Dr. Franklin's Children:

Kant, Shelley and Priest*

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1. Why did Immanuel Kant nickname Franklin "The Modern Prometheus"?

Benjamin Franklin still remains one of the most famous Americans, for he is featured on the obverse of the 100 dollar bill, the most expensive greenback in the United States. Although he never served as president of the United States, Franklin is still deeply admired as a major voice of the American Revolution that ended up with the creation of the first-ever testing ground for Democracy on earth. Despite D.H. Lawrence's modernist critique of this Founding Father of America, in which the author of *Lady Chatterley's Lover* (1928) boasts of being "many men" (Chapter 2, *Studies in Classic American Literature* [1923], 15), Franklin himself had already been famous for being "many men": he is a printer, journalist, tall-tale-teller, philosopher, scientist, inventor, musician, statesman, and "self-made man," among other things. In this respect, Franklin has long been compared with Yukichi Fukuzawa, one of the Founding Fathers of modern Japan, well-known for being multifaceted: he is a philosopher, educator, journalist, translator and entrepreneur. What is more, Fukuzawa is also featured on the 10,000 yen bill, the most expensive bill in Japan. To put it simply, Franklin and Fukuzawa still remain significant, for both of them contributed much to establishing modern nations based upon the vision of the Enlightenment.

What I would like to start with today, however, is the fact that it is Immanuel Kant, the greatest champion of the European Enlightenment, who cautioned people against defying the natural order of things, keenly aware of Franklin's achievements. In his 1755 essay, "The Modern Prometheus," Kant states:

There is such a thing as right *taste* in natural science, which knows how to distinguish the wild extravagances of unbridled curiosity from cautious judgements of reasonable credibility. From the Prometheus of recent times Mr. Franklin, who wanted to disarm the thunder, down to the man who wants to extinguish the fire in

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the workshop of Vulcanus, all these endeavors result in the humiliating reminder that Man never can be anything more than a man.

(qtd. in Angelina Stanford, "Immanuel Kant on Benjamin Franklin," the *Circe Institute Podcast Network*, Feb 11, 2016,

https://www.circeinstitute.org/blog/immanuel-kant-benjamin-franklin)

Here, Kant clearly refers to Franklin's experiment with the lightning rod that enlightened people by proving thunder to be the effect of electricity, not the anger of God that had long humbled Colonial Puritans in New England.

2. Electricity as the Spark of Life

Historically speaking, the Ancient Greeks observed that when fur is rubbed against amber there was a mutual attraction between the two. By the 1600s the electrostatic generator had been invented, the difference between positive and negative currents was noted, as well as classifying materials as conductors or insulators. Also, during this time the word, "electric" was coined from the Greek word, "electron."

Thus, it is safe to say that, contrary to popular belief, Benjamin Franklin did not discover electricity. However, during the 1740s, using ordinary household items, he developed a theory of positive and negative charges for electricity. Famously, as I already mentioned, his experiment with the lightning rod convinced us that lightning was an electrical phenomenon. This discovery induced him to the concept of an electric battery (Glassy 68-69). Therefore, if you combine Franklin's theory of electricity with Alessandro Volta's invention of the early form of the battery in 1800 that produced a steady electric current and Giovanni Aldini's electrical quasi-resurrection of the dead criminal George Forster in 1803, it is easy to assume how Mary Shelley was to come up with the idea of archetypal science fiction, *Frankenstein: or The Modern Prometheus*, published in 1818 (Conley 244). Although deeply fascinated with the wild fancies of old alchemical philosophers such as Cornelius Agrippa, Paracelsus and Albertus Magnus, Dr. Frankenstein is enlightened by a "most violent and terrible thunder-storm" he witnesses in Bellrive, Jura, in Switzerland:

It [thunder-storm] advanced from behind the mountains of Jura; and the thunder burst at once with frightful loudness from various quarters of the heavens. I remained, while the storm lasted, watching its progress with curiosity and delight. As I stood at the door, on a sudden I beheld a stream of fire issue from an old and beautiful oak, which stood about twenty yards from our house; and so soon as the

dazzling light vanished, the oak had disappeared, and nothing remained but a blasted stump. When we visited it the next morning, we found the tree shattered in a singular manner. It was not splintered by the shock, but entirely reduced to thin ribands of wood. I never beheld anything so utterly destroyed. Before this I was not unacquainted with the more obvious laws of electricity. On this occasion a man of great research in natural philosophy was with us, and, excited by this catastrophe, he entered on the explanation of a theory which he had formed on the subject of electricity and galvanism, which was at once new and astonishing to me. All that he said threw greatly into the shade Cornelius Agrippa, Albertus Magnus, and Paracelsus, the lords of my imagination; (Shelley 41)

This experience invited the protagonist to create a human being by making use of the art of "bestowing animation upon lifeless matter," that is, animating the gigantic amalgam of the dead men's parts. Now we should pay attention to the spark of life, a kind of lightning as the spirit of the Enlightenment:

It was on a dreary night of November, that I beheld the accomplishment of my toils. With an anxiety that almost amounted to agony, I collected the instruments of life around me, that I might infuse a spark of being into the lifeless thing that lay at my feet. It was already one in the morning; the rain pattered dismally against the panes, and my candle was nearly burnt out, when, by the glimmer of the half-extinguished light, I saw the dull yellow eye of the creature open; it breathed hard, and a convulsive motion agitated its limbs. (Shelley 57; underline mine)

It is safe to consider what Victor Frankenstein calls "a spark of being" as the effect of electricity. Nonetheless, the creature turned out to be so disgusting that "unable to endure the aspect of the being" he had created, Dr. Frankenstein "rushed out of the room." Later, the creature himself fled his master's laboratory.

Up until this point, you may assume that my paper plans to construct a history of scientific genius from Dr. Benjamin Franklin through Dr. Victor Frankenstein. Indeed, Dr. Franklin became the all-American hero by democratizing technology that could otherwise have been monopolized by a limited number of intellectual elites. And yet, it is also true that he caused such a fear on the part of the champions of the Enlightenment that Immanuel Kant nicknamed him the "Modern Prometheus." Although Dr. Franklin succeeded in demystifying lightning not as the anger of God but as the effect of natural electricity, Kant speculated that his invented technology must gain not only positive but also negative effects. This is exactly the reason why Mary Shelley subtitled her novel *Frankenstein* as the "Modern Prometheus." Without being

aware of the ambivalence of technology, this novel could not have gained its literary historical status as the archetype of science fiction.

3. Dr. Franklin's Monster: from Self-Made Man to Man-Made Self

What I would further propose here is that Dr. Benjamin Franklin is the inventor not only of the lightning rod but also of a human being. Certainly, he is not a mad scientist like Dr. Victor Frankenstein or Dr. Strangelove. However, if you read his text very closely, you will witness the moments that convince you that while he has long been popular as a typically American self-made man, Dr. Franklin also created a man-made self. What Mary Shelley's subtitle "Modern Prometheus" tells us is not only that she is indebted to Immanuel Kant's interpretation of Dr. Franklin but also that she was inspired by the way Franklin created quite a few man-made selves, just like Dr. Frankenstein's monster.

Let me illustrate my point with a couple of works composed by Dr. Franklin. First, I would like to reread the poem "Epitaph" composed in 1728, when he was only 22 years old.

The Body of B. Franklin,
Printer,
Its Contents torn out,
And stript of its Lettering and Gilding,
Lies here, Food for Worms.
But the Work shall not be wholly lost:
For it will, as he believe'd, appear once more,
In a new & more perfect Edition,
Corrected and amended
By the author.
He was born Jan.6, 1706
Died 17--("Epitaph," Lemay p.91)

What amazes us most is not so much the youth of the author but his vision of himself as a book that will be revised and reprinted in the future. At seventeen, with little money in his pocket but already an expert printer, he proceeded to make his way in the world, subject to the usual "errata," as he liked to call his mistakes in life, but confident that he could profit from lessons learned and not repeat them ("Benjamin Franklin 1706-1790," 234). Dr. Franklin retains this idea consistently until he writes his autobiography in 1771 at the age of 65.

That Felicity, when I reflected on it, has induc'd me sometimes to say, that were it offer'd to my Choice, I should have no objection to a Repetition of the same Life from its Beginning, only asking the Advantage Authors have in a second Edition to correct some Faults of the first. So would I if I might, besides correcting the Faults, change some sinister Accidents and Events of it for others more favorable, but tho' this were denied, I should still accept the Offer. However, since such a Repetition is not to be expected, the thing most like living one's life over again, seems to be a Recollection of that Life; and to make that Recollection as durable as possible, the putting it down in Writing. (*Autobiography* 249)

Once again, Dr. Franklin defines his own life as correctible and modifiable, that is, plastic. In this paragraph Dr. Franklin would like to be permitted to correct the Faults of his life, just the way the author is permitted to correct the errata of the first edition. At this point, he defines life as a book that will be corrected and revised forever. To put it simply, while Dr. Franklin as a human being must pass away someday, his life as a book will keep getting updated and surviving the predicament of the ages. In other words, while Dr. Franklin is mortal, his life as a book will remain immortal just like Artificial Intelligence.

What is more, here we have to remember Dr. Franklin is well-known for a variety of his pseudonyms such as: Silence Dogood, the persona of a middle-aged widow, under whose name he submitted some satirical essays to his brother's newspaper, the *New England Courant*, at the age of sixteen; Richard Saunders as the author of *Poor Richard's Almanac*, filled with maxims, most of which he created by himself, for achieving wealth and preaching hard work and thrift.

However, the most problematic pseudonym is Polly Baker in his radical feminist article, "The Speech of Miss Polly Baker" (1747), who was once accused of having illegitimate children, but who criticized bachelors in Colonial America who did not want to get married to women.

Compel them [the great and growing number of Bachelors] then, by a law, either to Marry, or pay double the Fine of Fornication every Year. What must poor young Women do, whom Custom has forbid to solicit the Men, and who cannot force themselves upon Husbands, when the Laws take no Care to provide them any, and yet severely punish if they do their Duty without them? Yes, Gentlemen, I venture to call it a Duty, 'tis the Duty of the first and great Command of Nature, and of Nature's God, *Increase and Multiply*? (*Autobiography* 243-244)

Based upon the Enlightenment discourse of Deism that gives priority to Nature over God, Polly Baker's speech is so logical and powerful as to attract a wider audience on both sides of the Atlantic. Thus, despite the pseudonymous persona, Polly Baker promptly gained fame as a kind of virtual idol who championed a kind of proto-feminist philosophy. Nonetheless, we may locate the true reason for her creation in the author's biography. In 1730, Dr. Franklin married Deborah Read, the daughter of his first landlady. But in the next year he came to have an illegitimate child, and Deborah accepted Franklin's son William into the household. It is ironic that while Dr. Franklin becomes one of the Founding Fathers of the United States, William Franklin was later to become governor of New Jersey and a Loyalist during the American Revolution. Accordingly, Franklin published the Polly Baker Hoax, not necessarily because he hoped to construct a proto-feminist discourse, but because his extra-marital fornication invited him to compose a feministic speech as a correction of the great errata in life. What matters here, however, is that whatever the reason, this persona Polly Baker came to have her own life, capturing the imagination of Enlightenment America. Although the Colonial Puritans developed a fear of challenging the Judeo-Christian God as the origin of everything, the Founding Fathers demystified the British monarch, as well as the idea of an angry God, by championing Deism and Unitarianism as the background of the Enlightenment. To be more precise, as Gordon Wood pointed out, Dr. Franklin as a young man, who had spent a couple of years in London from 1724 to 1726, only wished to become a gentleman. In 1748, at the age of forty-two, Franklin believed he had acquired sufficient wealth and gentility to retire from active business. Thus, he could finally become a gentleman, a man of leisure who no longer would have to work for a living (Wood 55). Nonetheless, in the course of human events he was required to join and lead the American Revolution, giving up the plan of spending his later years as a Loyalist gentleman. Therefore, the portrait of a failed gentleman helped invent the myth of Franklin as a self-made man. However, Benjamin Franklin the self-made man is to succeed in producing a man-made self, accomplished only by animating the pseudonymous characters. Dr. Franklin not only created but also became his own monster. However illegitimate he or she is, Dr. Franklin's monster gets unbound as the Modern Prometheus, observing the biblical duty, as Polly Baker mentioned above: "Encrease and Multiply." This is the revised version of Genesis: "Be fruitful, multiply, and replenish the earth, and subdue it"(1:28).

This perspective allows us to reconsider the extent to which Mary Shelley was cautious about the proliferation of Dr. Frankenstein's monster. Asked by the monster to create his own

companion, that is, his wife, Dr. Frankenstein determined to visit some remote spot of Scotland, and finish his work in solitude.

I was now about to form another being, of whose disposition I was alike ignorant; she might become ten thousand times more malignant than her mate, and delight, for its own sake, in murder and wretchedness. He had sworn to quit the neighbourhood of man, and hide himself in deserts; but she had not; and she, who in all probability was to become a thinking and reasoning animal, might refuse to comply with a compact made before her creation. . . . (Shelley 165)

Thus, gradually Dr. Frankenstein felt like changing his mind, anticipating the monster's multiplication:

Even if they were to leave Europe, and inhabit the deserts of the new world, yet one of the first results of those sympathies for which the demon thirsted would be children, and a race of devils would be propagated upon the earth, who might make the very existence of the species of man a condition precarious and full of terror. Had I a right, for my own benefit, to inflict this curse upon everlasting generations? I had before been moved by the sophisms of the being I had created; I had been struck senseless by his fiendish threats: but now, for the first time, the wickedness of my promise burst upon me; I shuddered to think that future ages might curse me as their pest, whose selfishness had not hesitated to buy its own peace at the price, perhaps, of the existence of the whole human race. (Shelley 165-166; underline mine)

At first glance, here, Dr. Frankenstein seems to feel afraid that the monster and his wife will reproduce themselves and demolish the whole human race. However, by the same token, we have to be aware that he assumes that the monster's proliferation will first take place in "the deserts of the new world," that is, the wilderness of America, the greatest invention of the Founding Fathers as represented by Dr. Benjamin Franklin who called the very wilderness "the Great American Desert." Let us note that despite his own creation, the monster is here described as a kind of "pest," a conventional metaphor of the other. This xenophobic syndrome will convince us that Dr. Frankenstein's monster has long been interpreted as the metaphor of the diaspora, which refers not only to the Wandering Jew but also to the Pilgrim Fathers, whose colonial descendants were to claim independence from Mary Shelley's country and threaten it politically and culturally. Note that while it was originally published in 1818, the author's annotated edition was presented by her to her friend Mrs. Thomas in 1823, when James Monroe,

the 5th president of the United States, composed his "Annual Message to Congress," the archetype of the Monroe Doctrine that claims/asserts the Western Hemisphere's right to refuse the Eastern Hemisphere's political and colonialist intervention, promising neither to intervene in the international affairs of the Eastern Hemisphere nor to colonize other countries in the Western Hemisphere except for the reason of protection. Nonetheless, we should not ignore that in the rhetoric of the Monroe Doctrine lies the twisted logic naturalizing the ambivalence between post-colonialism and crypto-imperialism, which was to jeopardize the peace of the Eastern hemisphere, especially the Europe that Mary Shelley had long inhabited.

Yes, the author of *Frankenstein* was intimidated by the existence of America, not only because it is the greatest monster Dr. Franklin invented but also because her proto-feminist mother, Mary Wollstonecraft, who fell in love with an American, Gilbert Imlay, in Paris in 1792, immediately after the publication of *A Vindication of the Rights of Woman*, gave birth to their daughter, Fanny, in 1794, and was to be abandoned by her rakish lover in 1795. What Gilbert Imlay represented is America as the anathema of her mother. Therefore, it is highly plausible that Mary Shelley (1797-1851), who lost her mother shortly after her birth and who was to deserve the name of the mother of science fiction, imprinted within herself the fear of the new world as a monster that would outwit the old world sooner or later.

Conclusion: Tesla, Gernsback, Priest

The place to close this paper should be with one of the recent descendants of Dr. Victor Frankenstein. Of course, since Brian Aldiss located the origin of science fiction in *Frankenstein* in his *Billion Years Spree: The History of Science Fiction* (1973) this novel has long been considered as the precursor of Villiers de l'Isle Adam's *The Future Eve* (1886), Thea von Harbou's *Metropolis* (1925) featuring a humanoid called "Maria," Philip K. Dick's *Do Androids Dream of Electric Sheep?* (1968) which inspired Ridley Scott to create a cult movie *Blade Runner* (1982) featuring the agony of replicants who would like to become human, and even William Gibson and Bruce Sterling's ultimate cyberpunk *The Difference Engine* (1990) featuring a steam-driven artificial intelligence, a post-Frankensteinian monster. However, now I would like to shed light on multiple-award winning British speculative fictionist Christopher Priest's novel *The Prestige* (1995), the winner of the 1996 World Fantasy Award, which induced Christopher Nolan to produce a film in 2006 featuring Christian Bale and Hugh Jackman.

The story of *The Prestige* is incredibly exciting. In fin de siècle London, a couple of stage illusionists, the aristocratic Rupert Angier and the working-class Alfred Borden, engage in a

bitter and deadly feud. Insofar as they were active in the field of illusion, a teleportation act called "The Transported Man" conceals a trick. However, desperately trying to outwit Borden and surpass the quality of his "Transported Man," Angier, with the help of the acclaimed inventor, Nikola Tesla (1856-1943), the competitor of Thomas Edison, succeeds in developing an act called "In a Flash," in which Tesla's invented machine physically teleports a human being from one place to another. To put it simply, Angier incorporated cutting-edge technology into the stage illusion, blurring the distinction between magic and science. As a result, in 1903 he could brilliantly outwit his competitor by teleporting the body, but Borden's malicious intervention caused an incomplete duplication of Angier.

Borden's intent was much more sinister, and a moment later I found out what it was. In the very instant that I turned to look up at the loge, two things happened simultaneously.

The first was that electrical power to the apparatus cut out, disconnecting the current instantly. The blue fires vanished, the electrical field died.

I remained on the stage, standing within the wooden cage of the apparatus in full view of the audience. I was staring over my shoulder at the loge.

The transmission had been interrupted! But it had begun before it was stopped, and now I could see an image of myself on the rail.

There was my ghost, my *doppelganger*, momentarily frozen in the stance I had adopted when I turned to look, half twisted, half crouching, looking away and up. It was *a thin, unsubstantial copy of myself, a partial prestige*. (Priest 302)

What I would like to foreground here is that with the help of Nicola Tesla, the genius of electric technology, the illusionist Angier unwittingly succeeds in creating a human being in his own image. This plot cannot help but remind me that, inspired by another genius of electric technology, Dr. Benjamin Franklin, Mary Shelley conceived the story of Dr. Frankenstein's created human being.

Of course, there is no evidence that Tesla invented the teleportation device. However, here, Christopher Priest expanded the imagination and constructed an alternative history of fin de siècle London, in which Tesla could have invented the very machine, helping the illusionist in question outwit his competitor. Tesla is a kind of distinguished scientist who could come up with the idea of inventing futuristic devices for controlling objects remotely, photographing thoughts, transmitting power wirelessly and communicating with life in outer space, but we have to be aware that he also deserves the name of "mad scientist" who planned to construct devises for man-made lightning or earthquakes and splitting the earth like an apple, whose

purpose one cannot grasp easily. While Dr. Franklin proved thunderstorms to be the effect of electricity by making use of the lighting rod, Nikola Tesla wanted to produce lightning itself artificially (See Marc J. Seifer, *Wizard: The Life and Times of Nikola Tesla*).

Accordingly, despite his genius far surpassing Edison's, Tesla was forced to spend dark years in the 20th century. However, it is Hugo Gernsback (1884-1967), a big fan of Tesla and editor of the *Electrical Experimenter* magazine, who asked him to contribute articles to his magazine. "One year earlier [1916], when Tesla's project was at its bleakest, he had formed an alliance with one of his most ardent admirers, Hugo Gernsback, editor of *Electrical Experimenter*" (Seifer 395).

Thus, the inventor's autobiography, "My Inventions," was first serialized in the *Electrical Experimenter* in 1919 (Tesla, *My Inventions and Other Writings*). What matters here is that Gernsback is called the father of science fiction, for he wrote his novel *Ralph 124C41*+ in 1911 (One to Foresee for One Another) featuring a scientific genius in the 27th century partly based upon Tesla and inaugurated in 1926 *Amazing Stories*, the first-ever science fiction magazine in the world, with the help of major illustrator Frank Paul and Tesla.

Indeed, it is easy to locate the origin of science fiction in Mary Shelley's *Frankenstein* published in 1818. However, by the same token, without Hugo Gernsback's launch of *Amazing Stories* and the expansion of the science fiction market, supported by Nikola Tesla, one of the descendants of Dr. Franklin, we could not have taken for granted the historical framework of science fiction. It is this paradoxical loop between the mother of science fiction and the father of science fiction that has long kept reviving and refreshing the text of *Frankenstein: or the Modern Prometheus*, showing us the way a self-made man is metamorphosed into a man-made self.

Works Cited

Conley, Shannon N. "An Age of Frankenstein: Monstrous Motifs, Imaginative Capacities, and Assisted Reproductive Technologies." *Science Fiction Studies*, vol. 45, no. 2, pp. 244-259.

Franklin, Benjamin. *Autobiography (excerpts)*. 1784. *The Norton Anthology of American Literature: Shorter Eighth Edition*, edited by Nina Baym et al. Norton, 2013, pp. 248-308.

----- "Epitaph." 1728. Writings, edited by J. A. Leo Lemay. The Library of America, 1987. pp.91.

Glassy, Mark C. Biology Run Amok!: The Life Science Lessons of Science Fiction Cinema. McFarland, 2018.

Kant, Immanuel. "The Modern Prometheus." 1755. Qtd. in Angelina Stanford, "Immanuel Kant on Benjamin Franklin," the *Circe Institute Podcast Network*, Feb 11, 2016, https://www.circeinstitute.org/blog/immanuel-kant-benjamin-franklin

Lawrence, D.H. Studies in Classic American Literature. 1923; Martin Secker, 1924.

Priest, Christopher. The Prestige. 1995. Golantz, 2004.

Seifer, Marc J. Wizard: The Life and Times of Nikola Tesla: Biography of a Genius. Citadel, 1996.

Shelley, Mary. Frankenstein; or, The Modern Prometheus. 1818. Oxford UP, 1987.

Tatsumi, Takayuki. Young Americans in Literature: The Post-Romantic Turn in the Age of Poe, Hawthorne and Melville. Sairyusha, 2018.

Tesla, Nikola. My Inventions and Other Writings. Penguin, 2011.

Wood, Gordon. The Americanization of Benjamin Franklin. Penguin, 2004.

