

Science Fiction of Fin De Siècle Europe

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"If men were to create a new world they must have a picture of what it could be, and see clearly the evils of the one in which they lived. They must see the inadequacy of the type of man who now ruled them, and understand the scientific outlook and training of the type required."¹

-Arthur Salter speaking of science fiction at the turn of the twentieth century

Salter comes as close as he can to coining a definition for the extremely broad genre of science fiction that emerged in the late nineteenth century in Europe. He tries to embody characteristics of science fiction into this definition as he speaks of how writers at the turn of the century looked to the future of science and politics. Science fiction writers of this time wrote about what we as humans should expect and how society as a whole should and would react to the technological and political changes of the future. These future changes were not just brought up in the science fiction genre, but this idea of future progress was the prime characteristic of society in the decadent 1890s. The fathers of science fiction were H.G. Wells and Jules Verne, because they painted the most vivid pictures of what the future would look like in their popular novels. Science fiction novelists of late nineteenth-century Europe attempted to promote change through their writing, and in some cases, their views on reform had major political and technological effects on society.

The French author Jules Verne was the first to explore the future in terms of how technology would advance. Verne was an avid scientific researcher, and when he spoke of how technology would be in the future, he always spoke using specific scientific terms. His best example of this was *From the Earth to the Moon: and, Around the Moon*. In this story, the president of an American gun club comes up with an idea that uses the advances of American artillery to send a bullet to the moon. The president presents this most radical idea in front of the club when he says, "I have asked myself whether by means of a sufficient apparatus manufactured under given conditions of resistance, it would not be possible to send a shot to the moon."² Verne displays his vast scientific knowledge when he talks about the specifics of how to get to the moon. For the bullet to get to the moon, Verne suggests that the projectile would need to have an initial velocity of twelve thousand yards per second; it would take ninety-seven hours, thirteen minutes, and twenty seconds (given the decrease in velocity as the projectile ascends into space); it would need to be launched at 0° & 28' N & S latitude to actually land on it; and it must be discharged on December 1, thirteen minutes and twenty seconds to 11:00 p.m., so it could land on December 4 at midnight, when the moon crosses its zenith (Verne calculated that this would be the most favorable time to land on the moon).³ The scientific calculations that Verne

made for this fictional novel were very accurate and laid out a very plausible scientific experiment for reaching the moon. In *Around the World in Eighty Days*, Verne asks another scientific question: is it possible to travel around the world in eighty days using the technological advances of transportation?

"I will make the tour in eighty days or less," is the bet that the main character, Mr. Fogg, makes in *Around the World in Eighty Days*.⁴ This is supposedly the fastest trip one could make around the world. Verne, yet again, uses technological advances to make this fictional work seem possible. Verne plans out this very elaborate trip in terms of how long it would take to get from one place to another with different means of transportation:

London to Suez by rail & steamboats	7 days
Suez to Bombay by steamer	13 "
Bombay to Calcutta by rail	3 "
Calcutta to Hong Kong by steamer	13 "
Hong Kong to Japan by steamer	6 "
Japan to San Francisco by steamer	22 "
San Francisco to New York by rail	7 "
New York to London by steam and rail	9 "
	80 days ⁵

Verne used present technology in this story to predict how many days it would take to get from place to place, and thus painted a very vivid picture of the capabilities of technology and its progress. Mr. Fogg completes his trip in the end, which essentially shows Verne's confidence in technology. The most innovative novel that Verne wrote was *Twenty Thousand Leagues under the Sea*, as it not only speaks of technological advances, but also of the main character Captain Nemo's inner struggle as he is trying to understand this apparently evil society, and the violence it will take to overcome it.

Verne's most talented characteristic as a writer is the vessels that he creates which, "...as Arthur Evans has remarked, are mobile utopias in miniature: cozy havens within which travelers venturing through dangerous environments experience a better life than they had at rest."⁶ Verne does have a great ability to write fantasy, but making these vessels realistic, as he does with the *Nautilus* in *Twenty Thousand Leagues under the Sea*, makes this technology believable. In this story "an enormous thing" is terrorizing warships in uncharted waters and no one can believe that this thing is actually a ship.⁷ This monster of the water is actually an extraordinary ship called the *Nautilus*, which uses both modern (at the time) and futuristic nautical technology, including thermometers, barometers, hygrometers, as well as a more futuristic way of actually powering the boat. Electricity, a new method for powering ships, was used to operate the *Nautilus*. Verne explains that sea water has two percent sodium in it, which Nemo extracts from the water to power the *Nautilus*. Nemo states that electricity "gives heat, light, motion, and in a word, life to the *Nautilus*."⁸ Not only is the technology in this story innovative, but the character of Captain Nemo is as well, as Verne introduces his first paradoxical, decadent main character.

Captain Nemo uses this ship to conduct underwater research, but also uses it maliciously to destroy other warships. Nemo believes that war is the corruption

of society, and with his vast knowledge of technology, he uses it against what he thinks is the evil of the world. Nemo is a very ambiguous character as he claims that he is ridding society of evil, but he also states that he is "...done with society entirely..."⁹ This paradox is very odd because Nemo is using war to combat war. Paul Alkon writes about the paradox of Nemo, claiming, "Nemo's moral sensitivity is as conspicuous as his ability to act ruthlessly when he deems it necessary."¹⁰ Verne's character of Nemo dwells on societal questions of life, death, peace, war, and destruction, and even though he stands strong in his cause to kill those he deems evil, it seems clear that his views overlap and contradict themselves.

Verne creates Nemo as both a symbol of decadence and the rejection of it, as people at the time were not sure whether to embrace the ideas of decadence or turn them away completely. With so many new ideologies, ideas, and conceptions at this time, it was hard for people to find something strictly to believe in, just like the character of Nemo. As stated, Verne and Wells were the fathers of science fiction, but Verne wrote more about technology and Wells wrote more about science. Wells was not a denouncer of scientific exploration, but in the novels of *The Invisible Man* and *The Island of Dr. Moreau*, he wrote about the negative effects of scientific experimentation in the imminent future.

In the story *The Invisible Man*, Wells lays out a very dark portrait of how scientific experimentation can go too far. The main character in Wells' story, Griffin, created a potion that can make him invisible, but he is unable to reverse the effects, making him invisible for his entire life. The story speaks negatively about the idea of invisibility, and Wells refers to the invisibility as "...the burden he carried," noting that it only made the main character more alone and depressed.¹¹ An interesting theme of the novel is the invisible man's kleptomaniac instinct. The first thing that Griffin does once he realizes that this invisibility is permanent is steal money, so Wells is portraying the invisible man as a character who has been affected by the woes of science, which has led to his evil nature.

Another point to speak of is how this scientific blunder causes the main character to have no conscience. In being invisible, Griffin loses all social and personal responsibility, which leads him to be a rather wicked character. The seclusion brought on by this scientific experiment leads to pure evil, for example, "The Invisible Man amused himself for a little while by breaking all the windows in the Coach and Horses, and then he thrust a street lamp through the parlour window of Mrs. Gribble."¹² Evil caused by science was a theme that Wells portrayed frequently, as he used it in *The Island of Dr. Moreau* as well.

In *The Island of Dr. Moreau* the main character Prendick finds himself on an island that is a haven for horrible scientific experimentation. On this island, Prendick runs into abominable creatures that were "...misshapen men, short, broad, and clumsy, with a crooked back, a hairy neck and a head sunk between his shoulders."¹³ Prendick cannot figure out whether these creatures are humans or animals until the mad Dr. Moreau tells him of his experimentation. Dr. Moreau employs the basic idea of vivisection in creating super animals by using skin grafting techniques. This is not only a physical process, but he uses the popularized idea of hypnosis to educate these animals with language and moral education.

Dr. Moreau explains these animals as, "Complex, like everything else alive. There is a kind of upward striving in them, part vanity, part waste sexual emotion..."¹⁴ Moreau is trying to play God and evolve these animals into humans, showing that Wells recognized the extreme complexity and evil that science could embody in the future. Moreau is trying to reverse degeneration in evolving these monstrous creatures, as he is using vivisection to create these evolved creatures. In the end, though, Wells is commenting on this complex idea of degeneration, in which scientific experimentation can not reverse the societal theory of degeneration and might, in fact be dangerous to society itself. Wells and Verne did not only write about science and technology, but like other popular writers, they wrote about different notions of political reform and what governmental systems would carry it out.

Wells was considered the greatest writer of his time when it came to writing about the future, as he loved to put his thoughts about government and political reform in his novels. His greatest example of this is *The Invisible Man*, as it was not only a story of the woes of science in the future, but a very descriptive critique of capitalism. At this time in history, the rise of capitalism had hit its peak and Wells was an advocate of socialism. He was upset about the popularity of capitalism and wrote about it. Wells would have agreed with scholar Philippe Willems as he describes the late Nineteenth Century as a society "with its consolidation & consecration of capitalist values..."¹⁵ Paul Cantor describes Wells in his piece, *The Invisible Man & the Invisible Hand: H.G. Wells's Critique of Capitalism*, saying: "He upheld a socialist idea of community, yet at the same time he saw a form of heroic individualism as the only way of bringing about socialism."¹⁶

In the story *The Invisible Man*, Wells sets up an economic experiment, as the main character of this novel lives in two societies: rural Iping, which fits the main character's desire for solitude, and the metropolis of London. In these two settings, the invisible man comes to one concrete conclusion: money governs each and every society, regardless of wealth. However, in the tight-knit community of Iping, it is a personal transaction and regulation of money, which he likes more than London, where strangers to the community can live powerfully by corruption in an impersonal working market. Hence, Iping symbolizes the personal market inherent in socialism brings and London symbolizes the woes of impersonal capitalism. Paul Cantor explains this underlying theme of capitalism: he says "Griffin's invisibility symbolizes the working of an impersonal, decentralized, and--in Well's view--dangerously chaotic market economy..."¹⁷ Wells did not just lay out an explanation of the evils of capitalism, but was also advocating change through the values and practices of socialism in *Socialism & The Great State* and, *The Fate of Man*.

Wells' belief in a command economy, which kept "...entrepreneurs from pursuing their individual interests" was so important to him that in the following cases, he did not write fictional works, but about the ideas of socialism as non-fiction in both *Socialism and The Great State* and *The Fate of Man*.¹⁸ Wells believed that socialists have a more intellectual understanding of the future than most political minds. As he said in *Socialism and The Great State*, he thought that socialists "believe in secular change, in Progress in a future for our species differing continually more from its past."¹⁹ He also said that "...they look for new ways of living and new methods of human association with a certain adventurous hopefulness," which Wells stated was

the only way to progress equally into the future, which he also explains in *The Fate of Man*.²⁰

In this study of present and future, Wells speaks of how society may be doomed unless the powers to be make large scale changes in government. He says, "And it is also being forced upon our reluctant attention that that the species of *Homo sapiens* is no privileged exception to the general conditions that determine the destinies of other living species."²¹ What Wells is stating is that great species have risen to power and have declined as well, so it is destined that a more evolved species will take control eventually, unless the governing forces exert their power justly. Wells believes that the only thing that can reverse this scientific fact is a morally just government, and the government system has to be socialism. Wells says, "Either life is just beginning for him [mankind] or it is drawing very rapidly close."²² Wells believes that if society adopts universal socialism, then life is just beginning; but if society clings to the evils of capitalism, then life as one knew it will be susceptible to the laws of scientific evolution. Wells also spoke explicitly about how corrupt systems of government affect the working class in *The Time Machine*.

In Well's *Time Machine*, a scientist travels through time to the year 182,701 A.D., and finds himself in what he hopes to be a utopian society. The scientist reports on how beautiful the future looks as he says, "The air was free from gnats, the earth from weeds or fungi...the ideal of preventive medicine was attained. Diseases had been stamped out."²³ The scientist believes this place to be a perfect society rid of social toil, but he comes to a rude awakening when he finds what dwells below the upper-world. In the story, there are two groups of people: the Eloi, who are the wealthy upper-worlders, and the Marlocks, the working class who receive nothing but a living space from the Eloi. The Marlocks live in complete misery as all they do is work all day, only to see the Eloi benefit from their hard labor. Wells is commenting on how the workers will receive less and less power as the future comes upon society, unless the powers to be change their ways. This is an idea stated in both *Socialism: the Great State* and *The Fate of Man*, as Wells believed that individuals in society will have no power in the future unless the governing body makes great strides to convert to a socialist government. Wells was not the only science fiction writer to rage against capitalism, as Jules Verne also laid out the ongoing corruption of American capitalism in *Propeller Island*.

Jules Verne's main theme in writing was usually futuristic technology, but this was not entirely the case in his novel *Propeller Island*. Verne showed his readers his versatility as he spoke of how capitalism ruined the society in his novel. In this story, a group of musicians from France are asked to tour around the west coast of a futuristic America, and these musicians learn about what has become of American capitalism. The entire west coast of the United States is greater islands, and the largest and most powerful island is Standard Island. This island has all the wealth of the Pacific coast of America and the power lays in the Island Company, which receives all economic revenue. Verne shows what has become of capitalism: one large scale corporation owns everything and its workers and citizens receive little to nothing, as they live in small, poor tenant islands.

In the end, Standard Island is destroyed as Verne says, "Yet how long that wonderful invention might have lasted had not human passion, more powerful than

wind or sea, set themselves to destroy it!"²⁴ The immense invention that was Standard Island was destroyed because of greed and the lust for power by certain individuals, and Verne believes that this could happen in a capitalistic system like America. Verne really did have a fascination with American society in general, as he wrote about America in almost all of his novels. Jean Chesneaux writes about Verne's future predictions on America in his article *Jules Verne's Image of the United States*, as he says, "Without misusing clichés, is it not possible to say that Jules Verne makes capitalistic society perish as a result of its own inherent contradictions?"²⁵ Another science fiction writer who advocated political reform was Edward Bulwer Lytton, as he wrote about how current society was morally corrupt, and how a "coming race" would take over crooked government with good religious morals and values.

Historian Matthew Beaumont claimed in a recent article that, "Utopian novels of the 1880s and 1890s... presents an ideal socialist society that repudiates or negates the empty present of capitalism," and Lytton presents a utopian socialist society in his *The Coming Race*, but he also speaks of how a government ruled by utopian religious values will take over our present society.²⁶ In this book, Lytton's main character is an Englishman who goes to the United States to stay with an American engineer. The engineer and the Englishman study a mine, and the Englishman finds that at its bottom, there is a race of people inhabiting it. The creatures that dwell in this land underneath the surface of the earth are very grotesque, as the Englishman says, "...I could scarcely bring myself to call him a man..." but in the end, he learns of their sophisticated nature.²⁷ In this land, the people live in a utopia, because everyone is equal and abides by the same rules of government. One of the citizens of the community of Vril-ya says "...this predominance of the few over the many is the surest and most fatal sign of a race incorrigibly savage," as he speaks of how their community is more evolved than the citizens that inhabit the earth.²⁸ One citizen of Vril-ya named Zee speaks of how they live a life of tranquility in which they praise the spirits and gods of their religion at all times. The Vril-ya do not fear death, because they all have faith in their spirits. Lytton is presenting the idea that a culture which truly gives itself to the divine will be more virtuous than the current society, because the world is ridden by violence, lust for power and fear. Lytton believes that religion should have its place in government and despises English society because he believes it is morally corrupt, and this current society could be changed by good, moral, and religious values.

The most radical science fiction novelist of this time was George Griffith: he wrote about how only anarchy would lead to peace and the disappearance of war in his epic novel, *The Angel of the Revolution*. In Griffith's highly controversial novel, he writes about Robert Arnold, a man who invents a design for an airplane that could be used as a warship, and the Russian Tsar wants this warship so he can take over the world. Arnold has problems with current society as it is, as he says "It is based on fraud, and sustained by force..." and "I am the enemy of a society that does not permit a man to be honest and live, unless he has money and can defy it."²⁹ When the Tsar presents this idea to the Arnold, he is outraged and gathers a group of terrorists who will resort to anarchy to bring peace to the world, and uses his warship as their main force. Arnold believes that because his society is "...neither truly civilized nor

Christian," his duty is for him and his terrorist group to kill as many people as it takes for international peace.³⁰

Even though anarchy was a movement that gained adherents at the turn of the century, this novel was still considered very controversial. What popularized this novel is how Griffith makes this story of anarchy very believable. Griffith believed that war or violence for a cause or change of government is justified, but war based on "...the transfer of territory or the payment of money" is evil.³¹ In the end, Arnold and his terrorists bring peace to the world through anarchy, as Arnold's native country of England and America rally behind him and cause the Tsar of Russia to abdicate, which dissolves Russia's corrupt government. Griffith displays how anarchy can truly bring peace when a government system is corrupt in every level. *The Angel of the Revolution* was an entire work of fiction, but among other novels like *From the Earth to the Moon: and, Around the Moon*, and Wells's novels about socialism, brought large-scale technological and political effects on society.

Jules Verne's novel *From the Earth to the Moon: and, Around the Moon* was a fictional work, but it had significant effects on space travel. This fictional book was very realistic in essence, and had a scientific foundation that helped space travel in the future. The idea presented in *From the Earth to the Moon: and, Around the Moon* that a vessel would have to be launched from a certain longitude and latitude, is used in current space travel, as that is the reason that spaceships are launched from the pleasant longitude and latitude of Cape Canaveral. Verne also made an excellent prediction in this novel, as he believed that the American's would have the technology to launch a vessel to the moon, as the American's were the first to land on the moon. It is rather scary how Verne's predictions about America's triumphs in space exploration were so accurate.

Likewise, Wells works on socialism had major effects on society, along with Wells's political activism in England. Wells participated in many political rallies for socialist groups and these helped spread socialism in England. A century before Wells wrote, the socialist movement was not very prevalent in England, but through the works of Wells and other socialists (William Morris), socialism became more widely accepted and has also been a basis for political reform in the Scandinavian countries and other countries throughout the world.

George Griffith did not popularize the idea of anarchy through his novel, but his novel made some rather surprisingly accurate predictions of how the Tsar would abdicate from Russia, and there would be a revolution. Griffith's novel was published almost a century before the Russian revolution, but still he had a premonition that revolution would occur in Russia, and his prediction was correct. Griffith's novel, although fictional, was used by Russian revolutionaries as a text to show how the Russia's Tsar was treating his people unjustly, and a change had to be made.

These authors of late nineteenth century Europe and their texts of science fiction were widely accepted throughout society, and people read and used their texts as a basis for what humans should expect of the future. These novels had widespread appeal throughout Europe, as at this time in history, people of the decadent society were really interested in what would happen to society in the future. They did not see these novels as merely works of fiction, but as guidebooks for what to expect of humanity. All in all, science fiction writers of this time wrote fictional plots and

characters, but the essences of their stories were absolutely true, and these works had immense effects on society, as these writers of the nineteenth century infused society with ideas for possible changes in the future.

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ENDNOTES

- ¹ J.R. Hammond, *H.G. Wells: Interviews & Recollections* (London: Macmillan Press, 1980), 72.
- ² Jules Verne, *From The Earth to the Moon: and, Around the Moon* (New York: Limited Editions Club 1970), 18.
- ³ *Ibid.*, 26.
- ⁴ Jules Verne, *Around the World in Eighty Days* (Los Angeles, CA: Limited Editions Club 1962), 19.
- ⁵ *Ibid.*, 16-17.
- ⁶ Paul K. Alkon, *Science Fiction Before 1900: Imagination Discovers Technology* (New York: Twayne, 1994), 18.
- ⁷ Verne, *Twenty Thousand Leagues Under the Sea*, (New York: Parke and Company, 1911), 3.
- ⁸ *Ibid.*, 59.
- ⁹ *Ibid.*, 48.
- ¹⁰ Alkon, *Science Fiction Before 1900*, 74.
- ¹¹ H.G. Wells, *The Invisible Man*, database on-line. <http://www.bartleby.com/1003/>, Accessed 20 Oct 2005, Ch. 1.
- ¹² *Ibid.*, Ch. 12.
- ¹³ H.G. Wells, *The Island of Dr. Moreau* (New York: Lancer Books Inc, 1967), 15.
- ¹⁴ *Ibid.*, 110.
- ¹⁵ Philippe Willems, "The Culture of Mimesis: Futuristic Science Fiction of the Late Nineteenth Century" (Ph.D. diss., University of Colorado, 1998), 14.
- ¹⁶ Paul A. Cantor, "The Invisible Man & the Invisible Hand: H.G. Wells's Critique of Capitalism," *The American Scholar* 68, no. 3 (Summer 1999): p. 8 (web). Database on-line. Available from Wilson Web. http://vnweb.hwwilsonweb.com/hww/shared/shared_main.jhtml;jsessionid=DDJL2SVC2M5K1QA3DIMCFF4ADUNGIIV0&requestid=234072
- ¹⁷ *Ibid.*, 2 (web).
- ¹⁸ *Ibid.*, 1 (web).
- ¹⁹ H.G. Wells et al., *Socialism and The Great State: Essays in Construction* (Freeport, N.Y.: Books for Libraries Press, 1972), 19-20.
- ²⁰ *Ibid.*, 20.

- ²¹ H.G. Wells, *The Fate of Man; An Unemotional Statement of the Things that are Happening to Him Now, and of the Immediate Possibilities Confronting Him* (Freeport, N.Y.: Books for Libraries Press, 1970), 20.
- ²² Ibid., 248.
- ²³ H.G. Wells, *The Time Machine* (Mount Vernon, N.Y.: Limited Editions Club, 1964), 43.
- ²⁴ Jules Verne, *Propeller Island* (Westport, CT: Associated Booksellers, 1961), 191.
- ²⁵ Jean Chesneaux, "Jules Verne's Image of the United States," trans. Frances Chew, *Yale French Studies* 43 (1969):111-127.
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- ²⁸ Ibid., 92.
- ²⁹ George Griffith, *The Angel of The Revolution* (Westport, CT: Hyperion Press, 1974), 13.
- ³⁰ Ibid., 31.
- ³¹ Ibid., 359.