaque in the Pantheon indicates that Raphael’s body was relocated to the Pantheon in 1758, and that he was originally buried in Urbino. No such plaque exists, for the excellent reason

that Raphael was buried in the Pantheon from the start at his own request. Brown also places the body of Pope Alexander VII, Alexander Chigi, in the Chigi chapel in Santa Maria del Popolo. In fact, Alexander VII is buried in the Tombs of St. Peter's Basilica.

## 5 – Michelangelo and the Vatican Museums

Brown ascribes to Michelangelo the design of the Swiss Guard uniforms and the spiral staircase leading to the Vatican Museums, which he incorrectly calls the *Musèò Vaticano* rather than the *Musei Vaticani*. In fact it appears that Michelangelo was not involved in the design of the Swiss Guard uniforms, and certainly had nothing to do with the spiral staircase of the Vatican Museums, which is of 20<sup>th</sup> century origin, designed by Giuseppe Momo in 1932. These are fairly incidental — if often glaring — errors so we'll just pretend we didn't hear him talk about '*entirely factual*' research.

## 6 – The West Tile of St Peter's Square

More problematic is a key reference to a tile in the pavement of St. Peter's Square, the [West/Ponente Tile](#). The tile depicts the west wind personified as a classical god head blowing from the west. Brown presents the West/Ponente tile as an all-important clue left Bernini, who designed St. Peter's Square, supposedly pointing the way to the next location in the book's scavenger hunt. Brown also claims that the use of the English word 'West' on the tile represented, in Bernini's day, a disreputable Anglicism — English in the 1600s being, in Brown's mythology, '*the one language the Vatican had not yet embraced*' and '*did not control*' — whatever that means ! There are a number of problems here :

- First and most obviously, the West/Ponente Tile is *one of sixteen* markers in St. Peter's Square arrayed in a circle and forming a '[wind rose](#)' (*rosa dei venti*) — i.e. pointing *in every direction*. For instance, directly opposite the West/Ponente marker is the [E\[a\]st/Levante Tile](#) — and, if I saw correctly, the new film actually includes a doctored shot of this marker, with the breath **lines brushed from the image**, thereby suggesting that only the West/Ponente Tile points in a specific direction.
- For another thing, the current wind-rose markers aren't Bernini's work at all. They were added three centuries later, under Pius IX — and whatever the status of English in Bernini's day, there was certainly nothing disreputable about it in 1852.

## 7 – The Great Castration (1857)

One charge made in both the film and the book is the notion of Pius IX's 'Great Castration' of **Vatican City's male statues** in 1857, which supposedly involved the Pope taking a mallet to the male organs of every single statue in the Vatican. In the book, Langdon wonders if the Vatican still has a heap of stone penises somewhere as relics of this systematic vandalism !?!

The truth is that **fig leaves were added out of modesty**, but the statues were **not** castrated. Only, *subsequent* efforts to remove the leaves proved more damaging than leaving them in place... That's why this part of the male statues got damaged. Wow, how people can fantasize sometimes if it wasn't so low I would probably laugh...

## BEYOND FICTION : DAN BROWN'S INSPIRATION

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Brown's misrepresentation of matters of art and architecture are not confined to the fiction of his novels. Here is how Brown describes how he got the inspiration to write *Angels & Demons* in a Q&A billed as an interview on his website :

*I was beneath Vatican City touring a tunnel called il passetto — a concealed passageway used by the early Popes to escape in event of enemy attack. According to the scholar giving the tour, one of the Vatican's most feared ancient enemies was a secret brotherhood known as the **Illuminati** — the 'enlightened ones' — a cult of early scientists who had vowed revenge against the Vatican for crimes against scientists like Galileo and Copernicus. I was fascinated by images of this cloaked, anti-religious brotherhood lurking in the catacombs of Rome. Then, when the scholar added that many modern historians believe the Illuminati is still active today and is one of most powerful unseen forces in global politics, I knew I was hooked... I had to write an Illuminati thriller.*

Unfortunately, this biographical anecdote story garbles the fact that the *Passetto di Borgo* is not a 'tunnel' and that it's not located 'beneath Vatican City' either — oops ! It is an **elevated passage**, partly covered and partly open, disguised as a wall running from Vatican City to Castel Sant'Angelo. If Dan Brown had made that mistake in the fictional narrative of the novel, it might be just another blunder, but he says that he toured the *Passetto* and was even inspired to write the book there. How could Dan Brown make that mistake if he had really toured it as he says ? Or is his 'interview' just a part of the whole fictional farce ?

The credibility of Brown's anecdote is further eroded by his **thoroughly unhistorical description of the Illuminati** as a '*cult of scientists*', one of the Catholic Church's '*most feared ancient enemies*' who had '*vowed revenge against the Vatican for crimes against scientists like Galileo and Copernicus*'. Who is this '*scholar*' ? In his acknowledgments Brown thanks **Sylvia Cavazzini** for his tour of the *passetto*. Whoever Sylvia Cavazzini may be, she hasn't published or otherwise left any scholarly paper trail that I could find. As far as I can tell, Dan Brown's acknowledgment is the only obvious evidence of her existence anywhere on the Internet.

This, of course, is just a detail but it happens to touch upon the **central premise** of *Angels & Demons*. The whole action of the novel is constructed around the picture of ***the Church and science at war with one another***. Brown connects this supposedly historical theme to a supposedly biographical event in his own life, implying a credible '*scholarly*' basis for it, reinforcing the claim of his author's note regarding the '*factual*' nature of the Illuminati.

In fact, the whole is **almost completely lacking** in reality.

## SCIENCE, *ILLUMINATI* AND THE CHURCH

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The historical Illuminati was not founded in the 1500s, and its membership did not include Copernicus, Galileo or Bernini — all of whom **died long before the Illuminati existed**. In Copernicus's case, well over two centuries.

The Illuminati was an **Enlightenment-era secret society**. It was founded in the late eighteenth century, in 1776, the same year as the founding of the United States. Its members were **politically minded free-thinkers with no particular interest in science**.

Although the Illuminati were not friendly toward religion, there were no '*vows of revenge*' against the Church for '*crimes against (any) scientist*' whatsoever. On the contrary, one would be hard pressed to come up with any evidence of any ecclesiastical '*crimes*' committed against Copernicus, and while the Galileo affair is for some a black mark on Church history, his fate (simple *house arrest*) was not the sort of outrage that tends to inspire murderous vows of revenge centuries after the fact !

**Copernicus was never at odds with Church authority.** A cleric and bishop's nephew, Copernicus published his six-volume work *On the Revolutions of the Heavenly Spheres* at the urging of the Cardinal Archbishop of Capua, Nikolaus von Schönberg, and dedicated the work to Pope Paul III. Years earlier, Copernicus was invited to advise the Lateran Council, invoked by Leo X, regarding reworking the calendar, and his work informed the Church's eventual reformation of the calendar. Although his writings proved controversial for a time after his death, the controversy centered **on a few passages and isolated** words.

Copernicus died at the age of 70, of a stroke. The claim that he was 'murdered by the church for revealing scientific truths' is **sheer fiction if not libel.**

If the larger picture of the **Catholic Church's opposition to science and systematic persecuting scientists** like Copernicus is almost completely without reality, it is not a mere 'product of the author's imagination' either. Just as *The Da Vinci Code's* reading of history is drawn from sources like *Holy Blood, Holy Grail*, its prequel *Angels & Demons* exploits a misconception with **long roots in American fantasy** : a kind of **anti-Catholic master Myth** celebrated in books like Charles Chiniquy's 1886 diatribe *Fifty Years in the Church of Rome*.

Chiniquy's 19<sup>th</sup> century polemic claims that **Blaise Pascal as well as Copernicus was excommunicated**, while Galileo was publicly flogged and sent to a dungeon. None of this is true : Pascal may have had heretical leanings, but never faced excommunication, while Galileo suffered nothing worse than house arrest, and was never flogged, tortured or imprisoned in a dungeon. Nevertheless, even today the picture of the Church systematically persecuting and executing scientists is unfortunately and popularly **perceived as having some basis in history.**

Specifically, Langdon cites a supposedly historical incident he calls *La Purga*. In the film version, Langdon upbraids Swiss Guard head Cdr. Richter for his historical ignorance : 'Geez, you guys don't even read your own history, do you ? 1668, the Church kidnapped four *Illuminati* scientists and branded each one of them on the chest with the symbol of the cross, to purge them of their sins. And they executed them, threw their bodies in the street as a warning to others to stop questioning Church ruling on scientific matters. They radicalized them. The Purga created a darker, more violent *Illuminati*, one bent on retribution.'

***La Purga* is a wholly fictional event.** There was no murder and branding of four scientists, Illuminati or otherwise, nor did the Church toss bodies in the street as a warning. The only remotely scientifically-minded historical figure I am aware of who was **executed** by Catholic **civil authorities** is the 16<sup>th</sup> century Dominican Giordano Bruno. Bruno's conviction by the Roman Inquisition appears to have been for sadly typical reasons — **heretical beliefs regarding the nature of God, the Trinity, Jesus Christ** and other points of fundamental dogma, in keeping with his pantheist worldview — and NOT for his ideas about the universe : he rejected geo-centrism, and proposed that the sun was merely one star like any other.

Brown depicts CERN scientists routinely petitioning the Vatican for '*apologies for Copernicus and Galileo*'. In the case of Copernicus, the only conceivable response would be '*For what ?*' Even Galileo, almost the only shred of fact in the anti-Catholic master myth of the Church's persecution of scientists, has been both distorted beyond recognition in popular imagination and misrepresented as **archetypal rather than exceptional**.

Brown **exploits and reinforces this misperception**, claiming that Galileo was convicted of heresy (in fact the finding was not heresy, but '*suspect of heresy*') and was '*almost executed*' (nothing of the sort was ever in question) for '*daring to imply that God had placed mankind somewhere other than at the center of His universe*'. This last implies that the **medieval geocentric model was flatteringly anthropocentric** ; in reality, the Medievals saw the earth as the *lowest and least glorious location* in the universe, the farthest from the heights of Heaven — with hell itself at the very center.

Brown shamelessly represents ecclesiastical authorities as insisting that heavenly bodies must move in perfect circular orbits and therefore attacking Galileo for daring to propose *elliptical* orbits. Actually, **it was Galileo himself** — and not Church authorities — who esteemed the perfection of circular orbits, and rejected the notion of elliptically orbiting heavenly bodies. This wasn't Galileo's only mistake, scientific or otherwise. For more : see [The Galileo Controversy](#).

Although Brown acknowledges that many scientists were devout believers who saw **faith and reason as complementary rather than opposed**, he insists that the enlightened attitudes of Galileo and others conflicted with the Church's claim to be '*the sole vessel through which man could understand God*' (emphasis in original). In doing so, Brown blithely ignores the

**crucial role of Christianity in the origins of modern science** as well as the **Church's patronage of the sciences** in the time of Copernicus and Galileo. As Dr. Thomas Woods notes : *'For the last 50 years, virtually all historians of science — including A. C. Crombie, David Lindberg, Edward Grant, Stanley Jaki, Thomas Goldstein, and J. L. Heilbron — have concluded that the Scientific Revolution was indebted to the Catholic Church.'* (*How the Catholic Church Built Western Civilization*, p. 4)

Not only did **Catholic theology provide the theoretical framework for the development of modern science** — since the first modern scientists believed that a cosmos ordered by a rational Creator was a cosmos governed by laws comprehensible to the reason of men created in His image — **many of the early scientists were priests and religious**. Beyond that, the Church itself provided direct monetary and social support to science, particularly astronomy.

Yet Brown claims, in the mouth of Carlo Ventresca in both the book and the film, that *'Since the days of Galileo our Church has tried to slow the relentless march of science'*. Even educated people today have little notion of the Church's role in the origin and growth of modern science — and they certainly won't learn about it from Brown. Unfortunately, this aura of *facticity* is taken mostly seriously by many fans of Brown's yarns.

## WRONG SCIENCE

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Although Brown's treatment of 'scientific matters' falls fairly under the rubric of legitimate science fiction, at least in part, it's not very smart science-fiction : Brown routinely botches things he could have gotten right without harming his premise.

Let's take the basic conceit of an '**antimatter bomb**' for instance.

The basic facts are these. Antimatter is real, and it is routinely created in miniscule quantities at laboratories like the European Organization for Nuclear Research, or CERN, as Brown describes in *Angels & Demons*. Anti-particles do annihilate on contact with corresponding particles of normal matter, **releasing energy equivalent to the two particles annihilated**. In principle, annihilating a very large amount of antimatter at once — a gram, say, as posited in the book — would have the devastating effect Brown describes.

**However, *Angels & Demons* gets a great deal wrong** that falls outside the scope of what is required by the story or what can be projected of future science. That both the book and the film speak of antimatter as a possible ‘*energy source*’ is one thing. But that Brown himself presents this possibility **as fact**, not just in a *fictional book*, but in a Q&A interview on his website... now this is quite another thing.

*Q : Is antimatter for real?*

*A : Absolutely. Antimatter is the ultimate energy source. It releases energy with 100% efficiency (nuclear fission is 1.5% efficient.) Antimatter is 100,000 times more powerful than rocket fuel. A single gram contains the energy of a 20 kiloton atomic bomb — the size of the bomb dropped on Hiroshima. In addition to being highly explosive, antimatter is extremely unstable and ignites when it comes in contact with anything... even air. It can only be stored by suspending it in an electromagnetic field inside a vacuum canister. If the field fails and the antimatter falls, the result is a ‘perfect’ matter/antimatter conversion, which physicists aptly call ‘annihilation’. CERN is now regularly producing small quantities of antimatter in their research for future energy sources. Antimatter holds tremendous promise ; it creates no pollution or radiation, and a single droplet could power New York City for a full day. With fossils fuels dwindling, the promise of harnessing antimatter could be an enormous leap for the future of this planet. Of course, mastering antimatter technology brings with it a chilling dilemma. Will this powerful new technology save the world, or will it be used to create the most deadly weapon ever made ?*

**This is very largely nonsense** — and again, nonsense *presented as fact*, not as fiction. The notion of antimatter as an ‘*energy source*’ is an **absolute impossibility**. Nor is it true that CERN scientists study it ‘*in their research for future energy sources*’. CERN research on antimatter is basically **studying the fundamental laws of physics**.

Antimatter is no more ‘*powerful*’ than regular matter. The energy released by a matter/anti-matter annihilation is simply the combined energy of the two particles. An anti-particle — say, an anti-proton — contains no more energy than its opposite particle, a proton. Antimatter does not ‘*ignite*’ when it comes into contact with ‘*anything*’; rather, every type of anti-particle annihilates on contact with its own corresponding particle of normal matter. Thus, anti-protons annihilate on contact with protons, positrons annihilate on contact with electrons, and so forth.

If antimatter were a natural resource that could be ‘*mined*’ and then annihilated with regular matter, it might be possible to use it as an energy source, just as we burn wood in order to harvest the solar energy stored in the wood. However, wood could *not* be an energy source if there were no sun and we had to grow trees under artificial light. The energy expended in order to light the trees would always far exceed the energy harvested by burning the wood. **The process would lose energy, not create it.**

That’s the situation in a nutshell with antimatter. **The only way to get antimatter is to create it ourselves, at an enormous expenditure of energy.** Of necessity, far more energy is expended in creating antimatter than could ever be harvested in annihilating it, just as more energy always goes into growing a tree than could ever be harvested by burning it.

Thus, while it may be true that a droplet’s worth of antimatter could power New York City for a month, the energy needed to *create* that droplet of antimatter in the first place would power New York for going on a billion years. Even if, *per impossibile*, the technology improved so that we could create antimatter with 100% perfect efficiency, we would still never get out more than we put in. For this reason, there is **absolutely no prospect** of creating antimatter as an ‘energy source’.

It would also, not incidentally, take billions of years to create enough antimatter to power New York for a month — or to blow up Vatican City for that matter. Most of the anti-particles created at CERN are **immediately annihilated on contact** with their normal-matter particles. It is true that small amounts of electrically charged antimatter can be captured in an electromagnetic trap. It is also true, as Brown claims in an opening FACT statement, that fairly **recent experiments at CERN**, notably the 2002 ATHENA and ATRAP experiments, succeeded in creating millions of antihydrogen atoms at a time.

However, the technology to generate a gram of antimatter is completely beyond us, as is the technology to capture it. A gram of, say, anti-hydrogen would contain approximately  $6.022 \times 10^{23}$  atoms — a figure commonly known as Avogadro’s number. That is so much larger than the mere millions of anti-hydrogen atoms CERN is currently capable of making that to create a gram of anti-hydrogen using this process would take billions of years. It is also far more than the amount of anti-hydrogen containable with present technology. For more, see CERN’s **own highly informative and entertaining [Angels & Demons FAQ](#).**

It isn't only with respect to the *esoterica* of antimatter that Brown **gets science facts wrong**.

**Whatever the subject, *Angels & Demons* reliably botches it :**

- On Langdon's trans-Atlantic flight, he's told that people weigh 30% less when travelling at 60,000 feet. In fact, the gravitational effect of rising to that altitude involves a change in weight of **less than 1% percent**.
- The book and film versions both refer to cardinals who are considered likely successors to the Chair of Peter as *preferiti* ('favourites') — rather than the standard term *papabile* ('popeable' or pope material).
- Brown mistranslates '*Novus Ordo Seclorum*' as '*New Secular Order*' and ascribes it to the Illuminati rather than '*New Order for the Ages*' which has nothing to do with them.
- He floats the **outrageous claim that the Catholic sacrament of the Eucharist** was '*borrowed from the Aztecs*' though the Aztec civilization came **over a millennium later** — not to mention the physical implausibility of trans-Atlantic cross-fertilization in the earliest days of Christianity
- Likewise he misascribes to Buddhism the Hindu art of Hatha Yoga, which **predates Buddhism**.
- He garbles **Ionic and Doric columns**, calling the Doric order the '*Greek counterpart*' of the Ionic, when in fact both are Greek.
- He calls the **Swiss Guard** '*the sworn sentinels of Vatican City*', a description that would better apply to the Vatican *gendarmerie*, as the Swiss Guard defend the person of the Holy Father, not the Vatican city state. The book refers to a Swiss Guard working undercover in St. Peter's Square. The only reason real Swiss Guards would be in St. Peter's Square would be if the Pope were there or if they were off duty. Fortunately the movie gets this right while the book doesn't.

An exhaustive list would be nearly impossible. It is hard to find an unproblematic or simply accurate page in *Angels & Demons*.

## BROWN'S WRITING PROSE

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Even for sheer popcorn entertainment value, while *Angels & Demons* offers a more engaging plotline than the turgid *Da Vinci Code* — and makes for a more watchable film — the sheer clunkiness of Brown's literary mechanics make the book a chore to wade through. Brown's writing is, in fact, the **worst prose style** I have ever encountered in a popular edition, with the possible exception of Stephenie Meyer's *Twilight* series.

'*Brown's writing is not just bad*', writes Dr. Geoffrey K. Pullam, Professor of General Linguistics at the University of Edinburgh ([1](#)), in the first of a number of blog posts on Brown at [Language Log](#). '*It is staggeringly, clumsily, thoughtlessly, almost ingeniously bad. In some passages scarcely a word or phrase seems to have been carefully selected or compared with alternatives*'.

Among other things, Pullam calls out Brown's penchant for opening action scenes with clumsy *curriculum vitae* details in sentences like '*Renowned curator Jacques Saunière staggered through the vaulted archway of the museum's Grand Gallery*' — the first sentence of *The Da Vinci Code* — and '*Physicist Leonardo Vetra smelled burning flesh, and he knew it was his own*' — the first sentence of *Angels & Demons*. Pullam also delights in debunking Brown's literary *non sequiturs*. On the first page of chapter one of *Angels & Demons*, we read that '*Langdon sat up in his empty bed*'; two pages later, '*Robert Langdon wandered barefoot through his deserted Massachusetts Victorian home.*' Obviously you can't sit up in an empty bed (because then it's no longer empty) nor wander through your deserted home, barefoot or otherwise (because it's certainly not deserted, especially if it's your own home). This, of course, is Brown's inept way of letting us know that Langdon lives and sleeps alone — which perhaps partly explains the author's embarrassing eagerness, two paragraphs later, to establish his hero's virility and attractiveness: '*Although not overly handsome in a classical sense*', we read, '*the forty-year-old Langdon had what his female colleagues referred to as an erudite appeal — wisp of gray in his thick brown hair, probing blue eyes, an arrestingly deep voice, and the strong, carefree smile of a collegiate athlete.*'

Literarily, the problem with this preoccupation with Langdon's credentials as a **fascinating, virile, maverick man of the world** is that in this scene Langdon is — as Brown has clearly

established — *alone* in his home. There's no one else in the scene for Langdon to impress with his erudite appeal, or through whose eyes we might experience the Langdon effect. So either Langdon himself is sitting around meditating on *his own* personal mystique — or else, we have *the author* transparently telling what he wants us to know about his hero, which is to say, indulging his own authorial enthusiasm for his hero's mystique — with the implication that readers will be equally fascinated.

All of this would be embarrassing enough if Brown merely admired his hero — but in fact it's pretty obvious that Brown views Langdon as... **a fictional version of himself**. Five minutes into my first experience of Brown's writing, a few pages into *The Da Vinci Code*, having read about Langdon's '*scholarly allure*' and his general '*Harrison Ford in Harris tweed ... and Burberry turtleneck*' look, I suddenly *knew* that if I would find a picture of the author wearing precisely that tweed and turtleneck look. Sure enough, [there it was](#).

Why is Brown so popular ? What do fans see in *Angels & Demons* ? Here, from Amazon.com, is the most highly rated positive user review of *Angels & Demons* — not a user review chosen at random, but the positive review voted most helpful by other users :

*What makes Dan Browns's books spectacular is the attention to detail and the research that he incorporates into his stories. I was fascinated by Brown's telling of the secrets of the Vatican and the Illuminati and the parts played by Galileo and Bernini.*

Attention to detail, research ? Really ? What more is there to say ?

## REFERENCE MATERIAL

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For all of you who had the courage to follow my analysis up to this point, it would be fair to speak about reference material. Indeed, you might wonder where I got *my* facts from, after criticizing Dan Brown's. Someone once told me that as I had no source material to back myself up, it left me in the same place as Dan Brown's.

### 1) [CERN and Anti-Matter](#)

Please make sure to check the following article : [Rome and Geneva : Religion and Science in Angel and Demons](#) (2009) although most of the facts hereby referenced can be verified from CERN's own website.

## 2) Art and architecture

You will be able to vouch from your own eyes for the **unreliability of Brown's descriptions** of churches, tombs and other architectural landmarks, despite his assurances that in this regard his book offers only '*entirely factual*' descriptions and '*exact locations*'. Again, if you don't have the occasion to go to Rome, most of this information can also be verified by **mass first-hand attestation from online sources**.

## 3) History

I suspect you may be more interested in historical questions around the Illuminati, Galileo, *La Purga* and such. Anyway, if Brown is manifestly and consistently unreliable on matters of **verifiable** fact for which he promises an '*entirely factual*' descriptions, why should he be given any credence on matters of history where he appears to be **at odds with historians** of all stripes ? Anyway let's face it, he is a novelist, not a historian.

# Rome and Geneva

Religion and Science in *Angels & Demons*

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By Steven D. Greydanus

When Sony Pictures, the production company behind *The Da Vinci Code* and *Angels & Demons*, reached out to CERN, the European Organization for Nuclear Research, CERN management in Geneva saw a high-profile teachable moment for science. They rolled out the red carpet for director Ron Howard and his fellow filmmakers, just as they had opened their doors to Dan Brown years earlier when he was writing *Angels & Demons*. Establishing shots were filmed at CERN's Geneva campus, where part of the story is set, and CERN physicists consulted on the script, where possible glossing over gaping holes in Brown's dodgy quantum physics as well as his fanciful descriptions of the CERN campus and culture.

Earlier this year, CERN hosted a press event for the studio, which I attended. Journalists from around the world converged on Geneva to view early footage from the film and to interview Howard, Tom Hanks, reprising his role as protagonist Robert Langdon, and co-star Ayelet Zurer, who plays *Angels & Demons* heroine Vittoria Vetra. Afterwards, the press continued on to Rome to tour important ecclesiastical and other sites in the story, such as St. Peter's Square, Santa Maria del Popolo and Castel Sant'Angelo.

CERN made available a number of its own physicists, who generally did their best to talk up what the story gets right... and what it gets wrong. *'If Brown got the Vatican as wrong as he got us'*, a CERN scientist said to me during a reception, *'we've got a lot less to complain about'*.

At the same time, the physicists were careful to debunk two myths regarding which both Sony and CERN probably wanted some protective distance from the book. One was the **'antimatter bomb'** — a key plot point in the film as well as the book. The other was the **supposed mutual hostility of science and religion** — a crucial theme in the book, but one that CERN scientists all dismissed, and that the film-makers handled differently in the film. More generally, Ron Howard emphasized that he sought to be fair in depicting the Catholic Church : *'I wanted to put a human face on the cardinals'*, he said. *'I tried to be very respectful about that. I suspect that some people want to look at it as broad-minded and interesting, and others are going to perhaps resent some of the foibles and character defects that get dramatized as well. But I think that there's a balance there.'*

## DIFFERENCES BETWEEN BOOK AND FILM

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Certainly, where the film version of *The Da Vinci Code* dutifully sought to incorporate as much of Brown's tendentious anti-ecclesiastical speeches as possible, *Angels & Demons* is a much freer adaptation that puts the emphasis on action and keeps speeches to a minimum.

Some **notable departures from the novel have the effect of softening the portrayal of the Church**. At the press conference Hanks cited what he called a 'magnificent' pro-church line added by the film's screenwriters for Cdr. Richter, who tells Langdon : *'My church feeds the hungry. My church comforts the sick and dying. What does your church do ? That's right — you don't have one.'*

*'And this is true'*, Tom Hanks acknowledged. *'The Church does take care of the poor, feeds the hungry, cares for the sick.'* How sweet ! By the way, he just missed the whole point. Such a simplistic depiction of the Church, as honourable as it may be, critically undercuts the whole spiritual level, minimizing the Church to some laic NOG.

**Key changes toward the end of the film** undermine the machinations of an unbalanced ecclesiastical figure in the book. Where Brown's *Angels & Demons* has the entire College of Cardinals fall prey to the villain's subterfuge, the film allows the Cardinals to save a little face. The film-makers also extended mercy to an ecclesiastical character who has a very different and grimmer fate in the book.

**What no amount of revisionism can overcome** is the fact that *Angels & Demons* remains part of the *Da Vinci* fantasy, in which **Christianity is seen as a long, bloody cover-up, with Jesus' divinity and resurrection seen as a lie**, and Jesus' legacy placed in the off-spring of his union to Mary Magdalene, which gives rise to the Merovingian dynasty.

Hanks acknowledged as much : *'If you've seen the first one,'* he said, *'you realize that Langdon has inside himself this very powerful **truth** (!). He found it, he interpreted it (!) So there is great weight to him walking into the Vatican — there's a lot of communication that goes on between his eyes and the eyes of anybody who is in authority in Vatican City because of this shared truth (!).'* Wow !

## ANGELS & DEMONS IN ROME

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Given the **complete lie** of this implicit ‘*shared truth*’, response to the film project from Church authorities at the Vatican and at Rome has understandably been very different from that of CERN management. Stung by the roaring success of *The Da Vinci Code*, officials at the Holy See prudently judged the sequel a lost cause, and have declined to participate in any way.

The film shoot was **denied permission to stage key scenes** at St. Peter’s Square and other Vatican locations as well as Churches in the Diocese of Rome featured in the story — and the film-makers claim that permits to shoot at other locations in Rome were cancelled at the last minute — possibly, Howard suggested, due to behind-the-scenes requests on the Church’s behalf : ‘*Three days before we were to begin filming*’, Howard said, ‘*we were told there was a meeting between the film commission and some Vatican officials. In the wake of that, a number of our permits were rescinded.*’

‘*We often provide our churches to productions whose purposes are compatible with religious sentiment*’, Rome diocese spokesman Father Marco Fibbi commented during the shoot, ‘*but not when the film pursues a type of fantasy that damages common religious sentiment, as in the case of The Da Vinci Code.*’ Regarding *Angels & Demons*, Fibbi added, in an eminently quotable sound bite, ‘*Normally we read the script, but this time that wasn’t necessary. The name Dan Brown was enough.*’

As a result, the shoot was obliged to make do with a mix of external establishing shots, non-ecclesiastical locations — such as the Royal Palace of Caserta, which stood in for interior shots at the Vatican —, Hollywood sets, computer-generated imagery and even some covert film-making : ‘*Cameras can be made really small,*’ Howard said.

## THE VIA ILLUMINATI

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For the Roman part of the press junket, the studio had another set of options than it had with the CERN in Geneva. Obviously there would be no Vatican tour, no panel of churchmen to discuss what Brown did or didn’t get right in ecclesiastical history, polity or art. On the other

hand, between the *Da Vinci* phenomenon and the new film fuelling enthusiasm for the other Robert Langdon story, *Angels & Demons* has become such a sensation that for some time tourists in Rome had their choice of any number of competing *Angels & Demons*-themed guided tours, all more or less following in Langdon's footsteps as he deciphers 450-year-old scavenger hunt clues supposedly left by Galileo in a rare manuscript in the Vatican archives.

On the one hand, the *Angels & Demons* Official Tour, subtitled 'The Path of Illumination' or *Via Illuminati* was originally offered by Dark Rome, then conducted by AD Travel, and licensed by Brown's Italian publisher. Another Tour, offered by Through Eternity, reinforced some of Brown's most lurid lies as well.

On the other hand, the self-styled Unofficial Tour operated by Three Millennia promised to '*separate fact from fiction*', including a long laundry list of Brown's historical, architectural and art history blunders. When I contacted the founder of Three Millennia via email, he willingly responded at length, recounting many of the issues noted in my essay above.

## THE ETERNAL CITY THROUGH A POP CULTURE LENS

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Our guide — a young, somewhat theatrical college student with long dark hair and bohemian attire who dramatically recounted key scenes from the story throughout the tour, using stock phrases like a Homeric story-teller — emphasized the importance of his anonymity and the vehemence of the Church's opposition to the Tours. On this tour, occasional sops to reality were allowed to subvert the story's pretensions to accuracy, yet more often, we still got the Dan Brown version, about the West Tile for instance.

Likewise, at Santa Maria della Vittoria, our guide offered a reductionistically carnal reading of Bernini's *Ecstasy of St. Teresa* in keeping with the sophomoric bawdiness of Brown's account of the sculpture : '*The statue depicted the Saint on her back in the throes of a toe-curling orgasm.*' Brown's prurient snickering is a shallow reversal of the truth. The erotic overtones of Bernini's sculpture are a **metaphor for otherwise incommunicable mystical experiences** — not the other way around !

The prospect of a stream of tourists flowing into Rome in order to experience the Eternal City **through the hopelessly muddled lens of a mediocre, sensationalistic pot-boiler** is certainly sobering, not to say depressing.

## AN ANTI-CATHOLIC MASTER MYTH

### Godless Physicists and super-colliding abominations

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In *The Da Vinci Code*, Brown's central thesis is built on a preposterously **revisionist, esoteric misreading of history** drawn from **fevered conspiracy theories of the *Templar Revelation* variety** and up-ending the fundamental tenets of the Gospel and replacing them with a **neo-pagan and feminist aesthetic of the sacred feminine**. Compared to *The Da Vinci Code*, the central thesis of *Angels & Demons* is not a **conspiracy theory revelation**, but the sheer extension of a popular anti-Catholic master myth, which it exploits and reinforces.

That master myth is *the implacable, irreconcilable mutual hostility of biblical faith and scientific inquiry*. Both the film and the book versions of *Angels & Demons* tell us that '*religion has always persecuted science*' and '*tried to slow the relentless march of science, sometimes with misguided means*' — torture and murder included. Unfortunately, this **misconception has long roots** in American anti-Catholicism, and is still popularly perceived as having some basis in history today.

Some of Brown's loopier religion/science flash points are almost touchingly daft. Even in academia, we're told, fundamentalist anti-scientism is so potent that half of U.S. schools '*aren't allowed to teach evolution*'. And Brown has Harvard's Divinity School — that bastion of religious rigidity ! — marching on the Biology Building to protest genetic engineering — a spectacle that can only appear surreal to Catholics scandalized by Notre Dame University's VIP overtures toward President Obama on May 17<sup>th</sup>, 2009.

In one of the book's most hilarious disconnects, a CERN official, dismayed to learn that the U.S. Senate is cutting funding for a particle super-collider, exclaims furiously : '*One of the most important scientific projects of the century ! Two billion dollars into it and the Senate sacks the project ? Damn Bible-Belt lobbyists !*' Because, you know, Bible-Belt types are forever fulminating against godless particle physicists and their super-colliding abominations...

Furthermore, Brown **freely and with breathtaking mendacity imputes to Catholicism the scientific bugaboos of other religious groups** — such as repudiation of modern medicine in favour of faith healing and young-earth Creationism — and even of men of science, such as Galileo as mentioned above about the notion of elliptically orbiting heavenly bodies vs. the perfection of the circle.

## BUDDHA AND MUHAMMAD ARE JUST FINE... (NOT JESUS)

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Although Brown relentlessly pillories Christianity and particularly Catholicism, he doesn't fight against faith *per se*. His books are not anti-faith, but anti-dogma, anti-institutional, anti-patriarchal, anti-revealed religion, anti-personified God.

In Brown's universe, true faith is **vague, mystical, scientific, feminist and universal**. '*God, Buddha, The Force, Yahweh, the singularity, the unicity point — call it whatever you like. Well, anything except **Him**.*' 'Her', Vittoria corrects Langdon with a smile. '*Your Native Americans had it right.*' This feminist bent reached its apex with *The Da Vinci Code*'s celebration of the 'Sacred Feminine' in the quasi-divine Mary Magdalene.

If the book takes a jab at violence and misogyny in the Muslim world in the figure of the *Hassassin*, a sadistic Arab Muslim who revels in murder and rape, this, though, was evidently **too controversial for Hollywood**, and the assassin's religious and ethnic identity was **scrubbed in the film**, much as the Muslim villains of Tom Clancy's *The Sum of All Fears* were recast in the film version as neo-Nazis. The assassin is played in the film by Danish actor Nikolaj Lie Kaas, and is explicitly non-religious.

Yeah, poor Muslims, it would have been nasty right? So Buddha is all right, the Muslims are all right, but Jesus gets the crap all over...

## GLEEFUL COMEUPPANCE (MAJOR SPOILERS)

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Brown's evident *animus* for the Church makes it impossible to ignore the **glee with which he crafts the Church's comeuppance**. The book recounts the **gruesome ritual murders** of four kidnapped cardinals, each of whom is murdered, *Se7en* style, in a themed way, corresponding to the elements of earth, air, fire and water. For the final two murders, the narrator — who otherwise tells us only Langdon's thoughts — gives us first-person descriptions of the cardinals' undignified last thoughts.

One, slowly roasting while suspended cruciform, can only think that God has forsaken him and that he is in Hell. The other, drowning in Four Rivers fountain, at least manages a suitable Christian thought — the sufferings of Jesus, who died for his sins. Yet neither attempts an appropriate final prayer.

Then comes the *camerlengo*'s outrageous speech before the Cardinals, followed by his revolutionary televised mission statement, which could be paraphrased : '*Religion to Science : You win.*' Though he's meant to be a sort of traditionalist (!), the *camerlengo*'s speech is a thesis statement of modernist Catholicism : **The Bible isn't true, but we have to have faith in something, get morals from somewhere, have some sort of spirituality.**

So mesmerized are the cardinals by this vapid speech that, following a convenient 'miracle', they **spontaneously acclaim Ventresca as Pope** — after which it is revealed that Ventresca has orchestrated everything : the kidnapping and murders of the Cardinals, even the antimatter threat to Rome. The whole, of course, is made up to involve the Vatican in a **murderous conspiracy to hide the falsity of its religion's foundations.** Preposterous !

Further **scurrilous revelations** follow. The late pope was poisoned by Ventresca for a sin the Pope began to reveal to him, which turns out to involve the Pope having fathered a son with a nun — by *in vitro* fertilization, *so as not to break their vows of chastity* — yeah, that's the ticket ! And then it turns out that the *camerlengo* himself is the son in question. Aghast at having unwittingly murdered his own father, Ventresca **commits self-immolation** — after which the stunned cardinals commence a new conclave to elect a new Pope.

The outrageous subversion of the conclave process by the villain, who is elected by an **extraordinary process of election by acclamation**, may be the most noxious structural element in the main action of the book. In the film, 'thanks' to a last-minute save by Langdon, the cardinals discover the *camerlengo*'s treachery in time to be spared the indignity of electing the villain of the piece to the Chair of Peter. Even so, prior to Langdon's discovery of his guilt, there is talk among the cardinals about electing McKenna by acclamation, and after his death there are calls among the faithful for his **canonization as a saint.** With the faithful and even the princes of the Church being this dupeable, no wonder Cardinal Strauss tells Langdon : '*Thank God he sent you to save us.*'

The film jettisons the *in vitro* back story connecting the late pope with the *camerlengo* — yet far from blunting the anti-Catholic punch of the book, to replace it with an even more gruesome motive : yet another rehash of religion versus science. The *camerlengo* was scandalized by the Pope's openness to scientific theories regarding the Big Bang. Even today, then, Churchmen — even seeming semi-progressives like McKenna — are **driven to murder by fear of science.** For shame, Dan Brown ! It doesn't even make sense...