Musab Shakeel

28 October 2017

**Fact and Fiction in Dan Brown’s *Origin***

Dan Brown’s latest book in the Robert Langdon series, *Origin* is a mystery-thriller novel that sells in the *fiction* section of bookstores. What distinguishes *Origin* from the other fiction books that sit beside it in the bookshelves is the interplay between fact and fiction that characterizes the plot of *Origin.* In keeping with his signature writing style, Brown embeds his fictional plot within facets of reality, thus obscuring the lines between fact and fiction. Brown claims factual accuracy in *Origin* by including a “FACT” page in the preface that reads: *“All art, architecture, locations, science, and religious organizations in this novel are real”*. [[1]](#endnote-1) The fact that *Origin*, similar as in the previous novels, is set in a real-world location (Spain, in *Origin*), with elaborate descriptions of the locations, landmarks, buildings, artwork, accompanying the story, contributes to the merging of fact and fiction.

Such a writing style has worked superbly for Brown in the past; his writings have brought him great fame and wealth. His novel *The Da Vinci Code*, in which Brown cleverly merges religious fiction with fact, is number one on the list of Top 100 Best-Selling Books of all time in the UK [[2]](#endnote-2) and the success of *Inferno*, ranked number one on the New York Times Best Seller list for the first 11 weeks of its release, saw Brown return to the Forbes Celebrity 100 list. [[3]](#endnote-3) It seems that Brown has figured out the recipe for successful fiction writing and his blurring of lines between fact and fiction is most certainly a key ingredient. And understandably so — stories that are rooted in aspects of reality make for a more riveting read. However, enthralling as they may be, such stories also leave the unsuspecting reader vulnerable to misinformation. Particularly so because despite Brown’s claims, his novels frequently compromise on factual accuracy in the interest of embellishing the plot. The blanket claim to factual accuracy in the preface causes the reader to lower her guard in being critical to ostensible facts she comes across in the novel. And that leads to misinformation.

In this essay, the interplay between fact and fiction in Brown’s *Origin* will be explored, particularly across the themes of science, Spain’s political present, and other miscellaneous areas in the novel, in an attempt to filter fact from fiction. It will be proven that the lines between fact and fiction are blurred in *Origin,* and that this is primarily done to embellish the plot to make for a more interesting read. It will be seen that the said lines are blurred by wrapping the fictive elements within some modicum of fact, and that this blurring makes the unsuspecting reader vulnerable to misinformation. The interplay in *Origin* compares to that in Brown’s previous novels in the same series: *The Da Vinci Code, Angels and Demons,* and *Inferno.*

Science is an important theme in *Origin*. In addressing the two fundamental existential questions posed by Kirsch that form the motif of the novel, Brown pits science against creationism. In doing so, Brown references the Miller-Urey Experiment (O, XCI, 383) in *Origin*. Through Edmond Kirsch’s presentation, we learn that chemists Stanley Miller and Harold Urey conducted a “legendary scientific experiment in the 1950s” attempting to answer the fundamental question: “*Where do we come from?”*. The experiment simulated the conditions of earth’s early atmosphere in laboratory apparatus, in an attempt to demonstrate the spontaneous origin of life from chemical reactions. The experiment is not a part of Brown’s fiction and did indeed happen. It was conducted in the 1950s, and produced a few amino acids. The vials from the original experiment were also rediscovered in 2007 [[4]](#endnote-4) and reanalyzed with modern techniques that resulted in identification of more amino acids than had originally been discovered. This is all mentioned in *Origin* and checks out factually.

However, the experiment is portrayed as more of a failure in *Origin* than it actually was. Kirsch exhales and says *“However, as many of you may know, the Miller-Urey experiment failed. It produced a few amino acids, but nothing even closely resembling life”* (O, XCI, 387).The truth of the matter is, the Miller-Urey Experiment successfully proved that simple molecules could be assembled into more complex molecules necessary for life by natural processes, and it is currently the most widely cited evidence for spontaneous generation of life in textbooks. [[5]](#endnote-5) Portraying the experiment as having failed serves Brown’s plot well as Kirsch’s genius with computer modeling is provided a platform to step in. Kirsch incorporates computer science into the experiment to revitalize the experiment to prove spontaneous generation. This presentation of fiction wrapped inside some relevant factual information such that the reader cannot tell one from the other, is characteristic to Brown’s writing and we will see more instances of this in *Origin.*

 Portrayal of MIT physicist Jeremy England’s research in *Origin* is another example of Brown’s obscuring of the lines between fact and fiction. *Origin* describes England as a *“thirtysomething MIT professor [who] [is] currently the toast of Boston academia, having caused a global stir in a new field called quantum biology”* (O, XCII, 394). Jeremy England *is* in fact a real-life MIT physicist with graduate degrees from Stanford University and University of Oxford [[6]](#endnote-6) and it is true that his work on ‘dissipation-driven adaptation’, a hypothesis of abiogenesis (the theory that life emerged spontaneously), has been acclaimed in the scientific community. [[7]](#endnote-7) In fact, the endorsement of England in *Origin* by NYU physicist Alexander Grosberg (O, XCII, 394) is directly quoted from a real-life article that appeared in *Quanta Magazine* [[8]](#endnote-8) in 2014. [[9]](#endnote-9) Brown’s claim that England attended the same prep school alma mater, Phillips Exeter Academy, as the protagonist of *Origin* Robert Langdon, although a striking coincidence, may also be factually correct considering England was raised in a college town in New Hampshire, the same state Phillips Exeter Academy is in.

 However, Brown’s presentation of England’s work in *Origin* is not without use of the liberal artistic license Brown is known for. Brown conveniently uses the authoritative figure of England to substantiate Kirsch’s, (and *Origin*’s) underlying notion of anti-creationism. England’s work in real life, however, does not attempt to do the same. In an article in the Washington Post titled *“Dan Brown Can’t Cite Me To Disprove God”* that England penned after reading *Origin,* England says: “I’m a scientist, but I also study and live by the Hebrew Bible. To me, the idea that physics could prove that the God of Abraham is not the creator and ruler of the world reflects a serious misunderstanding — of both the scientific method and the function of the biblical text”. Thus, we see that Brown takes England, a real-life physicist, embeds him into the plot of *Origin*, but also *adds* elements that deviate from the facts. These additions fit in nicely with the plot, in this case giving credence to Kirsch’s anti-creationist claims, but take away from factual accuracy, and that is Brown’s secret ingredient to writing fiction.

 The political situation of Spain, particularly pertaining to the 20th century, and the status of her monarchs, is another topic in *Origin* that ostensibly is based on fact. Spain is stated to be a parliamentary monarchy and the novel claims that despite holding limited official power, the King of Spain has enormous influence over the hearts and minds of his people (O, XIV, 72). In general, the notion of the Spanish monarchy having strong ties to “stalwart” Catholicism (O, XIV, 73) and hence, serving as a “spiritual compass” for the nation, is presented.

The presentation of the monarchy in Spain is accurate. Spain is indeed a parliamentary democracy with the King assuming a ceremonial role with nominal power. The monarchy has indeed continued to unite Spain as a nation, as Ramon Gilcaseres, Spain’s ambassador to the United States suggests: “The monarchy has played a very important role, and still plays an important role, in Spain. The monarchy got us out of dictatorship, gave us stability. People know that and recognize themselves in the king and queen”. [[10]](#endnote-10) In addition, the monarchy has indeed had strong ties with Roman Catholicism, with the current king, King Felipe being Catholic, and the fact that first monarchs of Spain, King Ferdinand II and Queen Isabella I, whose wedlock led to the unification of Spain, [[11]](#endnote-11) were titled the “Catholic King and Queen” by the then pope, for their efforts for the Roman Catholic faith.

However, of course the characters of Prince Julian and his dying father, the King, in *Origin*, are fictional, as is the fact that the current monarch of Spain is secretly looking to abolish monarchy in Spain. The character of Prince Julian may be based on that of the current Spanish king, King Felipe VI, in the sense that King Felipe was the only son of the former Spanish king, Juan Carlos [[12]](#endnote-12) (Prince Julian is the only heir to the throne in *Origin*). Also, there is striking similarity in King Felipe’s and Prince Julian’s story of romance – both defied traditional expectations and married a commoner, instead of a princess bride. [[13]](#endnote-13)

 The description of Spain’s history with the “ruthless, violent, and uncompromising” (O, XXXVII, 169) dictator, Francisco Franco, is also accurate. Franco was indeed an unyielding leader who led a brutal dictatorship in Spain from 1939 until his death in 1975. [[14]](#endnote-14) The “victor” symbol consisting of six letters spelling out the word “victor”, depicted in *Origin* as “the symbol of Franco” (O, XXXVII, 169) is also factual, however, in addition to its significance as an emblem for the Spanish dictator, the novel glosses over a second use of the symbol: the victor symbol is also used as a sign to commemorate students who have received the degree of doctorate [[15]](#endnote-15) in some Latin American and Spanish universities.

 There is a plethora of other ostensible facts that Brown presents in *Origin*, a detailed analysis of each being impossible within the constraints of this paper. However, the following paragraphs presents a quick fact check of some randomly chosen details in the novel, presented in a “statement: verdict” format where the statement is the factual claim in the novel and the verdict the veracity of the statement in relation to real life.

**Fact-checking *Origin***

William Blake was a real life English poet who published the epic poem *The Four Zoas*: ***True****, kind of.* Blake was indeed a poet and had published *The Four Zoas,* and “*The dark religions are departed & sweet Science* reigns” (the 47-character password in *Origin*) is indeed the last line of *The Four Zoas*. But Brown seems to have missed the capitalization of the words “religions” and “science” when quoting the poem in *Origin.* Also, *The Complete Works of William Blake* does not exist only as a *“priceless manuscript”* but is a rather mundane paperback book that can be purchased from Amazon for $20. [[16]](#endnote-16)

Bone conduction technology for headphones exists (O, III, 25): ***True****,* but it is largely still in the development phase, with current models not matching the standards of traditional headphone technology. [[17]](#endnote-17)

The largest synagogue in Europe is in Budapest on Dohany Street (O, V, 31): ***True****.* [[18]](#endnote-18)

The Turing test is a test that determines if a computer is artificially intelligent (O, VIII, 48): ***True****.* [[19]](#endnote-19)

Anyone can buy portable cell jammers easily in the markets (O, XIV, 70): ***True****;* here [[20]](#endnote-20) is one for $499.

Cody Wilson, an American millennial, designed “The Liberator”, the first 3D printed polymer gun (O, XIX, 92): ***True****.* [[21]](#endnote-21)

There was a Superconducting Super Collider under construction in Texas that was abandoned due to budget problems and “political pressure from startling sources” (O, XX, 97): ***True****, [[22]](#endnote-22)* although the insinuation that vitriol from religions parties was a major factor in the abandonment is likely merely Brown’s addition since no concrete evidence could be found that religious parties had a role in causing the abandonment of the project.

A book written by an artificially intelligent machine nearly won a Japanese literary prize (O, XXXIX, 175): ***True, kind of****.* The *novella*, titled “*The Day a Computer Writes a Novel*”, only made it through first of the four rounds of screening for the prize. And it was *co-written* by AI and humans. A team of scientists in Japan had fed a list of words and sentences and programmed parameters for sentence construction into the machine before it was allowed to “write” the novel. [[23]](#endnote-23) This of course makes the original revelation less impressive and is probably why Brown did not include it in his description in *Origin.*

The Tesla Model X P90D would defeat a jet in a one-mile drag race (O, XLVII, 210): ***True****.* [[24]](#endnote-24)

The famous AI computer in the movie *2001: A Space Odyssey* was named HAL because each letter in HAL occurs one letter ahead of IBM (O, XLVII, 210): ***False***. [[25]](#endnote-25) HAL stands for *H*euristically programmed *AL*gorithmic computer.

The many different Winston Churchill quotes in the novel: All of them check out to be actual Winston Churchill quotes.

*“The Washington Post had run an article on ‘godlessness at Harvard’, reporting that for the first time in the school’s 380-year history, the freshman class consisted of more agnostics and atheists that Protestants and Catholics combined”* (O, LV, 252): ***True****.* [[26]](#endnote-26)

The above fact checking shows that *Origin,* like the other Brown books, introduces the reader to new topics, facts, and trivia. And that is a significant reason for Brown’s success – the reader is motivated by the fascinating, ostensibly factual, information, to invest her time reading an otherwise fiction book. However, as seen in the portrayal of the Miller-Urey experiment, or of Jeremy England, and also in some of the facts that only “k*ind of”* turn out to be true in *Origin*, Brown has a tendency to alter the facts he includes in his books. For readers who are unaware of Brown’s fact/fiction blending, Brown’s style of writing can potentially spread misinformation.

Similar fact/fiction blending that leads to misrepresentation of fact for the reader occurs in Brown’s other novels as well.

In *The Da Vinci Code,* Brown’s misrepresentation falls under two categories. The first is the kind that directly antagonizes the Christian church. This includes assertions that Jesus was a mortal man who fathered a child with Mary Magdalene, and whose divinity was voted on by other mortal men, at the Council of Nicea. Another such mistruth is Brown’s depiction of The Priory of Sion as the guardians of the ancient secret that is the ‘Holy Grail’, that, if revealed, will irreparably harm Christianity. [[27]](#endnote-27) In reality, the Priory is a well-known “20th century fraud”. [[28]](#endnote-28) The other kind of misrepresentations are relatively harmless and serve to embellish the historical aspect of the plot. This kind includes Brown’s claims that the modern Olympics are based on the half cycle of Venus, or that the pentacle was originally intended to be the symbol of modern Olympics, or that the Church of Saint-Sulpice is built over the ruins of goddess Isis’ temple, or that the brass strip at Saint-Sulpice is called the Rose Line, and that it was the original prime meridian (all untrue).Even the assertion that Leonardo Da Vinci’s famous *Mona Lisa* is named as an anagram based off of the names of the Egyptian god and goddess of human fertility, is closer to preposterous fiction than fact. In doing so, Brown almost makes a mockery of ‘factually accurate’ writing.

Even though *The Da Vinci Code* looks to undermine the foundation of The Catholic Church in particular, as opposed to religion or creationism as a whole, we see that in both *Origin* and *The Da Vinci Code*, Brown tends to misrepresent the facts by modifying them to fit his plot better. The reader may initially be excited to learn about a particular fact mentioned in a Brown book, for example, that the *Mona Lisa* is named as an anagram based off names of the Egyptian gods of fertility, or that the modern Olympics are based on the half cycle of Venus, only to be disappointed later at learning these are merely Brown’s fictional versions of the actual fact.

In *Angels and Demons* too, Brown’s tendency to deceptively write fiction embedded in facets of reality, is at display. A*ngels and Demons* begins with one such misrepresentative detail in its preface, where Brown claims that “the brotherhood of the Illuminati is factual”. [[29]](#endnote-29) Indeed, the existence of the Illuminati at one point in history is indisputable historical fact — the secret society was founded in 1776 — but its presence in the current world is at best, a conspiracy theory, not “fact”. [[30]](#endnote-30) Also, Brown’s subsequent assertion that Galileo Galilei, the famous 16th century Italian scientist, was the most “revered member” (A&D, IX, 51) of the society is sheer fiction. Galileo predated Illuminati by nearly two complete centuries. Such presentation of fiction wrapped inside relevant facts, as we have seen, is characteristic to Brown’s writing.

A theme that is particularly misrepresented in *Angels and Demons* is that of Church versus Science. There is no doubt that the Church has been in conflict with science for centuries; The Roman Inquisition impeding the progress of science is glaring evidence to the conflict. Copernicus’ book on his heliocentric theory was indeed banned and Galileo was indeed placed under permanent house arrest by the Inquisition.[[31]](#endnote-31) But the house arrest and other similar book bans are the extremes of the Church’s obstruction to science, and executions, if any, were the exception (Steven D. Greydanus). Brown’s claim in the novel that “outspoken scientists like Copernicus — were murdered by the church for revealing scientific truths…” (A&D, IX, 50) are thus preposterous. Copernicus, in fact, died of a stroke. [[32]](#endnote-32) Moreover, the event of “La Purga” in 1668 mentioned in the novel, where the Church allegedly branded and murdered four eminent scientists, is another example of fiction that is deceptively imbued with a factual vibe. The richness of detail of the claims (specific mention of the date 1668, for example) together with the fact that a prominent *Harvard professor* corroborates them, make the claims credible.

In *Origin*, similar claims portraying religion as intolerant to science are made. For example, when it is heavily insinuated that the major factor for the abandonment of the Texas Superconducting Super Collider was pressure from religious groups (“political pressure from startling sources” (O, XX, 97) ), or that the World Federation of the Catholic Medical Associations “recently declared war on genetic engineering, proclaiming that ‘science lacks soul’ and therefore should be restrained by the Church” (O, XX, 97).

In *Inferno*, the plot revolves around the threat of a worldwide biological attack, apparently planned in an attempt to avert the crisis of global overpopulation. It is claimed by the antagonist, Zobrist, that the population has been increasing exponentially and is on the brink of reaching an unsustainable number. Although it is a fact that population *has* been growing exponentially over the past few centuries, [[33]](#endnote-33) it is not a scientific fact that population growth will *continue* to rise exponentially. In fact, only predictions can be made as to the future of the world’s population and there is no consensus in the scientific community on the matter. Thus, the dogmatic portrayal of the ‘crisis’ of global overpopulation in *Inferno* is certainly a liberal stretch of the truth.

Misrepresentations of reality exist outside of the scientific sphere as well in *Inferno*. Zobrist ‘reminds’ the reader that the Renaissance followed the Black Death, to justify his rationale in support of mass human sterilization. Except … it did not — certainly not in the manner Zobrist portrays it. There were multiple outbreaks of the Black Death in Europe at different points in history, and the interval between the Black Death and the Renaissance is not as distinct as Zobrist claims: the Renaissance had already commenced *before* the last of the Black Death had ended. [[34]](#endnote-34)

Thus, it is seen that similar as in his other novels, Brown continues his tradition of blurring the lines between fact and fiction by wrapping fiction within modicum of fact in *Inferno* as well. Most claims in Brown’s novels are harmless exaggerations fully justifiable by the “fiction” genres of the novel. So why be concerned? It is the obscuring of the lines between fact and fiction that is worrying. The reader is left vulnerable to misinformation. It is important to note that Brown’s fact/fiction blending *does* make the novels more interesting as the reader is exposed to a variety of new “factual” information. Brown’s huge success is glaring proof of this, and cements the ‘fact/fiction blending’ as Brown’s key ingredient to successful fiction writing. It is also important to note that Brown often *does* get things right. However, rather than trusting Brown with his claims of accuracy, any ostensible 'fact' one comes across in the book should be treated with a grain of salt because odds are, the 'fact' is merely a seductive work of fiction used as a plot device, at the expense of factual accuracy. One should keep in mind that Brown is not legally liable to cite or reference, given the fiction genre of the novels. (There is not a single proper reference in *Origin* beyond the informal “Acknowledgements’ page). The onus is thus on the reader to fact check and stay critical of what they come across in Brown’s books. But in reading a fiction book, one may not be inclined to expend the time and energy such extensive fact checking would require and so, *Origin* is best read as the other books that sit beside it in the bookstore are: fiction.

1. Brown, Dan. *Origin*. Doubleday, 2017. [↑](#endnote-ref-1)
2. https://www.theguardian.com/news/datablog/2012/aug/09/best-selling-books-all-time-fifty-shades-grey-compare [↑](#endnote-ref-2)
3. https://www.forbes.com/profile/dan-brown/ [↑](#endnote-ref-3)
4. https://www.nasa.gov/centers/goddard/news/releases/2011/lost\_exp.html [↑](#endnote-ref-4)
5. Wells, J., Icons of Evolution, Regnery, Washington, 2000. [↑](#endnote-ref-5)
6. http://web.mit.edu/physics/people/faculty/england\_jeremy.html [↑](#endnote-ref-6)
7. https://www.quantamagazine.org/a-new-thermodynamics-theory-of-the-origin-of-life-20140122/ [↑](#endnote-ref-7)
8. https://www.quantamagazine.org/a-new-thermodynamics-theory-of-the-origin-of-life-20140122/ [↑](#endnote-ref-8)
9. Brown may possibly have conceived his idea for Edmond Kirsch’s computer modelling that “proves” abiogenesis in *Origin* from this very Quanta Magazine article. The article reads: *“England’s bold idea will likely face close scrutiny in the coming years. He is currently running computer simulations to test his theory that systems of particles adapt their structures to become better at dissipating energy. The next step will be to run experiments on living systems.”* The article explicitly mentions “computer simulations” as a means of testing England’s hypothesis that looks to prove abiogenesis. The fact that the novel also involves Kirsch developing computer simulations to prove abiogenesis, seems too great a coincidence. Bear in mind that Brown has already been involved in a lawsuit in 2006 on the charges of plagiarizing in *The Da Vinci Code.*  [↑](#endnote-ref-9)
10. https://www.washingtonpost.com/lifestyle/style/can-spains-monarchy-be-saved-its-up-to-king-felipe-vi-and-his-commoner-queen/2015/09/14/97c97808-5a96-11e5-9757-e49273f05f65\_story.html?utm\_term=.0df3537080b9 [↑](#endnote-ref-10)
11. https://www.britannica.com/topic/Catholic-Monarchs [↑](#endnote-ref-11)
12. https://www.washingtonpost.com/news/morning-mix/wp/2014/06/02/deeply-unpopular-spanish-king-to-abdicate-throne-in-favor-of-son/?utm\_term=.7919468b2500 [↑](#endnote-ref-12)
13. https://www.washingtonpost.com/lifestyle/style/can-spains-monarchy-be-saved-its-up-to-king-felipe-vi-and-his-commoner-queen/2015/09/14/97c97808-5a96-11e5-9757-e49273f05f65\_story.html?utm\_term=.ede9d33a8061 [↑](#endnote-ref-13)
14. http://www.history.com/topics/francisco-franco [↑](#endnote-ref-14)
15. https://en.wikipedia.org/wiki/Victor\_(symbol) [↑](#endnote-ref-15)
16. https://www.amazon.com/Complete-Works-William-Blake/dp/1514385317 [↑](#endnote-ref-16)
17. https://www.theverge.com/2016/10/24/13383616/bone-conduction-headphones-best-pair-aftershokz [↑](#endnote-ref-17)
18. http://www.worldatlas.com/articles/the-largest-synagogues-in-the-world.html [↑](#endnote-ref-18)
19. https://www.theguardian.com/technology/2014/jun/09/what-is-the-alan-turing-test [↑](#endnote-ref-19)
20. https://www.jammer-store.com/monstro-10-all-frequencies-portable-jammer.html [↑](#endnote-ref-20)
21. https://www.forbes.com/sites/andygreenberg/2013/05/05/meet-the-liberator-test-firing-the-worlds-first-fully-3d-printed-gun/#5bd8dd1952d7 [↑](#endnote-ref-21)
22. https://www.scientificamerican.com/article/the-supercollider-that-never-was/ [↑](#endnote-ref-22)
23. https://www.digitaltrends.com/cool-tech/japanese-ai-writes-novel-passes-first-round-nationanl-literary-prize/ [↑](#endnote-ref-23)
24. http://www.esquire.com/lifestyle/news/a43586/whats-faster-tesla-or-qantas-jet/ [↑](#endnote-ref-24)
25. https://www.zinzin.com/observations/2014/how-hal-from-2001-a-space-odyssey-got-his-name-and-no-its-not-ibm-minus-one/ [↑](#endnote-ref-25)
26. https://www.washingtonpost.com/news/acts-of-faith/wp/2015/09/09/there-are-more-atheists-and-agnostics-entering-harvard-than-protestants-and-catholics/ [↑](#endnote-ref-26)
27. Dan Brown, *The Da Vinci Code.* Corgi, 2004. [↑](#endnote-ref-27)
28. www.religionfacts.com/da-vinci-code/list [↑](#endnote-ref-28)
29. Brown, Dan. *Angels and Demons:* Corgi, 2009. [↑](#endnote-ref-29)
30. Greydanus, Steven D. “Lies, Damned Lies and Dan Brown: Fact-Checking Angels & Demons | Decent Films - SDG Reviews.” *Decent Films*, decentfilms.com/articles/fact-checking-brown. [↑](#endnote-ref-30)
31. en.wikipedia.org/wiki/Roman\_Inquisition [↑](#endnote-ref-31)
32. www.biography.com/people/nicolaus-copernicus-9256984 [↑](#endnote-ref-32)
33. zebu.uoregon.edu/2003/es202/lec07.html [↑](#endnote-ref-33)
34. www.thedailybeast.com/fact-checking-dan-browns-inferno-10-mistakes-false-statements-and-oversimplifications [↑](#endnote-ref-34)