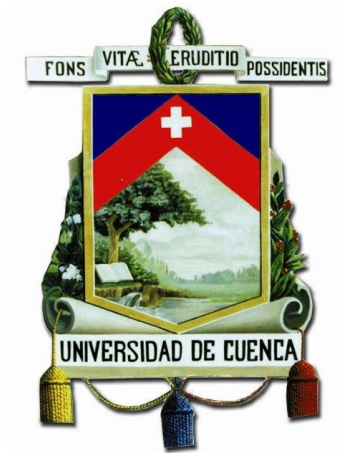


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FACULTAD DE FILOSOFÍA, LETRAS Y CIENCIAS DE LA
EDUCACIÓN

CARRERA DE LENGUA Y LITERATURA INGLESA

**"Isaac Asimov and the Golden Age of Science Fiction: A Study in Terms of his
Contribution to the Genre"**

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RESUMEN

Este trabajo investigativo trata de la vida y la obra literaria de una persona extraordinaria: Isaac Asimov. Su vida fue la de un genio que aprendió a leer y escribir por sí mismo y que escribió su primer relato a la edad de once años. Su producción literaria abarca diversos campos del conocimiento: ciencia pura, religión, humanismo, ecología y, especialmente, el campo de la ciencia ficción. Este último, género literario al cual él contribuyó a darle la forma definitiva que tiene en la actualidad.

Concomitantemente, entonces, esta investigación cubre la historia de la ciencia ficción como género literario, desde sus manifestaciones más tempranas hace miles de años, hasta las absorbentes producciones audiovisuales que cautivan la atención tanto de niños como adultos hoy en día.

Por este motivo, los contenidos de esta tesis también incluyen una descripción, llena de abundantes ejemplos, sobre las características que este género ha adquirido en nuestros días.

Entre los numerosos trabajos de Asimov que se encuentran ligados a la ciencia ficción, dos series de libros aparecen como los más importantes. Se trata de sus series *Fundación* y *Robots*. Los elementos de ficción científica que se destacan en estas series han servido de inspiración para los escritores de ciencia ficción modernos. Consiguientemente, la parte fundamental de esta investigación trata de un estudio detallado de estas dos series en términos de su contribución al delineamiento de la ciencia ficción como género literario.

Palabras claves: Isaac Asimov, ciencia ficción, Fundación, Robótica, Robots.



ABSTRACT

The present research is about the life and literary works of an extraordinary person, Isaac Asimov. His life is that of a genius who learned to read and write by himself and who wrote his first story at the age of eleven. His literary production covers different fields of knowledge: science, religion, humanism, ecology and, especially, the field of science fiction (SF), a literary genre that he contributed to give it the definitive form it has today.

Concomitantly, then, this investigative work covers the history of science fiction as a literary genre from its earliest manifestations thousands of years ago, to the absorbing audiovisual productions that captivate the attention of today's both adults and children.

For this reason, the contents of this thesis also include a description with abundant examples of the characteristics that this literary genre has acquired at present.

Among Asimov's numerous works related to science fiction, two series of books are the most important, his Foundation and Robot series. The elements of science fiction that stand out in these two series have served as inspiration for modern writers of fictional scientific material. Consequently, the fundamental part of this research deals with a detailed study of these two series in terms of their contribution to shape science fiction as a literary genre.

Keywords: Isaac Asimov, Science Fiction, Genre, Foundation, Robot, Robotics.



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DEDICATIONS

This is for you Mom and Dad, for believing in me. It is also for my friends and loved ones for cheering me up when I became too tired to deal with two specialties at the same time.

Ismael Ochoa Cobos



INTRODUCTION

This thesis is intended to be a tribute to one of the greatest American writers of all time, Isaac Asimov.

The first chapter is devoted to provide information about his life since he was born in Russia until he passed away in New York City in 1992, at the age of 71. Asimov was a unique individual since he was a child. Among his peculiarities, it is worth mentioning he was a very precocious boy who taught himself to read and write before even setting a foot in a school. Likewise, he finished high school when he was only 15. Because of his massive literary production, he is considered to be the most prolific writer ever.

The second chapter deals with a brief history of the science fiction (SF) genre and why it has been positioned as one of the most esteemed literary genres nowadays. Since the very early stories, which pushed readers imaginations, to the early days of SF as a real genre in the 20th century, this section of the thesis summarizes two thousand years' worth of history of the genre.

Chapter three consists of a study of literary genres and their subdivisions. In accordance with the topic of the research, this chapter is mainly destined to define the science fiction genre in terms of what critics and writers consider this literary field to be about.

The central part of this investigation is developed in chapter four, here a somewhat detailed study of Asimov's two most famous series of books is carried out. Isaac was a very prolific writer and his contributions to SF and to science fact are numerous; however, he will be most remembered for his Robot and Foundation series. These series gather this author's most original ideas which made them, the Robot and Foundation series, very influential fictional universes for readers during the 1900s.

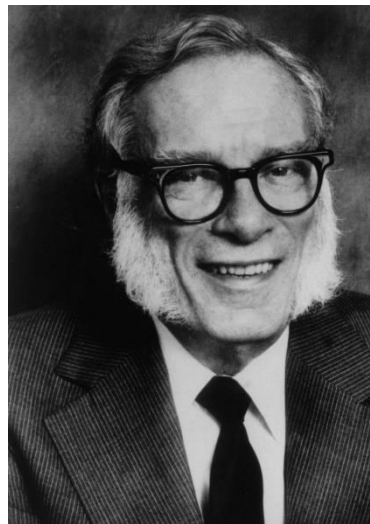
CHAPTER I

Isaac Asimov

1.1 Biography

Isaac Asimov was the author of nearly five hundred books (Rothstein, 1992, para. 3). He is considered one of the best science fiction writers of all time. Renowned author and professor of biochemistry at the University of Boston, his incredible legacy includes hundreds of books not only focused on science fiction, but also in other subjects. Asimov's ideas and stories left millions amazed during the twentieth century (D'Ammassa, 2005, p. 17). However, his life was not easy and the road to become one of the precursors of the science fiction genre, as it is known today, was complicated.

Image 1: Isaac Asimov



Source: Goodreads, 2016.

He was born to middle-class Jewish parents in Petrovitch, Russia, then part of the Smolensk district in the Soviet Union at the beginning the of the 20th century (Asimov, 1979, p. 8). Although it should be noted, his exact date of birth is unknown due to the lack of recordings and differences between the Julian and Jewish calendars. Asimov explained this in one of his autobiographies:



The date of my birth, as I celebrate it, was January 2, 1920. It could not have been later than that. It might, however, have been earlier. Allowing for the uncertainties of the times, of the lack of records, of the Jewish and Julian calendars, it might have been as early as October 4, 1919. There is, however, no way of finding out. My parents were always uncertain and it really doesn't matter. I celebrate January 2, 1920, so let it be (Asimov, 1994, p. 12).

Isaac was the oldest of the Asimov kids. He had a younger sister named Marcia and a brother named Stanley. Although Isaac and Marcia were born in Russia, Stanley was born in the US since the Asimov family moved to America in 1923, when Isaac was only three years old. In addition, this is why he was fluent in English and Yiddish but did not speak Russian. Also, it is worth noting that Isaac Asimov became a naturalized American citizen when he was eight (Ibid, p. 13).

Isaac Asimov grew up in Brooklyn, New York, where he had a troubled childhood. Upon arrival, he noticed a bit of anti-Semitism in the new country. In his autobiography, he says that his name, Isaac, was a kind of presentation card of his Jew heritage. Some neighbors recommended his parents to change his name to avoid discrimination, but they never did so (Asimov, 1979, p. 14).

Once in America, the Asimovs opened many candy stores, and among all the products they sold there were magazines and newspapers. Isaac used them to learn to read while he was five. It was here where he came across the fantastic world of literature and became interested in writing his own adventures (Ibid, p. 15).

Although magazines and newspapers were important for Asimov, especially the ones that introduced him to science fiction, a public library near his house was the place where he learned a lot about many topics regarding history, literature, religion, Greek mythology, and so on. Before even turning ten, he became a bookworm (Asimov, 1994, p. 15).

After finishing his academic formation, a theme which will be covered later in this chapter, Asimov decided to work as a civilian from 1942 to 1945 in a



military institution, the Philadelphia Navy Yard's Naval Air Experimental Station. When World War II was ending, he was transferred to the U.S. Army where he served for nine months (Asimov, 1994, p. 18).

WW II was a significant time to Asimov. He, being a Jew, was horrified about Hitler's racism towards his people. These horrible times meant, however, that in America Jewish started to be more accepted while a big anti-Nazism sentiment grew in the country. Racism and xenophobia were both topics that Asimov considered to be very important (Ibid., 1994, p.15). Although after WW II, he realized how Jews did not learn anything about those things. Asimov saw with bad eyes Israel's misbehavior towards the Palestinians (Ib., p. 16). Anyhow, pro-Jew sentiment was not the only good thing for Asimov during this time.

On July 26, 1942, he got married to Gertrude Blugerman. They conceived two children: David and Robyn Joan. The former born in 1951 and the latter in 1955. They lived together until 1970 when they separated. Then Isaac Asimov decided to move back to his home state of New York where he spent the rest of his life. He lived in the Manhattan area (Asimov, 1994, p. 18).

In 1973, Asimov got divorced, but not before meeting another woman, Janet O. Jeppson, whom he married weeks after getting divorced. This new marriage would last until the end of his life, and Janet became an advisor for him. They both even co-wrote some novels. Janet Asimov herself became a writer, and after Isaac's death, she inherited all Intellectual Properties from the stories and novels his husband had created (D'Ammassa, 2005, p. 18).

Since he moved to New York, Asimov spent most of his time in his apartment. He himself was aware of this fact and admitted to be a claustrophile; that is, Asimov loved to be enclosed which is the key to his massive literary production (Asimov, 1979, p. 21). He used to spend most of his time locked in his apartment writing many stories. This topic, however, will be expanded later in this chapter. Finally, he did not like to travel too much, and he even recognized that he was scared of traveling by plane (Ibid.).



Even though he was a claustrophile, Asimov spoke publicly very often and frequented science fiction conventions. Also, he was a member of numerous organizations which included comic operas, a Sherlock Holmes society called “Baker Street Irregulars,” a literary club called “Trap Door Spiders,” among others. In addition, Asimov was one of the founders of the “Committee for the Scientific Investigation Claims of the Paranormal.” This organization was created to expose claims from pseudo-scientific origin (Asimov, 1979, pp. 374-377).

In 1984, he was named “Humanist of the Year” by the American Humanist Association, and a year later the same organization named him honorary President. A position he would hold until his death (The Guardian, 2008, para. 6).

At the age of 57, Isaac Asimov suffered from a heart attack, and in 1983 he had a triple bypass surgery. During this procedure, he contracted HIV due to a blood transfusion. Immediately, Asimov’s doctors advised him against making his sickness public due to the enormous discrimination against AIDS infected people. They, his physicians, said that even Asimov’s family members would end up being discriminated if Isaac’s illness were to become public. All in all, Isaac Asimov died on April 6, 1992 from heart and kidney failure. Stanley Asimov, Isaac’s brother, reported his cause of death, however avoided mentioning his late sibling illness (Seiler and Jenkins, 2014, para. 2). The sickness was not revealed up until the year 2002 when Janet Asimov, Isaac’s widow, wrote an epilogue for a new edition of his late husband autobiography “It’s Been a Good Life.” She stated they wanted to go public immediately after Isaac’s death, however, controversies during that year convinced them otherwise. It was not until ten years after Isaac’s death that his widow, Janet, and son, Robyn, decided to make it public (Janet Asimov, 2002, para. 1).

1.1.1 Studies and Formation

From a young age, Isaac Asimov showed that he was a very intelligent child and a very unusual one. According to Asimov (1979, pp. 23-27), public



education could not fulfill his curious nature. The books were too short and simple for the genius of his. For example, he said that he read all his school books within a week, and that his teachers could not provide him with the extra knowledge he wanted and needed.

All in all, he graduated from New York's Boys High School at the age of 15 and went to Junior College. More specifically to Seth Low, which was a part of Columbia University, a junior college created to accept Jewish students, among other ethnic minorities. There he took a chemistry major and graduated in 1939 (Asimov, 1994, p. 32).

Then Asimov tried to be admitted to a medical school but was rejected. That is why he applied to a Master's Degree program at Columbia University also in chemistry. Finally, he completed his studies in 1948 after he had obtained a biochemistry PhD. (Ibid, pp. 132-138).

This degree allowed him to enter the faculty of Boston University School of Medicine where he worked as a teacher until he decided to become a full-time writer due to his enormous popularity and demand of his many novels, short stories, and novelettes. In 1958, he left the University, and then it honored him by making him an honorary professor. In addition, in 1979 the Boston University made him a full-time professor of biochemistry (Asimov, 1994, pp. 87-93).

Asimov won more than a dozen annual awards for particular science fiction works and half dozen lifetime awards. He also received 14 honorary doctorate degrees from universities. Among them, the Special Hugo Award for "adding science to science fiction," the James T. Grady Award of the American Chemical Society, the Westinghouse Science Writing Award, The Nebula Award for Best Novel, the Hugo Award for Best Non-Fiction Book (Seiler and Jenkins, 2014, para. 17).

Four distinct awards have been named for the writer, chemist, and humanist Isaac Asimov (Ibid, para. 25):



- The Isaac Asimov Award for Undergraduate Excellence in Science Fiction and Fantasy Short Story Writing
- The Asimov Prize (Italian: Premio Asimov) for popular science books, edited in Italian language.
- The skeptical organization CSICOP created an Isaac Asimov Award, established in 1994 "to honor Asimov for his extraordinary contributions to science and humanity."
- The American Humanist Association created the Isaac Asimov Award.

1.1.2. Some Interesting Facts about Isaac Asimov

Here there are some interesting facts about Isaac Asimov as a writer and person (Ibid, para. 35):

- According to Asimov, Carl Sagan and Marvin Minsky were the only human beings he ever met whose intellect was superior to his own.
- Janet Asimov revealed that Isaac Asimov answered to an estimated of 90,000 letters from his fans. Also, she stated that giving autographs was an activity his husband enjoyed a lot.
- Asimov and Arthur C. Clarke had a "entente" which was a verbal contract in which Asimov would admit that, of the two of them, Clarke was the better science fiction writer. However, Clarke would instead admit that Asimov was a better Science writer than him.
- Isaac Asimov never learned to swim or to even ride a bicycle.
- He was credited on "Star Trek: The Motion Picture" as a "Special Science Consultant."
- Isaac Asimov's personal papers are archived at Mugar Memorial Library at Boston University. The papers take up 464 boxes, on 71 meters of shelf space.
- Asimov was the Vice President of Mensa International.
- An asteroid was named after him, the "5020 Asimov."
- A crater on the planet Mars, Asimov, was named in his honor.



- There is a science fiction magazine named after him called “Asimov’s Science Fiction.”
- In Brooklyn, there is an elementary school that has his name.
- A great paradox about the life of Asimov was that while his science fiction works dealt with interplanetary and galactic travels, he was very afraid of flying.

1.2 The Making of a Writer: Works, Influences, Style of Writing, and Resources

How does anybody make himself/herself a writer? This is not a question that can be answered by simply enlisting a few recommendations. As everything in life, this is absolutely relative. In Asimov’s case, it just seems he was born to write. In 1934, while attending Boys High School of Brooklyn, Asimov published his first story, *Little Brothers*, in the school newspaper when he was only fifteen years old. This was the beginning of an incredible writing career that encompassed hundreds of literary pieces, including books, novels, novelettes, and short stories. Additionally, he wrote approximately 90,000 letters as a response to the ones sent by his very own fans. It is also notable that, although he’s considered one of the best science fiction writers of all time, Asimov wrote many non-science fiction books. Following is a brief account of Asimov’s main works (Asimov, 1994, pp. 562-579).

- 38 science fiction novels, including but not limited to:
 - o The Robot series
 - o Galactic Empire novels
 - o Foundation saga
 - o Lucky Starr series
 - o Norby Chronicles
- 33 science fiction short stories collections
- 200 or so non-fiction books, including but not limited to:
 - o 24 books on general science
 - o 69 books on astronomy



- 17 books on chemistry and biochemistry
- 19 books on history
- 7 books on mathematics
- 22 books on physics
- 7 books on The Bible
- 9 books on humor and satire

Among the latter, he covered an ample number of themes. He devoted himself to writing about pure science as well as about history, religion, literature, humor, and environmental topics. One of the common elements in Asimov's science books is that he often explained science from its simpler days to where it became much more complex. He was very strict when it came to show nationalities and general information about the scientists he referred to. (Biblio, n.d., para. 2).

During the early years of his career as an author, he mostly published short stories in magazine. In fact, worldwide known books that he wrote like *I, Robot* and the *Foundation* trilogy, are none other than just a collection of short stories. His first hit novel, *The Naked Sun*, was not published until 1958, and his first nonfiction book was released in 1952. This last one was co-written with some colleges from the Boston University. (Asimov, 1994, pp. 149-157).

In 1982, he started writing science fiction again. He did so due to the petition of his fans and editorials to continue the *Foundation* and *Robot* sagas. That year, *Foundation's Edge* was published and was later followed by a sequel, two prequels to the *Foundation* trilogy, and two sequels for the *Robot* novels.

While there are no formulas to become a writer, something which is common to practically all prolific writers is that they were avid readers first. And Isaac Asimov loved to read. He liked the activity so much that he became a frequent member of a local public library at a very young age (Asimov, 1994, pp. 21-39).

He was a fast reader too, so he would read many books a week. When he was a child, Asimov recalled that he wanted to own a magazine stand to be



enclosed and read all day long. This desire appeared when he started reading the magazines of the candy store his family owned. Among all the magazines he started reading, he came across with pulp magazines (made up of cheap wood pulp paper). When science fiction magazines started to appear, he became interested in the topic. He became so obsessed with these science-based fictional stories that he started writing his own at the age of 11. However, it was not until he was 19 that he started selling them (Ibid).

Asimov (1979, p. 26), in *In Memory Yet Green*, describes the mistakes in his initial literary venture:

"I was trying to imitate the series books without knowing anything but what I read there. Their characters were small-town boys, so mine were, for I imagined Greenville to be a town in upstate New York. Their characters went to college, so mine did. Unfortunately, a junior-high-school youngster living in a shabby neighborhood in Brooklyn knows very little about small-town life and even less about college. Even I, myself, was forced eventually to recognize the fact that I didn't know what I was talking about."

In spite of many initial discouragements, Asimov continued to write. As mentioned before, his first published piece appeared in his high school's literary semiannual and was accepted because it was the only funny piece anyone wrote, and the editors needed something funny. In the summer of 1934, Asimov had a letter published in *Astounding Stories* in which he commented on several stories that had appeared in the magazine. His continuing activities as a fan brought him to the decision to attempt a science fiction piece of his own; in 1937, at the age of seventeen, he began a story entitled *Cosmic Corkscrew* (Asimov, 1979, pp. 69-72).

When he finished, *Cosmic Corkscrew*, on June 19, 1938, *Astounding Stories* had changed its name to *Astounding Science Fiction*. Its editor was John W. Campbell, who was a great writer himself and would become the mentor not only for Isaac Asimov, but also for Arthur C. Clarke, Robert Heinlein, Poul Anderson, L. Sprague de Camp, and Theodore Sturgeon (Ibid, pp. 73-75).



Fortunately, Campbell was a person who liked to help young writers and...

He had invited some of them to discuss their work with him, and when Asimov arrived he was shown into the editor's office. Campbell talked for over an hour and agreed to read the story; two days later Asimov received the manuscript back in the mail. It had been rejected, but Campbell offered extensive suggestions for improvement and encouraged the young man to keep trying. This began a pattern that was to continue for several years with Campbell guiding Asimov through his formative beginnings as a science fiction writer” (Encyclopedia of World Biographies, 2017, para. 6).

Since he started writing his works at a very young age, it is understandable that Asimov’s stories were at first rejected by many magazines and editorial houses until he approached the Astounding Science Fiction magazine which decided to give him an opportunity. Eventually, he published his first stories there, and the editor, John W. Campbell, became a close friend to him (Asimov, 1994, pp. 72-74). His first professionally published story, *Marooned off Vesta*, appeared in *Amazing Stories* in 1939 (Jenkins, 2014, para. 1).

Asimov and Campbell were so close in terms of friendship and professionally that Asimov recognized that his editor became his mentor. In fact, The Three Laws of Robotics, that made this author a worldwide known one, were outlined by Campbell. Isaac once stated that his editor came to the realization that robots in Asimov’s stories behaved as if they were under certain rules, then Isaac realized that that was in fact true and decided to write them down (Asimov, 1994, pp. 72-74).

In August, 1952, Asimov published *David Starr: Space Ranger*, which was a novel whose target audience were the youth. It was the first of his *Lucky Starr* novels. These were published under the pseudonym Paul French where the main character was David 'Lucky' Starr. He, the character, had a sidekick



named John Bigman Jones, a human born in Mars. Together they fought pirates, crazy scientists, and so on (Advameg, n.d., para. 10).

However, as a science fiction author, Asimov received his greatest popular and critical acclaim for the Foundation saga and his Robot series. The first was originally comprised of *Foundation*, *Foundation and Empire*, and *Second Foundation*. This trilogy describes the history of mankind in the Milky Way after a Galactic Empire, one that encompassed the whole galaxy, broke into many small, and often barbaric, kingdoms. On the other hand, his books about robots—most notably *I, Robot*, *The Caves of Steel*, and *The Naked Sun*—were important to the developing of science fiction by expanding the genre's traditional material. These books were rather revolutionary during the time they were written. Before Asimov, robots were portrayed as unintelligent creatures, similar to the Frankenstein creature, whose only purpose was to fight humans (Scott, 2011). Asimov created the standard for robots in science fiction; he gave them from human appearance to goals and complexity as characters. He even coined the term “robotics” which nowadays is a branch in engineering (Brown, 2012, para. 3).

Asimov's role on the field of science fiction was long and he dominated it. He introduced several innovative concepts into the genre, including the previously mentioned “Three Laws of Robotics.” Perhaps those are the main reasons he became a worldwide renowned author. In addition, although they gained general acceptance among readers and among other science fiction writers, Asimov did not feature them as an implacable system to behave robots. In fact, in his Robot stories, he often challenged them and showed the flaws they actually had. All in all, the laws became so popular that scientific organizations have analyzed them for Artificial Intelligence studies (Murphy & Woods, 2009, p. 14). Although this topic will be later expanded in Chapter IV.

Other of Asimov's most notable science fiction works is the "Foundation" series, which will be further explored in detail in the last chapter of this investigation. However, for the sake of properly introducing this saga, it can be said that this group of short stories, published in magazines during the forties and then collected into a trilogy in the early fifties, was inspired by Edward



Gibbon's *Decline and Fall of the Roman Empire*. This saga introduces fictional sciences, Psychohistory, a dystopian future, and a 1,000-year plan to save humanity from an extended period of barbarism.

During the 1950s and 60s, Isaac Asimov decided to take a break from writing science fiction and started a period of almost two decades where he wrote exclusively science. He did so because he was afraid that the Soviet Union was taking the lead in technological development, so his books were meant to “educate” the American people (Asimov, 1994, pp. 251-253).

In 1966, the World Science Fiction Convention honored them with a special Hugo Award as the best all-time science fiction/fantasy series, beating The Lord of Rings trilogy in the same category (The Hugo Awards, n.d., para. 7).

His contributions to the science-fiction genre were phenomenal, to the extent that many consider that it is appropriate to talk about science fiction before and after Asimov and his adherents. He has many characteristics that make him one of the best science fiction authors of all time. Some authors have stated that him alongside Robert A. Heinlein and Arthur C. Clarke are the “big three” or best science fiction authors of the Golden Age of Science Fiction (Asimov, 1994, pp. 140-141).

Having determined the unquestionable importance of Asimov as a unique writer, it is pertinent to establish whether he had a specific writing style. In this regard, controversy arises because more than one can argue that Asimov lacked a literary style. His characters were unidimensional; that is, they often did not have complexity in his personality, emotions, and motivations. The stories were told through exposition; in other words, characters would basically inform the reader what was happening by talking about events between each other. Sometimes places and societies were bland and uninteresting.

Although this is very true to many novels and short stories, many of which were written in his early years, Asimov proved that he could create exotic societies, complex characters, and interesting places in his stories. *Nemesis*, *The Naked Sun*, *Foundation's Edge*, *Forward the Foundation*, *The End of*

Eternity, among others, are examples of stories where the author proved he could be a traditional writer.

However, the field where this prolific author stands out and becomes unmatched, is in the sharing of interesting original ideas. Here are a few examples of revolutionary ideas:

- Although robots are not his original creation, he changed the way readers see these characters in science fiction. His approach made robots, the way we see them today, a standard one. This is why pre-Asimov robot stories would be barely understandable for a modern reader since they behave like erratic monsters rather than cold, logical, intellectual machines.
- The Three Laws of Robotics, a set of rules by which robots behave. Rules, however, that can be challenged and are not perfect.
- Psychohistory, a fictional subject that can predict the history of a society due to a profound study on socio-economic and political trends.
- Trantor, a planet which its entire surface is a continued huge city.
- Galactic Empire, an empire so big that it encompassed an entire galaxy. An idea later borrowed by George Lucas's Star Wars.

Image 2: Trantor.



Source: Jertsho, 2012.

- Mentalics, a group of people with high developed cognitive functions. They can control and influence other people's minds. An idea also borrowed by Lucas.



From the Foundation's Galactic Empire to Star Wars' Galactic Empire, from Multivac to Terminator's Skynet, among others, the influence of this author is everywhere in modern science fiction.

In spite of the fact that Asimov could be a conventional writer when he wanted to, people criticize him because he liked to give his stories complicated narrative structures, often by arranging chapters in non-chronological ways. In addition, authors criticize the narrowness of the plotline in his robot stories: Robot is created, it seems to disobey three laws, robot is chased and captured by humans, and misunderstanding is cleared up (Gunn, 1982, n.p.). His defenders, however, think that while for many authors this technique would not be successful, for Asimov it helped give birth to a new style of science fiction writing (Patrouch, 1974, n.p.). In short, Asimov's direct prose style is still a style, which is not a standard one, but works for his stories and their structures.

Finally, many critics, scientists, and educators believe Asimov's greatest talent was for popularizing or, as he called it, "translating" science for the lay reader. His many books on atomic theory, chemistry, astronomy, and physics have been recognized for their extraordinary clarity, and Asimov has been praised for his ability to synthesize complex data into readable, unthreatening prose. When asked about his prodigious output in such a wide range of fields, Asimov responded that he never had a thought that he did not write down (LoveToKnow Corp., 2017, para. 2).



CHAPTER II

A Brief History of Science Fiction

2.1 Defining Science Fiction

Even though authors like H.G. Wells and Jules Verne are considered to be arguably the most influential science fiction writers in history (Roberts, 2016, p. 9), the genre itself did not exist as such until the 1910s. Magazines specialized on the publication of science-based fictional stories marked the beginning of the genre and prepared the field for the beginning of the period known as the “Golden Age of Science Fiction” thirty years later.

Though to some authors science fiction’s origin can be traced back to at least two thousand years, it is in fact a relatively new form of literature (Franklin, n.d., para. 3). The term "scientist" was first used in 1840 while "science fiction" did not appear until 1851. The latter was coined by poet William Wilson as a way to define dramatized scientific stories, but it was immediately forgotten. It really was not established until the 1920s when several popular magazines picked the term up, one of them was *Amazing Stories*, a very most influential magazine from whose pages arose Isaac Asimov (Stableford, 2004: pp. 462-463), the author this study focuses on.

Before going deep into the history of this genre, it must be first defined what science fiction is. Although it might not seem like it, this could be really complicated due to differences in the real approach of the genre. To many, sci-fi could only be fantasy that happens to involve a few “scientific” elements. However, due to the fact that the word “science” is modifying “fiction”, it might be argued that a sci-fi story should have a strong emphasis on things that can actually be proved by scientists. Damien Broderick (1944, p. 155), defines this genre like this:

Science Fiction is that species of storytelling native to a culture undergoing the epistemic changes implicated in the rise and



supersession of technical-industrial modes of production, distribution, consumption, and disposal.

In this first approach, science fiction (SF) should strictly follow what science says; therefore, epic adventures like “Star Wars” must be considered fantasy movies. However, a second, less strict approach defines:

... science fiction as that branch of ‘fantastic’ or ‘non-realist’ fiction in which difference is located within a materialist, scientific discourse, whether or not the science invoked is strictly consonant with science as it is understood today. This means that faster-than-light travel (impossible, according to contemporary scientific orthodoxy) is a staple of science fiction, provided that such travel is rationalized within the text through some device or technology (Roberts, 2016, p. 2).

In short, there is no real definition to what can or cannot be considered science fiction. Although, Roberts (Ibid) says that there is...

...no single consensus on what SF is, beyond agreement that it is a form of cultural discourse (primarily literary, but latterly increasingly cinematic, televisual, comic book and gaming) that involves a world-view differentiated in one way or another from the actual world in which its readers live.

These different points of views make the searching for the origin of SF much more complicated. For the more orthodox approach, the genre cannot have appeared before the 19th century because that was the time where the term science actually appeared. On the other hand, a less strict definition would say that the genre’s origin can be tracked 2,000 back into the past during the Mesopotamian era (Scholes and Rabkin, 1977, p. 3).

The problem of defining science fiction is that many topics that are explored in modern day SF, like time travel, interplanetary warfare, among others, appear in epics that could be as old as two thousand years. This is why people might argue that the genre is as old as the oldest examples of this.



However, it should be noted that as time passed, many fantastic ideas from fantasy found their way to science fiction when they were able to get a scientific explanation. This change of focus from magic to science did not happen until the 1900s and on. As magazines and comic books began to arise, the atomic era and post-World War II inventions represented a new unexplored field where stories and characters could be explained not through some magical source but through science (Carter, 2010).

For example, if during the early 40s Green Lantern's¹ power came from a magical ring, after the atomic era, the character was redesign to make his ring a technological device from extraterrestrial origin.

In other words, one can make the case that ideas like immortality, space travel, time travel, flying machines, among others, do not belong to a literary genre but to human imagination. The way we explain those ideas makes the only difference. Jules Verne once wrote that "Anything one man can imagine, other men can make real." And that is truly the basis of science. As human civilization understands more about the world and cosmos that surrounds us, some ideas begin to be considered not as impossible as we, as a race, first thought. This really makes the line between fantasy and science fiction really thin.

2.2 The Evolution of the Genre along History

Since the limits between what is fantasy and what is fiction are somewhat opaque, and since the purpose of this investigation is to focus on the work of one of the greatest modern sci-fi writers – Isaac Asimov- and his period -Golden Age-, no great attention will be given to eras, authors, and books or stories other than the previously mentioned.

¹ A character featured in many comic books from DC Comics.

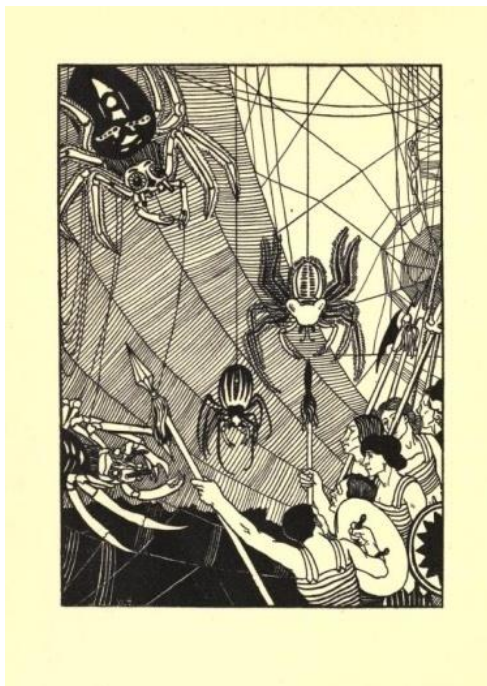
2.2.1 Ancient Precursors

As stated before, some authors argue that the origin of science fiction, or at least science fiction related elements, can be found in really old stories belonging to ancient civilizations. Although it is clear that these are fantastic stories that rely more on fantasy, they contain recurrent themes of modern science fiction like time travel, flying machines, among others (Roberts, 2016, pp. 22-30).

These are a few stories that many consider to be the roots of the genre and/or earlier examples of it:

- *Gilgamesh* (2000 BC): This Mesopotamian story is considered the very first example of science fiction. In this epic, themes like immortality are explored which is a topic typical of modern sci-fi adventures.
- *Rigveda*, (1700-1000 BC), a collection of Sanskrit myths. In one of them, a kind of mechanical bird with the ability of moving fast to outer space is described.

Image 3: A battle scene in *True History*.



Source: Aubrey Vincent Beardsley, 1894.



- *Mahabharata* (900-800 BC): A Hindu king named Kakudmi travels to the heavens only to discover upon his return that many decades have passed in his kingdom.
- *Ramayana* (600 – 500 BC): A Hindu adventure that features a type of flying machines called “Vimaana” that are used to travel through the stars, going under water, and wiping out cities with its power.
- *True History* (2nd century BC): A satire that describes a voyage to space, where characters would encounter alien forms, interplanetary wars are detailed, among other incredible elements found in nowadays sci-fi. Written by Lucian of Samosata, for many authors it is considered to be one of the earliest examples of a literary work within the science fiction genre (Fredericks, 1976, pp. 49-60).
- *The Tale of the Bamboo Cutter*, a 10th century story from Japan that tells the story of a princess who was born on the Moon but raised on Earth.
- According to Dr. Abu Shadi Al-Roubi (1982, n.p.), a medieval book called *Theologus Autodidactus*, by Ibn al-Nafis, is one of the earliest examples of science fiction due to elements like futurology, apocalyptic themes, among others.

In short, there are more stories featuring topics commonly used nowadays in the genre, but these are probably the most representative ones.

2.2.2 The Enlightenment and Science Fiction

The Enlightenment era was a movement which began in France and that started the ship of thinking from faith to reason. In other words, scientific discoveries and innovations motivated the thought that people should try to explain the world through religion but science.

During this time, thinkers created works of fiction that used the knowledge of that time to begin to develop their stories. This speculative science based stories were the basis for the actual genre than arose during later centuries.

Image 4: Cover book of *Utopia*.



Source: Los Angeles Archive, 2008.

Here are some of the most important works of this time that are related to science fiction (Sterling, 2017, para. 7):

- *Utopia* (1516) by Thomas More
- *New Atlantis* (1627) by Francis Bacon
- *The Dream* (1634) by Johannes Kepler
- *The Man in the Moone* (1638) by Francis Godwin
- *The Blazing World* (1666) by Margaret Cavendish
- *Guilliver's Travels* (1726) by Jonathan Swift²
- *Twentieth Century* (1733) by Samuel Madden
- *Micromégas* (1752) by Voltaire
- *L'an 2440* (1771) by Louis-Sebastien Mercier
- *Icosameron* (1788) by Giacomo Casanova

Just like the stories featured in "Ancient Precursors," the Enlightenment novels often used themes like spacecrafts, time travel, exotic civilizations, and so on. However, one of the most commonly used themes in this era was the existence of fictional perfect societies or "utopias."

² This novel predicted that Mars had two moons.



2.2.3 The 19th Century

This century built upon what previous authors did and began to switch more to science based stories. Early authors like Mary Shelley were among the pioneers of the new wave of proto-science fiction stories. Her 1818 book, *Frankenstein*, is one of the most influential literary works of all time. In fact, it single handedly created the stereotype of the “mad scientist” that we see in all forms of science fiction. From movies to books to television series, Dr. Frankenstein is a recognizable figure often imitated, never duplicated.

This author wrote two other very influential fictional works which are *The Last Man* (1826) and *Roger Dodsworth: The Reanimated Englishman* (1863). The former depicts a post-apocalyptic world where a plague has practically wiped out humanity. The latter consists of a 17th century man frozen in ice that was reanimated two hundred years later (Clute and Nicholls, 1993, p. 19).

Other notable proto-science fiction authors and works of the 19th century include (Clute and Nicholls, 1993, pp. 22-32):

- *Short Account of a Remarkable Journey into the Skies and Discovery of a New Planet* (1813) by Willem Bilderdik. This story depicts the creation of a sort of spacecraft to travel to space.
- *A Voyage to the Moon* (1827) by George Tucker
- *The Unparalleled Adventure of One Hans Pfall* (1835) by Edgar Allan Poe
- *Napoleon et la Conquete du Monde* (1836) by Louis Geoffroy. This is one of the earliest examples of a sub-genre within science fiction called “alternate history”. In this epic, Napoleon Bonaparte is able to conquer the entire world.
- *Orrin Lindsay’s Plan of Aerial Navigation* (1847) by John Leonard Riddell. This short story is an example of another sci-fi sub-genre called “hard science fiction” due to the fact that the author included formulas and scientific footnotes to his creation.
- *The Brick Moon* (1869) by Edward Everett Hale. The first ever work to explore the possibility of an artificial satellite.



- *The Coming Race* (1871) by Edward Bulwer-Lytton. It describes a underground civilization that has developed psychic powers.
- *The Case of Summerfield* (1871) by William Henry Rhodes. A book that was the first to introduce the idea of a weapon of mass destruction.
- *Erewhon* (1872) by Samuel Butler. The author develops a future where machines have become sentient and replace mankind.
- *The Sun* (1874) by Edward Page Mitchell. A short story that deals with topics such as invincibility, time travel, mutants, cyborgs, teleportation, and faster than light travels among others.
- *A Connecticut Yankee in King Arthur's Court* (1889) by Mark Twain
- *Land of the Changing Sun* (1894) by Will Harben. This tale develops a highly advanced civilization that inhabits the Earth's core and has created a metallic sun.

Although there were so many pioneer authors in this proto-science fiction era, none of them compare to the biggest authors of this century: Jules Verne and H. G. Wells. Both of them are still today considered two of the most influential writers of all time (Del Rey, 1980, p. 12). Their ideas and fame transcend science fiction and reaches all genres of literature.

2.2.3.1 Jules Verne and H.G. Wells

19th century writers were shacked in Europe by two giants of universal literature: Jules Verne and H. G. Wells. The former made a name of himself due to his incredible stories featuring ideas like travels to the moon, a sank continent, the core of the Earth, among others. The latter became universally praised for his socially critical stories that depicted complex and diverse societies (Roberts, 2016, p. 231).

Jules Verne's biggest master pieces are *Journey to the Center of the Earth* (1864), *From the Earth to the Moon* (1865), and *Twenty Thousand Leagues Under the Sea* (1869). There he combined dramatic plots, interesting characters, technology and incredible locations. The result was a tremendous



success. In fact, he became “the world's first full-time science fiction novelist” (Ibid).

On the other hand, Wells’ master pieces are *In the Time Machine* (1895), *The Island of Doctor Moreau* (1896), *The Invisible Man* (1897), and *The War of the Worlds* (1898). He provides more social commentary to his stories and develops concepts social Darwinism applied to very specific circumstances.

Although the two were big influences to pretty much all science fiction writers, the matter to the fact is that their stories revolve more around their characters and societies than in science based concepts.

2.2.4 The Early of the 20th Century and a Genre Finally Defined

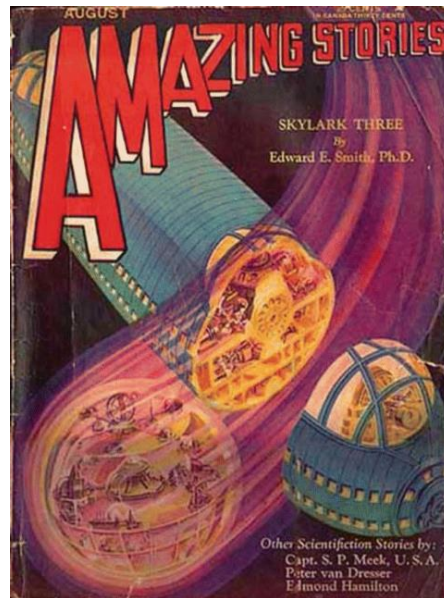
The start of the new century brought new authors that were directly and indirectly tackling the topic of mechanical inventions, flying ships, among other things. One of them was L. Frank Baum who wrote fourteen books associated to his World of Oz saga between 1900 and 1920. Although not science fiction per se, these books contained weapons and artifacts of artificial and mechanical origin. Anyhow, other important authors during these first decades include: Robert Hugh Benson and Edgar Rice Burroughs. The latter worldwide known for *Tarzan*, although his science fiction books include *Under the moons of Mars* (Clute and Nicholls, 1993, p. 24).

Big names and books aside, this century marks the beginning of science fictions as a well-defined literary genre. Furthermore, such an accomplishment was only possible due to the existence of “pulp magazines” or “the pulps.” These were published between 1896 and the 1950s. Cheap paper and, from 1926, science based stories is what made them different from other magazines (Stableford, 2004: p 462).

In the year previously stated, 1926, Hugo Gernsback founded a magazine named “Amazing Stories” which was the very first magazine to be dedicated exclusively to science based fictional stories. At first, Gernsback

chose the term “scientifiction” to describe the newly created genre, but the term almost immediately evolved to “science fiction.”

Image 5: Cover “Amazing Stories” magazine.



Source: Adam Roberts, 2002.

This very term, “science fiction,” was actually coined in the year 1851 by poet William Wilson as a way to define dramatized scientific stories, but it was immediately forgotten (Ibid). It was not established until several popular magazines, like *Amazing Stories*, *Weird Tales*, *Astounding Stories*, and *Wonder Stories*, picked the term up (Ibid: p 463).

The new form of entertainment became increasingly popular as years went by. Even though many critics did not consider this science based fictional stories as real literature, these science fiction stories became the basis of the genre. They established the style and structure a scientific speculation story must follow. Also, their mainstream appeal and distribution helped the public to become familiar with such content (Taormina, 2005, p. 35).



2.2.5 The Golden Age of Science Fiction: 1940s – 1950s

During the late 1930s, John W. Campbell became the editor of *Astounding Science Fiction* (formerly named *Astounding Stories*) where he mentored a group of young science fiction writers which was nicknamed “The Futurians” by fans of the magazine. Among the people that worked in this magazine, there were Damon Knight, Judith Merrill, Isaac Asimov, among others (Asimov, 1994, pp. 60-63).

Through text format, the science fiction genre was at its height not only due to Campbell and his “Futurians,” but also due to many contemporary authors like Robert A. Heinlein and Arthur C. Clarke. However, it was Campbell the one that outlined the style and structure a science fiction story had follow (Ibid, pp. 72-75). Since he mentored most of these young writers, he had a great influence over their writings and the quality he expected out of them. Asimov (1981, p. 177-178) referred to him as, “we were extensions of himself; we were his literary clones.”

When talking about the Golden Age, Roberts (2016, p. 195) says, “... the phrase valorizes a particular sort of writing: hard SF, linear narratives, heroes solving problems or countering threats in a space-operatic or a technological-adventure idiom.”

Authors like Isaac Asimov, Arthur C. Clarke, and Robert A. Heinlein published revolutionary stories that helped science fiction to become serious fiction due to adventures that would amaze and inspire the common public. This was especially true among teenagers (Taormina, 2005, p. 47). In addition, these three authors are considered the “Big Three” of science fiction, or at least from the Golden Age.

Although this era had many of the best science fiction writers of all time, for readers three were the most relevant ones. Their ideas, stories and works were respected, innovative, and became the standard for the genre. Nonetheless, the title was informal while commonly used by science fiction fans.



Some important novels published during this time include:

- *The Roads Must Roll* (1940) by Robert A. Heinlein
- *Nightfall* (1941) by Isaac Asimov
- *The Martian Chronicles* (1950) by Ray Bradbury
- *I, Robot* (1950) by Isaac Asimov
- *Foundation* (1951-1953) by Isaac Asimov
- *Childhood's End* (1953) by Arthur C. Clarke
- *The Nine Billion Names of God* (1953) by Arthur C. Clarke
- *Fahrenheit 451* (1953) by Ray Bradbury
- *I am Legend* (1954) by Richard Matheson
- *The Caves of Steel* (1954) by Isaac Asimov
- *The End of Eternity* (1955) by Isaac Asimov
- *Starship Troopers* (1959) by Robert A. Heinlein

2.2.5.1 The Golden Age in Movies and Television

The influence the genre acquired due to the magazines was notorious in and out the written format. In text form, science fiction became a well-defined literary genre and began to spread to radio, television, comic books, and so on.

Films like *Destination Moon* (1950), *The Thing from Another World* (1951), *The Beast from 20,000 Fathoms* (1953), *Them!* (1954), *This Island Earth* (1955), *Invasion of the Body Snatchers* (1956), *Forbidden Planet* (1956), *It! The Terror from Beyond Space* (1958), *Journey to the Center of the Earth* (1959), *The Time Machine* (1960), among others, were films that are considered classics of the science fiction genre, although their acting and plots often do not compare to the stories featured in SF magazines. In addition, many of these stories were based on writings by many of Campbell's pupils or even the editor himself. Just to cite a few examples, *Them!* and *Invasion of the Body Snatchers* were based on novels by Frank Finney while *The Beast from 20,000 Fathoms* was an adaptation of a short story by Ray Bradbury.

Furthermore, TV and radio became also the hosts for SF. A British TV show called *The Quatermass Experiment*, which run in 1953, was broadcasted

in the US and the UK. It is one of the earliest examples of SF coming to the small screen (Taormina, 2005, p. 47). People's interest for the genre created a collective interest for extraterrestrials, spacecrafts, and so on. This led to a massive hysteria on October 30th, 1938 when people believed Orson Welles's radio adaptation of *The War of the Worlds* to be real.

Image 6: Orson Welles broadcasting the War of the Worlds on CBS Network 1938.

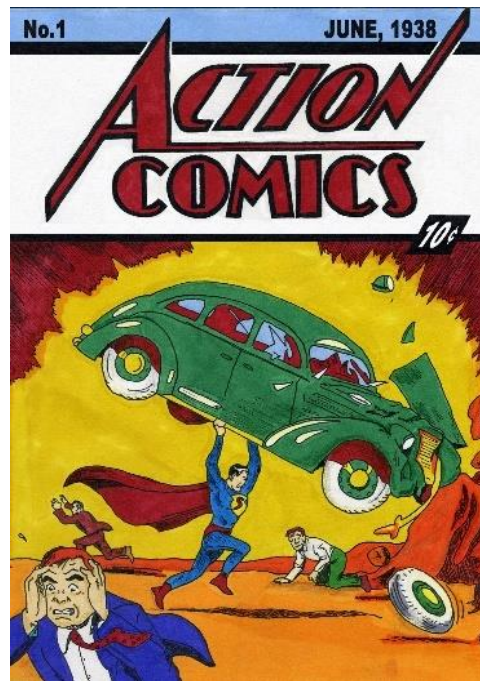


Source: Pinterest, 2014.

If television, books, and movies were not enough, during the Golden Age, a different form of media arose into popularity due to its influx of SF stories and characters: Comic books.

June of 1938 marks the beginning of the superhero genre. The first issue of the stories featuring *Superman* became so popular that immediately copy-cats started to appear, and thus the market of comic books superheroes was born.

Image 7: First issue of Superman.



Source: Comic Vine, 2017.

Although very popular, this comic books lacked the intricate characterization, story arcs, and social commentary that comic books have nowadays. Characters like the previously mentioned *Superman*, *Batman*, and *Wonder Woman* were born during this time and became icons of popular culture.

2.2.5.2 The End of an Era

The decline of the Golden Age began after World War II, but it was during the 1960s where it definitely ended. This happened due to new inventions, new magazines, and a new offspring of writers that began to write in a style outside the one Campbell established (Taormina, 2005, p. 46).

There were really several factors that contributed to the “end” of this particular era. Although some might argue that it never actually ended (Roberts, 2016, p. 232), the differences in tone and writing style are different between Golden Age writers and those that came during the 1960s and 70s.



One of the most important reasons was that authors and audiences were tired of the puzzle-oriented and idea-based nature of the stories. When new authors came to the scene, they left behind the direct and hard SF stories to focus more on world building. All in all, the genre became less about scientists solving a scientific puzzle and more about heroes battling great evils in rich complex worlds. This new story, featured also in new magazines like *Galaxy*, eclipsed the Golden Age ones (Asimov, 1994, pp. 253).

In addition, authors like Isaac Asimov decided to leave SF and write science books as a way to “educate” the American people due to a fear that the Soviet Union would surpass the United States of America technologically. However, they also left the field because they considered that their writing style had become obsolete (Ibid, pp. 252-253). Even though this is true for Asimov, he eventually adapted his writing style to the new conventions and returned to write science fiction again.

2.2.6 The New Wave: 1960s and 1970s

As it was stated previously, the end of the Golden Age era occurred due to several factors. In addition, many big authors of that period stopped producing science fiction and, like in Asimov’s case, started writing science books almost exclusively. This left the ground fertile for a new “wave” of authors to build upon what have been done in the previous years.

The term “new wave” basically defines a group of authors that started writing outside the Campbell style as a result of genre’s exhaustion. They focused less on hard SF, stories with a scientific basis, and focused more on complex and interesting characters, locations, and so on. This in an attempt to improve and stylize more the genre (Roberts, 2016, p. 231).

Key titles written during this era include:

- *New Maps of Hell* (1960) by Kingsley Amis
- *Stranger in a Strange Land* (1961) by Robert A. Heinlein
- *Clockwork Orange* (1962) by Anthony Burgess



- *Planet of the Apes* (1963) by Pierre Boulle
- *Dune* (1965) by Frank Herbert
- *Giles Goat Boy, or the Revised New Syllabus of George Giles Our Grand Tour* (1966) by John Barth
- *Lord of the Light* (1967) by Roger Zelazny
- *2001, A Space Odyssey* (1968) by Arthur C. Clarke
- *The Gods Themselves* (1972) by Isaac Asimov
- *Rendezvous with Rama* (1973) by Arthur C. Clarke
- *Time Enough for Love* (1973) by Robert A. Heinlein

A big difference between books from the Golden Age and the New Age is that the ones released during the latter were huge hits. One particular example is Frank Herbert's *Dune*. Even today, it still is the highest selling science fiction novel of all time (Kunzru, 2015, para. 4). Although its sequels did not obtain the same critical nor commercial success, its contribution to the genre was massive.

In 1977, due to the massive success of *Star Wars*, and its successors, people finally stopped the debate about the proper style in which SF should be narrated (Ibid, p. 196). Previous films like *Metropolis* (1927), *The Day the Earth Stood Still* (1951), *Alphaville* (1965), Kubrick's *2001: A Space Odyssey* (1968), and so on were first approaches of science fiction to the seventh art. However, it was George Lucas's film the one that obtained not only critical acclaim, but also a commercial success. Thus, marking the beginning of SF as a defined genre in filming.

Both *Dune* and *Star Wars* borrowed from ideas already in science fiction, i.e., Asimov's Galactic Empire, and improved them to a level not seen before. While Golden Age stories focused more on linear structures, bland characters and interesting scientific based ideas to solve one time problems. New Wave stories, like the mentioned before, decided to create space soap operas with complex worlds, characters, and plots. Their science fiction element was just a complement rather than the main focus on them.



Although not completely disappearing from the genre, many Golden Age authors like Clarke and Asimov reduced significantly their literary production. Others like Heinlein expanded his horizons and explored themes like sexuality, libertarianism, free speech among others.

Comic books also had a huge change during this “second” SF revolution. Although its change was way more dramatic, Golden Age stories and characters were too simplistic, lacked purpose, and social commentary. It was during the 1960s and on, the so called “Silver Age of Comic Books” (Carter, 2010), that this media reinvented superheroes. If before they only focused on fighting bank robbers and Nazis, now they would focus on fighting drugs, governmental abuse, and corrupt politicians, among other things. The superheroes themselves became more human with flaws, personalities, weaknesses, and, in some cases, even addictions.

2.2.7 New Media, The 1980s and On

Since *Star Wars*, science fiction TV shows and the dawn of video games, writers started to struggle in reaching the same audience. Public’s attention went from text to visual representations, although the number of SF writers increased and sci-fi novels were released in higher numbers than ever before.

Some important and relevant titles during this time include:

- *Thousand Worlds Universe* (1971-1986) by George RR Martin
- *Ridley Walker* (1980) by Russell Hoban
- *Foundation’s Edge* (1982) by Isaac Asimov
- *2010: Odyssey Two* (1982) by Arthur C. Clarke
- *The Book of the New Sun* (1980-1983) by Gene Wolfe
- *Startide Rising* (1983) by David Brin
- *Neuromancer* (1984) by William Gibson
- *Sin of Origin* (1987) by John Barnes
- *Doomsday Book* (1992) by Connie Willis
- *Hunger Games* trilogy (2008-2010) by Suzanne Collins



All in all, even though science fiction novels and comic books struggled to reach the numbers they got during previous decades, science fiction movies, TV shows, and video games were increasingly becoming popular. *Star Wars* and *Star Trek* became instant classics of filming and, to them, others followed like the *Alien* saga, *The Terminator*, *Predator*, James Cameron's *Avatar*, *The Matrix*, *Madmax*, *Blade Runner*, *E.T. The Extra-Terrestrial*, *Back to the Future*, and so on. To this must be included the entire superhero sub-genre that since 2005's *Batman Begins*, produces most of the highest grossing box office movies per year.

Among video games, there are a lot of examples and early representations of science fiction dating back to the 1970s. But for the sake of the investigation, the list products in this media is going to be kept short. Furthermore, some of the highest selling and critically acclaimed video game franchises, to focus on science fiction, are: *Metal Gear Solid*, *Deus Ex*, *Halo*, *Metroid*, *Mass Effect*, *Call of Duty*, *Splinter Cell*, *StarCraft*, *Doom*, *Quake*, *Bioshock*, *Portal*, *Half-Life*, *Gears of War*, *System Shock*, *Fallout*, *Metro*, *Horizon Zero Dawn*, among others.

Finally, it is worth noting that very important brands, like *Star Wars*, are transmedia; that is, they are present in many forms of media. For example, Lucas's creation produces, or has produced, novels, comic books, TV shows, video games and, of course, films.



CHAPTER III

Pinpointing the Science Fiction Genre: Its Literary Characteristics

3.1 Defining Genre

Science fiction is a literary genre that was created by the necessity of telling stories based on factual information. It distances itself from other genres where the driven narrative forces are supernatural and inexplicable. Also, as explained in previous chapters, this genre can track its roots in Ancient Greece and advance up until the beginning of the 20th century where it took a well-defined form.

This chapter will deal with the conception of genre and what makes science fiction be different from others. In addition, the characteristics of a SF story will be explored to understand it better. Therefore, even though the previous chapter explained why the genre could be difficult to define and showed many interpretations of it, for the sake of making things more understandable, a basic concept will be given about what it is meant by SF.

Science fiction, abbreviation SF or sci-fi, a form of fiction that deals principally with the impact of actual or imagined science upon society or individuals. The term science fiction was popularized, if not invented, in the 1920s by one of the genre's principal advocates, the American publisher Hugo Gernsback. The Hugo Awards, given annually since 1953 by the World Science Fiction Society, are named after him. These achievement awards are given to the top SF writers, editors, illustrators, films, and 'fanzines' (Encyclopedia Britannica, 2017, para. 3).

On the other hand, genre is the group of elements in a work of literature that readers expect when they pick a book. Since humans are very different and



tastes are wide, literature has many genres, and these also have sub-genres than expand, explore or pushes the boundaries of existing conventions.

According to some authors, there are four main literary genres: poetry, drama, fiction, and nonfiction (Pearl, 1999, p. 7). However, for the purpose of this research, only fiction and nonfiction will be considered since they represent the majority of literary production nowadays.

3.1.1 Fiction and Nonfiction

Nonfiction, as its name reveals, is a literary genre that it is based on real information. Within this genre authors gather real information and present it in a logical and structured way. Depending on the intention, or genre, the information might convey one or many purposes (Saricks, 2001, p. 12).

Culler (2000, p. 31) expresses that:

Non-fictional discourse is usually embedded in a context that tells you how to take it: an instruction manual, a newspaper report, a letter from a charity. The context of fiction, though, explicitly leaves open the question of what the fiction is really about. Reference to the world is not so much a property of literary [i.e. fictional] works as a function they are given by interpretation.

Some common genres in nonfiction are (Terrace, 2014, para. 2):

- Academic book: A literary work created after much research and with different purposes.
- Biography, Autobiography, memoir: Focused on telling the life of a person.
- Essay, paper: A small research that reflects a specific point on a topic that an investigator wants to make.
- Journal, diary, chronicles: A day by day sequence of events written down as they happen.
- Journalism: Different ways in which journalist present information. Whether it is a small piece of news or a big research.



- Report: It is a compilation of information on a specific subject and under specific requirements.
- Speech: Public address or discourse of any kind.

Fiction of course is the creation of a person based on its own thoughts, inspirations, personal experiences, imagination, and so on. This makes fiction a genre that can basically explore anything. From *urban legends* to *romance* to *fantasy* to *alternative history* to *suspense*, it can relate to anyone everywhere. From the early days of the *myth* when our ancestors tried to explain the world using their imagination to the atomic era when new inventions pushed out the limits of our very perception of the cosmos, fiction has always been present.

Some common genres of fiction are:

- Epics: Literary works that have become the basis of all fiction. This usually belong to Greek, Roman or other ancient civilizations.
- Fan Fiction: As the name states, works created by fans of another fictional world.
- Fantasy: Fiction showcases impossible or improbable things like talking animals, wizards or invented creatures, i.e., Trolls.
- Horror/Suspense/Thriller: Works that try to provoke suck emotions in their readers.
- Myths, legends and folklore: Stories that date from unknown times and that were spread from mouth to mouth and generation to generation until they were finally written down.
- Mystery/Crime: Often involving the police and ingenious murder cases.
- Romance: It could refer to medieval epics, or to novels written in western countries which focuses on romantic situations.
- Science Fiction: Invented stories that are based on scientific principles.



3.2 Characteristics of the Science Fiction Genre

Since science fiction has already been defined in chapter III and at the beginning of this one, this research will continue with its characteristics as a genre of fiction. Although it is hard to describe all the characteristics of all stories within SF, including its subgenres, it is possible to define the characteristics that are common to at least the majority of them (Janovsky, n.d., paras. 8-10).

1. Creating a World

Early sci-fi stories had two main characteristics, as Isaac Asimov (1994, p. 252), Golden Age SF stories were “idea-based” and “puzzle-oriented.” This means that back then, writers focused more on establishing a big problem for the main characters to resolve in an ingenious way. However, these were often one-time characters, and their worlds usually were never actually visited again by the same author. There are only a few examples of early world building during this period, one of them being Isaac Asimov’s Foundation saga.

However, since the advent of Frank Herbert’s *Dune*, a bigger effort was put on world building; that is, creating a world and a story so complex that might take many sequels to cover. In such sagas, planets, races, civilizations, and characters would have their own history within the franchise “canon,” and even the single most insignificant character might have a back story that makes them interesting.

2. Non-Human Characters

One important aspect of SF is the inclusion of characters that are as different as possible from humans. These can be robots, extraterrestrial species, monsters, interdimensional beings, time travelers, and so on. In addition, their role can be as lead or supporting characters, “good” guys or villains.



Here are a few examples of portrayals of these characters:

- Robots in Asimov's stories are mankind protectors while in James Cameron's, *The Terminator*, are the destructors of humanity.
- Series like *Battlestar Galactica*, *Star Wars*, *Dune*, and *Star Trek*, just to name a few, feature extraterrestrial characters in different factions and can be either heroes or villains.
- 1950s and 60s *B* science fiction movies often portrayed huge creatures as villains. For example, *The Beast from 20,000 Fathoms* (1953) features a monster from the age of the dinosaurs that awakens to destroy cities in the US. On the other hand, a very similar creature, but that is portrayed as a hero, is Godzilla. This one debuted in 1954's Japanese movie *Gojira*.
- *Sliders* (1995-2000) was a popular TV Show that featured interdimensional travel as the main focus of the story. Another series that explores this topic is Adult Swim's hit series *Rick and Morty* (2013-present).
- Time travel stories have been a recurrent topic in fiction. Just to name a few examples there are: Mark Twain's *A Connecticut Yankee in King Arthur's Court*. H.G. Wells' *The Time Machine*, and Robert Zemeckis's *Back to the Future* trilogy.

Although works of fantasy often also include a wide variety of non-human characters like trolls, orcs, fairies, dragons, elves, dwarfs, giants, cyclops, centaurs, among others, their main difference from the ones in SF is that their origin is magic, and thus, they cannot be really explained from a scientific point of view.

3. Social Commentary

Science Fiction, like all forms of fiction, often shares a comment or position in our own society. Dystopian and post-apocalyptic stories are recurrent themes in SF. Most of them seem to warn readers how our species might end if headed to the wrong direction.



1968's *Planet of the Apes* has one of most famous plot twists in the cinema. Moreover, its meaning conveys the notion that humans caused their own destruction due to nuclear weapons. Isaac Asimov's *Pebble in the Sky* (1950) tells the story of the final years of life on Earth as humans have reduced it into a radioactive wasteland.

Furthermore, more than one person who has read Asimov's *Foundation* might get the thought that maybe our own society is in decadence and that a decline is near. 1927's cult classic, *Metropolis*, narrates the struggle of a working class which is forced to live underground while the upper class enjoys the sun and the advancements in technology on the surface.

However, other topics have also been explored in SF along the years: Racial discrimination, overpopulation, pollution and the destruction of nature, the quest for immortality, the creation of Artificial Intelligence and its ramifications, among others.

For example, Neill Blomkamp's 2009 movie *District 9* and Ridley Scott's *Blade Runner* (1982), explore themes like racism and segregation from humans towards an alien species that sought refuge on Earth for unknown reasons, and human-engineered beings respectively. *The Terminator* (1984), *The Matrix* (1999), and Asimov's *I, Robot* (1950), deal with the consequences of creating AI's. *The Day the Earth Stood Still* (1951) and James Cameron's *Avatar* (2009) deal with themes like pollution and exploitation of natural resources.

4. Science and Technology

It would be ludicrous to talk about science fiction without any direct reference to science. Even though technology is not always the main focus of SF stories, it has to be portrayed in one way or another. Science is at the core of the genre. In fact, it is the essence of these epics.

One thing is true, though. Often technology becomes an interesting aspect on a SF chronicle, but it is not the reason that readers become amused at these



worlds. It is the way how the author blends it to their characters, worlds, and stories that really attracts the audience.

3.3 Science Fiction Subgenres

There are literally dozens of subgenres in science fiction, not only due to the wide variety of themes that this genre encompasses, but also due to the fact that many subgenres can be combined into one. In fact, SF can be merged to other fiction genres like horror, suspense, romance, among others.

However, this research will only focus on the sub-genres that are considered to be the most representative and important. However, it is worth noticing that the following list does not cover all the subgenres that can be catalogued within SF.

There have been many subdivisions of the genre of science fiction from the point of view of a particular theme that is consistent throughout a given literary work. These subdivisions some times are so deep that some could argue that there are sub-genres within sub-genres. Since a minute subdivision of the genre will fall out of the scope of this investigation, only a broad account of its subgenres will be given here, in the hope that it will suffice.

3.3.1 Alternate History

What if the Axis Powers actually won WW II? What if JFK was not killed? Alternative history is a subgenre that it is constructed around questions like those. People often while reading history books realize that very little events started a chain reaction that had huge consequences on the entire planet, so it would be adequate to ask the question, *what if this particular event had been different?*

One particular relatively small event that had a big impact on Earth was the murder of Archduke Franz Ferdinand, the heir to the Austro-Hungarian Empire. This event caused that country to declare war on Serbia which in turn



caused other countries -Germany, Russia, the United Kingdom, France, the Ottoman Empire- to take a side and declare war on each other. Had Franz Ferdinand not being killed, probably Europe and the world might have been different from what we know today.

Another big example would be the rise of Napoleon Bonaparte. Even though he was ultimately defeated, he played a big role in European geopolitics. For instance, his decision to dissolve the nine-century-old Holy Roman Germanic Empire led to dramatic events that ended up with the rise of the German Empire and, eventually, the Third Reich.

Some examples of alternative history stories include:

- *History of the Universal Monarchy: Napoleon and The Conquest of The World* (1836) by Louis Geoffroy
- *A Connecticut Yankee in King's Arthur Court* (1889) by Mark Twain
- *Fatherland* (1993) by Robert Harris
- *The Man in the High Castle* (1962) by Philip Dick

3.3.2 Apocalyptic and Post-Apocalyptic

This type of SF deals with the end of human civilization due to a specific, sometimes self-inflicted, catastrophe. Nuclear war, a pandemic, climate change, a meteor, an alien invasion, among others.

Sometimes the story is entirely focused on the end of civilization or the attempts of mankind to prevent it. When this occurs, then it is an apocalyptic tale. Some examples include:

- *The War of the Worlds* (1898) by H.G. Wells
- *Nightfall* (1941) by Isaac Asimov
- *Pebble in the Sky* (1950) by Isaac Asimov
- *Childhood's End* (1953) by Arthur C. Clarke
- *Earth vs. Flying Saucers* (1956) directed by Fred F. Sears
- *Night of the Living Dead* (1968) directed by George A. Romero
- *Armageddon* (1998) directed by Michael Bay



- *Deep Impact* (1998) directed by Mimi Leder
- *The Day After Tomorrow* (2004) directed by Roland Emmerich

On the other hand, a recurrent topic in SF is the life of humans after the end of civilization. These are post-apocalyptic stories. A few examples of this type of stories include:

- *The Scarlet Plague* (1912) by Jack London
- *Foundation* saga (1942-1993) by Isaac Asimov
- *I am Legend* (1954) by Richard Matheson
- *Planet of the Apes* (1963) by Pierre Boulle
- *The Stand* (1978) by Stephen King
- *Mad Max* (1979) directed by George Miller
- *28 Days Later* (2002) directed by Danny Boyle
- *The Hunger Games* (2008-2010) by Suzanne Collins

3.3.3 Dystopian Science Fiction

This sub-genre deals with the depiction of dysfunctional societies. From corrupt leaders to segregation to post-apocalyptic worlds, dystopian stories represent a wide number of ideas where one of the main characteristics is that humans have lost their humanity in many senses.

These stories often overlap not only with the post-apocalyptic subgenre but also with social science fiction. This is due to the fact that they are charged with a deep commentary on real world things like mega-corporations, totalitarian governments, religious oppression, social conflict, among others.

Some examples of this subgenre include:

- *The Time Machine* (1895) by H. G. Wells
- *The Trial* (1925) by Franz Kafka
- *Metropolis* (1927) directed by Fritz Lang
- *The Caves of Steel* (1953) by Isaac Asimov
- *Fahrenheit 451* (1953) by Ray Bradbury
- *Forbidden Planet* (1957) directed by Fred M. Wilcox



- *A Clockwork Orange* (1962) by Anthony Burgess
- *Westworld* (1973) directed by Michael Crichton
- *Akira* (1988) directed by Katsuhiro Otomo
- *The Matrix* (1999) directed by The Wachowski Brothers

3.3.4 Hard Science Fiction

This subgenre focuses more on science and less on world or story building. Often hard science stories are very strict on including things that are scientific and possible to explain. This subgenre was the original, and only, way of portraying SF stories during the Golden Age.

Some examples include:

- *Metropolis* (1927) directed by Fritz Lang
- *I, Robot* (1950) Isaac Asimov
- *The Rolling Stones* (1952) by Robert A. Heinlein
- *Mission of Gravity* (1953) by Hal Clement
- *A Fall of Moondust* (1961) by Arthur C. Clarke
- *2001: A Space Odyssey* (1968) directed by Stanley Kubrick
- *Blade Runner* (1982) directed by Ridley Scott
- *Jurassic Park* (1990) by Michael Crichton
- *The Mars* trilogy (1992-1996) by Kim Stanley Robinson
- *Gattaca* (1997) directed by Andrew Niccol
- *Gravity* (2013) directed by Alfonso Cuarón
- *Europa Report* (2013) by Sebastian Cordero
- *The Martian* (2015) by Ridley Scott

3.3.5 Kaiju

Genre that portrays gigantic creatures either as villains or heroes of the story. Kaiju are often the former, though. One of the most representative examples on this subgenre is *Godzilla*, also known as the “king of the monsters.” Also, kaiju is a kind of science fiction more popular in movies.



Some examples include:

- *King Kong* (1933) directed by Merian C. Cooper and Ernest B. Schoedsack
- *The Beast from 20,000 Fathoms* (1953) directed by Eugène Lourié
- *Gojira -Godzilla-* (1954) directed by Ishiro Honda
- *Mothra* (1961) directed by Ishiro Honda
- *King Ghidorah: The Three-Headed Monster* (1964) directed by Ishiro Honda
- *Pacific Rim* (2013) directed by Guillermo del Toro

3.3.6 Action Science Fiction

This subgenre takes the same approach of action movies only with a heavy emphasis on futuristic technology. Although not very prominent in written form, this subgenre is very popular in films. Furthermore, big action set pieces are featured alongside strong lead protagonists. Characters like *Sarah Connor* and *Ellen Ripley* have become icons of popular culture and helped to establish the archetype of a main SF action hero.

In addition, these types of movies have pushed the boundaries of special effects. Since the main characters often have to face big challenges and powerful enemies, these movies also require big budgets to accomplish their goals. From the creation of fictional monsters, like in *King Kong* (1933), to the exotic world of *Avatar* (2008). The combination of practical effects and “computer generated images” (CGI) have amazed audiences since the dawn of cinema.

Some examples of sci-fi action movies include:

- *King Kong* (1933) directed by Merian C. Cooper and Ernest B. Schoedsack
- *Starship Troopers* (1959) by Robert A. Heinlein
- *Aliens* (1986) directed by James Cameron
- *Terminator 2: Judgment Day* (1991) directed by James Cameron



- *Men in Black* (1997) directed by Barry Sonnenfeld
- *I, Robot* (2004) directed by Alex Proyas³
- *Transformers* (2007-present) produced by Michael Bay

3.3.7 Horror Science Fiction

Often presenting characters facing strange monsters and bizarre creatures, this subgenre capitalizes on the very same horror film tropes modeled by master minds like Edgar Allan Poe, H.P. Lovecraft, Stephen King, and Alfred Hitchcock, just to name a few.

This is one of the most recurrent subgenres of science fiction. Since fear is one of the strongest emotions, horror tends to exploit this feeling towards the unknown. That is why it blends so well with science fiction. Some common themes in these stories are: alien conquerors, killer robots, huge monsters that destroy cities, plagues that destroy mankind, strange planets, and so on.

In addition, although very popular in written form, horror was never one of the most common subgenres. In motion pictures, however, was one of the most exploited type of movies. Movie Studios, during the 1960s and 70s, would finance *B*, i.e., low budget films that would be easy to produce.

Some sci-fi horror stories include:

- *Frankenstein* (1818) by Mary Wollstonecraft Shelley
- *The War of the Worlds* (1897) by H.G. Wells
- *The Thing from Another World* (1951) directed by Howard Hawks and Christian Nyby
- *Invasion of the Body Snatchers* (1956) directed by Don Siegel
- *Plan 9 from Outer Space* (1959) directed by Ed Wood
- *Alien* (1979) directed by Ridley Scott
- *The Mist* (1980) by Stephen King
- *Galaxy of Terror* (1981) directed by Bruce D. Clark
- *The Terminator* (1984) directed by James Cameron

³ Loosely based on the Isaac Asimov book of the same name.



- *Predator* (1981) directed by John McTiernan
- *The Blob* (1988) directed by Chuck Russell
- *Under the Dome* (2009) by Stephen King

3.3.8 Social Science Fiction

These types of stories provide social commentary on our own civilization and tend to establish a parallel to our own world. Social conflict, pollution, social segregation, and other forms of discrimination are just a few examples of the topics social science fiction focuses on. Also, it has often been termed as soft science fiction because it usually focuses more on speculation about humanity and less on scientific accuracy.

Some examples of social science fiction include:

- *The Time Machine* (1895) by H.G. Wells
- *Metropolis* (1927) by Fritz Lang
- *If This Goes On—* (1940) by Robert A. Heinlein
- *Nightfall* (1941) by Isaac Asimov
- *Beyond This Horizon* (1942) by Robert A. Heinlein
- *Foundation* (1951) by Isaac Asimov
- *Fahrenheit 451* (1953) by Ray Bradbury
- *Avatar* (2008) directed by James Cameron
- *District 9* (2009) by Neill Blomkamp
- *Chappie* (2015) by Neill Blomkamp

3.3.9 Space Opera

Just like a fairy tale, an epic, or a soap opera, from which takes its name, it is a subgenre that focuses on heroes facing strange and powerful enemies, romance among main characters, and a complex universe. Main characters would usually be “the saviors of the galaxy” and enemies would be characters featuring supernatural powers or in possession of weapons of mass destruction.



Stories like George Lucas's *Star Wars* (1979) are a blend of fantasy and science fiction. Luke Skywalker's tale is the archetype story that is featured in fantasy epics. A farmer discovers that he possesses supernatural abilities (the force) and sees himself involved in an adventure to save a princess (Leia), while facing an evil wizard (Darth Vader). In fact, the beginning titles of the motion picture resemble a fairy tale, "In a galaxy far far away..."

Other space operas, however, are less heavy on fantasy tropes and focuses more on realistic characters and politics. Epics like *Star Trek* (1966) and *Battlestar Galactica* (2004) are closer to what mankind might be in the future. Not only do they try to show realistic relationships between humans and alien races, but also focuses more on science fiction. While "the force" cannot be really explained by science, the artifacts and science featured on *Star Trek* are plausible.

A very interesting approach to space operas is Frank Herbert's *Dune* (1965). It deals with humans in a feudal-like society. A powerful empire is featured with a social and political structure that resembles the Middle Ages where noble houses would fight, for absolute power, the rest of the nobility. Such complex world resembles a lot J.R.R. Tolkien's "*Middle Earth*" books and novels.

However, the basis for all these space operas was Isaac Asimov's *Foundation* books and, in turn, Asimov's inspiration was the Roman Empire and its long history and complex structure.

Some examples of space operas sagas, including books, TV shows, and movie pictures, are:

- *Foundation* (1942-1999) created by Isaac Asimov
- *Dune* (1965-2007) created by Frank Herbert
- *Star Trek* (1966-present) created by Gene Roddenberry
- *Star Wars* (1979-present) created by George Lucas
- *Stargate SG1* (1994-2011) created by Dean Devlin and Roland Emmerich
- *Battlestar Galactica* (1997-2010) created by Glen A. Larson



3.3.10 Superhuman/Superhero

Superhuman stories are very popular nowadays, especially in movies and TV series. Although some stories in this subgenre might be outside of what is considered “superhero” i.e., *The Invisible Man* (1897) by H.G. Wells, the latter are the most common adventures audiences would find.

DC and Marvel are the most important editorials in the superhero genre. Batman, Superman, Spiderman, Wonder Woman, The Flash, the X-men, Iron-Man, Captain America, Hulk, among others, are pop culture icons and have become brands in their own. These characters are worldwide recognized and have been featured in comic books, TV shows, films, novels, radio shows, among others.

3.3.11 Time Travel

One of the characteristics of sci-fi, as seen above, is time travel. Appearing for the first time in the seventeenth century, these stories often take the rout of social commentary or self-discovery. A messenger from the future sent to change the past (*Memoirs of the Twentieth Century*), a teenager traveling through past and future to save his own family (*Back to the Future*), or a time traveler that discovers the ruins of mankind in the future (*Planet of the Apes*), these are but just a few themes on time travel adventure.

Time travel can be done, in these adventures, through different ways. For example, in Mark Twain’s *A Connecticut Yankee in King Arthur’s Court* (1889), a man travels to the past after being struck in the head. In Isaac Asimov’s *A Pebble in the Sky* (1950), a man is sent into the future through a radioactive phenomenon. However, the most popular form of time travel is through a “time machine,” term coined by H.G. Wells in the novel of the same name.

Some time travel stories include:

- *Memoirs of the Twentieth Century* (1733) by Samuel Madden
- *A Connecticut Yankee in King Arthur’s Court* (1889) by Mark Twain
- *The Time Machine* (1895) by H.G. Wells



- *Pebble in the Sky* (1950) by Isaac Asimov
- *The End of Eternity* (1955) by Isaac Asimov
- *The Door into Summer* (1957) by Robert A. Heinlein
- *Doctor Who* (1963) created by Sydney Newman, C. E. Webber and Donald Wilson
- *Planet of the Apes* (1968) directed by Franklin J. Schaffner
- *The Terminator* (1984) directed by James Cameron
- *Back to the Future* (1985) directed by Robert Zemeckis

3.3.12 Other Subgenres

Some other less common but worth naming subgenres of science fiction include:

- Anthropological science fiction
- Comic science fiction
- Cyberpunk
- Feminist science fiction
- Space Western
- Steampunk and its sub-subgenres Atompunk, Clockpunk, Dieselpunk.



CHAPTER IV:

A Study of Asimov's Foundation and Robot Series and their Impact on the Genre

4.1 The Foundation Series

4.1.1 Development of the Foundation Saga

As it has been pointed out when dealing with his biography, the Foundation series is Asimov's most popular science fiction book series along with the Robot series. It is one of the most complex fictional universes ever written. In fact, it is very difficult to even approach the reading and study of it. There are many books, short stories, and tie-in material that could make the task of understanding it a bit overwhelming for a newcomer.

As an introduction, the Foundation saga can be summarized as the effort of a scientist to try to save humanity from falling into a period of barbarism that would last for 30,000 years. Set in a distant future where humanity has colonized the entire Milky Way galaxy and has established a "Galactic Empire," the biggest mind of the time discovers, through an Asimov-invented science (psychohistory), that their society is in a stage of decadence and that within a couple of centuries, the twelve millennia old Empire will fall. This will leave the entire galaxy in a stage of barbarism which will devastate it. To avoid this, the scientist sets two "Foundations" in distant planets to be a refuge to science.

Written between 1942 and 1999, this universe rose into popularity among science fiction readers during the 1940s and 50s. Moreover, it became the archetypal universe that many other sci-fi authors later took inspiration from. Its characters, ideas, and stories were complex, deep, philosophical, and, more importantly, innovative.



The “Foundation Trilogy” is the name given to many short stories written by Isaac Asimov between 1942 and 1950 and published as novels between 1951 and 1953 (Asimov, 1982, p. 182). This set of novels established the basis for the whole saga. They introduced fictional sciences, characters, and villains that made them become part of the most representative novels ever written by Asimov.

These are:

- *Foundation* (1951)
- *Foundation and Empire* (1952)
- *Second Foundation* (1953)

Although the trilogy seemed complete, pressure from fans of the franchise and from many editorials motivated Asimov to continue it (Asimov, 1986, p1). That is how in 1982 he published *Foundation’s Edge*, the next novel in the franchise. However, this time Asimov decided to expand his universe even further. Within this novel, he decided to merge his two most popular sagas, the *Foundation* and *Robot* ones.

The *Robot* saga is a very complex one in itself, and since there have been TV and film adaptations of its stories, more than one can make the case that it is even more famous than the *Foundation* Universe. Furthermore, the “Three Laws of Robotics” are what make Asimov a worldwide known author since their impact was considerable on both science and science fiction (Clarke, 2011, p. 255). In addition, the *Robot* series consists of many short stories and novels, but these will be covered later in this chapter.

Anyhow, after the publication of *Foundation’s Edge*, Asimov continued to expand the saga with another sequel named *Foundation and Earth* (1986). The latter is the last story of the *Foundation-Robot* universe in terms of chronological order even though after this last novel, Asimov decided to write two prequels to the original trilogy: *Prelude to the Foundation* (1988) and *Forward the Foundation* (1993). This last one being published posthumously a year later after the author had died.



This makes the entire “Foundation saga” composed of seven novels. Yet there are more books and stories that are tied in to this franchise. First, there is the “Galactic Empire saga” which bridges the Robot and Foundation ones. When Asimov decided to unite his most famous works into one Universe, he divided it into three sub-sagas set in this chronological order: The *Robots* saga, the *Galactic Empire* saga, and the *Foundation* saga.

The second saga; that is, the *Galactic Empire* one, is a collection of three novels written between 1950 and 1952. Moreover, they are supposed to be a “saga” although they are directly not connected. Furthermore, these books, while all in the same universe, tell stories separated from themselves in both time and space.

The novels are:

- *Pebble in the Sky* (1950)
- *The Stars, Like Dust* (1951)
- *The Currents of Space* (1952)

Finally, although the total rises up to ten books, there are some more books to consider. For instance, even though Asimov stated that these novels cannot be part of the *Foundation* universe due to timeline inconsistencies, he suggested that “altered versions” of *The End of Eternity* (1955) and *Nemesis* (1989) occurred in the *Foundation* timeline (Asimov, 1982, p. 182). Actually, in *Foundation’s Edge* (1982) one of the characters mentions the existence of powerful beings called “The Eternals” (Ibid, p. 153).

In total, 10 novels of the *Foundation* saga were written by Asimov himself. However, after the author’s death other writers, with the consent of his widow and his own, continued to expand this universe (Benford, 1997p. 274). In 1989, a collection of short stories was published in an anthology called “*Foundation’s Friends*.” These stories take place at different moments in the Robot-*Foundation* timeline.

Furthermore, during the late 90s, the Asimov estate approved the outline for three more novels that would tie many loose ends created after the merging



between the Robot and Foundation sagas (Benford, 1997p. 274). Also, it is worth noticing that these books collectively are called the “*Second Foundation Trilogy*,” although all of them are actually prequels to the original trilogy.

This second trilogy consisted of:

- *Foundation’s Fear* (1997)
- *Foundation and Chaos* (1998)
- *Foundation’s Triumph* (1999)

In addition, although he did not manage to get authorized by the Asimov estate, in 2001, author Donald Kingsbury published a novel called *Psychohistorical Crisis*. This novel is not considered to be part of the official continuity, but many editorials printed the book and marketed it as an actual Foundation book (León, 2005, para. 1).

In total, there are 14 books that are part of the *Foundation* universe. Written between 1942 and 1999, this saga became one of the most influential and complex fictional universes ever created. In addition, this is where the topic of how to approach should be mentioned. In short, it is very difficult due to many characters, planets, story arcs, and so on. When it comes to reading it, there are two possible ways to do it: in chronological order or in the order the novels were written.

Books in chronological order:

1. “Blind Alley” (1945) by Isaac Asimov⁴
2. *The Stars, Like Dust* (1951) by Isaac Asimov
3. *The Currents of Space* (1952) by Isaac Asimov
4. *Pebble in the Sky* (1950) by Isaac Asimov
5. *Prelude to Foundation* (1988) by Isaac Asimov
6. *Forward the Foundation* (1993) by Isaac Asimov
7. *Foundation’s Fear* (1997) by Gregory Benford
8. *Foundation and Chaos* (1998) by Greg Bear

⁴ Short story.



9. *Foundation's Triumph* (1999) by David Brin
10. *Foundation* (1951) by Isaac Asimov
11. *Foundation and Empire* (1952) by Isaac Asimov
12. *Second Foundation* (1953) by Isaac Asimov
13. *Foundation's Edge* (1982) by Isaac Asimov
14. *Foundation and Earth* (1986) by Isaac Asimov
15. *Foundation's Friends* (1989) by different authors

It could be argued that maybe the best way to read the saga is to do it in chronological order. In this way, people can best understand the plot as it progresses. It, technically, would be easier to catch the story as a whole, early characters, and so on. However, the problem of reading the saga in this way is Asimov's writing style.

His last book was published in 1993 while the first short story appeared in 1942; that is, 51 years of difference. In his early days, Asimov's writing style was bland, his characters were "two" dimensional -lacked goals, emotions, personality, among other things-, and the plot progressed mostly through exposition, in other words, through the dialogues of characters instead of actual events.

As explained in earlier chapters, this was the standard writing style during the *Golden Age of Science Fiction*. As time passed by, the genre evolved and new writers appeared. Although Asimov took a break from writing for almost two decades, when he did eventually return, his writing had adapted to the new style.

This change in style can annoy readers if they jump, for example, from *Forward the Foundation* (1993) to *Foundation* (1950). Of course, the "Golden Age" novels written by Asimov are still SF classics and very enjoyable. These novels were very successful because of the ideas they present, which were revolutionary and innovative. The original trilogy even won the *Hugo Award* for best *All-Time Series*, beating J.R.R. Tolkien's *Lord of the Rings* in the same category (The Hugo Awards, n.d., para. 7).

All in all, this is the main reason these novels should be read in the order



they were written. The jumping from a novel with rich characters, e.g., *Forward the Foundation*, to another that barely features any female characters⁵, i.e., *Foundation*, might be frustrating and disappointing. Big ideas and plots exist in all Asimov's novels, but by reading them in order of publication, the improvement in characterization and variety is notable and well received.

All in all, the order of publication would be:

1. "Blind Alley" (1945) by Isaac Asimov
2. *Pebble in the Sky* (1950) by Isaac Asimov
3. *The Stars, Like Dust* (1951) by Isaac Asimov
4. *The Currents of Space* (1952) by Isaac Asimov
5. *Foundation* (1951) by Isaac Asimov
6. *Foundation and Empire* (1952) by Isaac Asimov
7. *Second Foundation* (1953) by Isaac Asimov
8. *Foundation's Edge* (1982) by Isaac Asimov
9. *Foundation and Earth* (1986) by Isaac Asimov
10. *Prelude to the Foundation* (1988) by Isaac Asimov
11. *Foundation's Friends* (1989) by different authors
12. *Forward the Foundation* (1993) by Isaac Asimov
13. *Foundation's Fear* (1997) by Gregory Benford
14. *Foundation and Chaos* (1998) by Greg Bear
15. *Foundation's Triumph* (1999) by David Brin

Finally, it can be argued that the "Galactic Empire" novels can be skipped all together since they are not important to understand the overall story, characters, and conflicts featured in the *Foundation* novels. In fact, these *Galactic Empire* novels take place 12,000 years or more before the *Foundation* ones.

⁵ A common problem in most SF stories from the Golden Age.



4.1.2 Brief Explanation and Descriptions of the Books in the Foundation Saga

As explained above, there are many stories that are considered to be part of the *Foundation* timeline.

Prelude to Foundation

This novel develops the character of Hari Seldon. He is the greatest mind of his time, but in this book he is still very young and tries to develop a new science called *Psychohistory*. Since the subject is presented as a way to “predict” the future, the emperor of the Galactic Empire tries to obtain this information for personal gain.

Hari Seldon then is forced to escape and move from location to location to try to evade the emperor’s forces trying to capture him. In his journey, he encounters his future wife, Dors Venabili, learns about humanity’s long-lost home planet, and some ancient human made beings called “robots.”

At the end, a *coup d’état* against Emperor Cleon I is stopped while Seldon realizes that he can use Trantor as a sample to model and apply his theoretical science *Psychohistory*.

Forward the Foundation

Some years after the events on *Prelude to Foundation*, Hari Seldon has finally managed to apply and develop “Psychohistory,” where he discovers that the 12,000-year-old Galactic Empire will fall and a period of barbarism will decimate the entire galaxy for the next 30,000 years. Furthermore, he, and a team, decide to engineer the “Seldon Plan” to save mankind.

In addition, while working in his plan, he becomes the First Minister to Cleon II, although he does not want the job. During his years developing his project and working for the Empire, he loses many of his loved ones. His partner dies due to a conspiracy of one of the members of his Foundation project. In addition, his adopted son also loses his life during a rebellion within



Trantor, while his daughter-in-law and one of his two granddaughters get lost in space and nothing is ever heard of them again.

Seldon spends his entire life setting up the plan to establish two “Foundations” in opposite sides of the galaxy. While the first one would be populated by all kinds of scientists, the second one would be made of “psychohistorians” and mentalics. These humans have the ability to read other people’s emotions and control them. Finally, his remaining granddaughter, Wanda, would become the heir to his project as he did not live enough to see the Foundations established.

Foundation

This book consists of five short stories separated in time by decades.

The Psychohistorians (set in 0 F.E.)⁶

The Galactic Empire starts to see Hari Seldon as a problem to their rule since his message of “end of civilization” is growing among the citizens of Trantor. Seldon is accused of organizing a *coup d’état* and is judged. However, while in court, he explains his plan to establish a “refuge to science” at the edge of the galaxy in a planet named *Terminus*. That would be the first Foundation while the second would be established at an undetermined location referred to only as *stars end*. This plan would reduce the period of barbarism from 30,000 years to 1,000 years. Although skeptical, the Emperor allows the establishment of the Foundations as a way to get rid of Seldon.

The Encyclopedists (set in 50 F.E.)

Scientists sent to *Terminus* are tasked with the mission of writing an “Encyclopedia Galactica” to preserve knowledge. However, after 50 years of the establishment of the first *Foundation*, provinces at the edge of the galaxy declare independence and establish small kingdoms which are hostile to the first Foundation. While in this political crisis, a hologram of Seldon reveals to the

⁶ F.E. means “Foundational Era”. It began when the First Foundation was established.



leaders of Terminus that the encyclopedia is a scheme. The real task of both *Foundations* is to be the seeds for a *Second Galactic Empire*. They are meant to expand and establish a new imperial state within 1,000 years.

The Mayors (set in 80 F.E.)

At the border of the galaxy, decadence had started centuries before these provinces declared independence. Being a planet without an army, the Foundation struggles to survive the constant threats of the neighboring kingdoms that want Terminus's technological advancements. At the end, led by Mayor Salvor Hardin, the Foundation uses their technology to turn the people of three kingdoms against their leaders and annex them.

The Traders (set in 135 F.E.)

One hundred years after Seldon appeared for the first time in Terminus, the Foundation uses their technology to become the most powerful economic power at the edge of the Milky Way. Traders are sent to technologically underdeveloped kingdoms to try to create an economic dependence and eventually convince the superstitious states to join the Foundation, although most of these kingdoms are hostile to the growing influence of the Foundation.

The Prince Merchants (set in 155 F.E.)

Traders have become the ruling class within Terminus, and the Foundation seems unmatched in their expansion through the edge of the Milky Way. However, the discovery of a republic with advanced technology starts to worry the Foundation as it appears that an unknown source is providing that technology. Even though the Republic of Korell is powerful, the Foundation's mayor, Hober Mallow, puts an embargo on the state which is forced to surrender. Upon victory, it is revealed that the provider to Korell was the Galactic Empire, which still exists in the core of the galaxy.



Foundation and Empire

The General

During the time of Trantor's last strong emperor, a loyal general named Bel Riose, decides to organize an armada to attack the Foundation as he sees it as a big threat to the Galactic Empire. Even though Terminus is defeated in military terms, the general is forced to return to Trantor since the Emperor considers that Riose, along with other Imperial officers, is involved in an assassination attempt against him. A few decades after this, Trantor would be destroyed in an attack by other rebel generals, in an event called *The Great Sack*, and the Galactic Empire would immediately effectively cease to exist.

The Mule

The Foundation has become a dictatorship and its military power is unparalleled. However, its economic power is challenged by merchant worlds which have seceded from the Foundation. As tensions grow between these two powers, a warlord called *The Mule* appears and starts conquering many systems. After a Foundation committee is sent to this warlord stronghold planet, Kalgan, it is revealed that he basically takes planets without any resistance.

The Mule declares war on the Independent Merchants and the Foundation, defeating both easily as the latter generals surrender to Kalgan. It is revealed then that the Mule is a *mutant* with the ability to control emotions. After Terminus is conquered, the lead characters travel to the ruins of Trantor to try to find clues of the location of the second Foundation.

Second Foundation

Part I: Search by the Mule

The Mule has established a sort of Empire and his influence is growing through the galaxy. However, he is still looking for the Second Foundation as it is the only threat to his domain. Hidden and preparing for the confrontation, the mentalics of the second Foundation face and defeat the Mule. However, he is



allowed to keep his empire while the mentalics prepare a plan to restore the Seldon Plan as it was destroyed when the first Foundation was conquered.

Part II: Search by the Foundation

A few decades have passed since the Mule died and the first Foundation obtained independence from Kalgan. Even though some people see the second Foundation as their saviors, many others see them as a threat. Moreover, a group of people develop devices able to block the mentalics' power and start a conflict against the second Foundation.

In the end, although the Foundation believes that its sister counterpart has been destroyed, it is revealed that it was the second Foundation's plan to appear to have been defeated as they decide to return into hiding in their home planet: Trantor.

Foundation's Edge

After a civil war has been stopped, the mayor of Terminus arises victorious as the rebels, who wanted to move the capital to a more centric planet, are defeated. However, the mayor immediately moves her cards to fight another menace to the Foundation's domain: The second Foundation.

The main character, Trevize, is sent to the neighboring systems outside the Foundation's territories, where he is expected to bring the attention of the second Foundation, which he does, as the second Foundation plans to expand. These events start a new crisis as the Seldon Plan is completely disregarded by bad leaders from both Foundations.

However, Trevize discovers a robot-settled planet called *Gaia*, which is sentient and has control over matter and minds. As the leaders from both Foundations have been captured, it gives Trevize the opportunity to decide the future of mankind: to let the first Foundation rule the galaxy, let the second Foundation rule the Galaxy or let *Gaia* rule.



Finally, Trevize decides that Gaia should rule and use its mind control to force both leaders, and future ones, to continue the Seldon plan as it was first established. This decision ensured that Gaia's power will spread through the galaxy to have control over the minds of all humans. Thus, in 4,000 years or so, Gaia will become an entity called *Galaxia*.

Foundation and Earth

The same lead characters of the previous novel decide whether or not the decision of letting Gaia rule was the correct one and decide to search for mankind's home planet from which records do not exist.

After visiting many planets, many of which are populated by genetically altered humans, they finally find a radioactive Earth. There they find R. Daneel Olivaw, a robot character from the *Robot* novels, who reveals that he has been protecting mankind through different actions: creating Gaia, pushing Seldon into creating *Psychohistory*, among other things.

Olivaw reveals that mankind needs to become a collective mind since internal conflicts are weakening their civilization, and that, in the future, huge threats might arrive from other galaxies.

4.2 The Robots Series: Short Stories and Novels

4.2.1 Development of the Robot Saga

If Isaac Asimov is a worldwide known author, it is due to his "Three Laws of Robotics." Since their very first introduction in 1942's short story "Runaround," they have become an integral part of pop culture. They have been featured in many non-Asimov works, which is why regular audiences are likely to be familiar with them.

Not only Isaac Asimov's laws are interesting concepts, but also his views on robots are revolutionary and innovative. Science Channel's 2011 documentary series "Prophets of Science Fiction" dedicates one episode to



Asimov, where many authors analyze the unique vision he had over robots and how before him those were considered monsters similar to the creature of Frankenstein.

Whether you are talking about robots, super computers, or artificial intelligences in general, Asimov set the standard on what to expect on those types of stories. However, it all looks that Asimov did not intend to make a set of his short stories relating to robots, and it is also true that he had no idea the impact his fictional short stories and novels would have on science fiction.

As explained in previous chapters, his subconscious somehow imagined a future where robots would behave in certain ways and that their actions would be limited. However, it was editor Joseph W. Campbell the one that came to the realization that robots in Asimov's stories behaved in patterns. They were not erratic, independent, or aggressive. Their actions seemed ruled by certain unwritten "laws." Furthermore, by December of 1940, he and Asimov had fully developed the concept that made him and his stories famous (Asimov, 1979, pp. 285–7).

His first two stories, "Robbie" and "Reason," both published in 1940, were the basis of the laws. 1941's "Liar" featured only the first law, however it was not until 1942's "Runaround" that they were explained and written.

The Laws, in fact are (Asimov, 1950, p. 4):

1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
2. A robot must obey orders given by human beings except where such orders would conflict with the First Law.
3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

However, much different to the general conception, Asimov never stated or tried to establish that these laws are infallible. In fact, all of his stories often revolve around the fact that they are not. The very first short story that introduced this concept showed one, of the many, examples on how they are

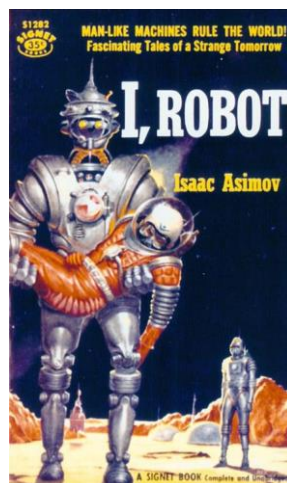
not perfect.

In “Runaround,” a mining crew sends a robot to obtain some materials from a nearby selenium lake. However, hours go by and *Speedy*, the robot’s name, does not return. Upon inspection, the crew finds the robot sort of running in circles due to a conflict between laws 2 and 3. The second law commanded the robot to obey the crews’ order of retrieving the selenium from the lake. However, the mineral was dangerous for the robot, so the third law prevented it from getting closer. In this way, the robot became trapped in an endless loop. Finally, the crew realizes that the first law, outranks the other two. This is why, one of the members puts himself in danger so that the robot would have to rescue him.

This first short story sets up the imperfection of the laws, which would be later exploited in dozens of future stories, and it is a very didactic way to make the reader understand the concept of the laws.

In addition, Asimov did not only introduce the laws but also coined the term “*robotics*,” which nowadays is an actual science. It is a branch of engineering.

Image 8: Cover art for I, Robot (1950).



Source: Asimov, 1950.

Having invented the concept, Asimov not only shaped robot-based stories, but also dominated the field for decades. Until today, his influence is strong among writers and authors. Since 1942’s “Runaround,” Asimov



continued to develop stories and concepts like the positronic brain. The source of intelligence to any robot which would have the three laws of robotics recorded into it. Thus, not allowing for the construction of a robot without these rules.

While most of Asimov's robot short stories tend to be self-contained stories, there are recurrent characters during some of them. These more specifically are two: Dr. Susan Calvin and the super computer Multivac, also often referred to as AC.

For over fifty years Asimov wrote science fiction short stories. However, it is very difficult to determinate how many of them are actually part of the *Robot* universe. Almost all of his short stories were originally published in SF magazines; however, they sometimes do not seem to be part of the same universe.

Furthermore, Asimov eventually edited many of his short stories in book collections, and the ones that are certain to be part of the *Robot* saga are:

1. *I, Robot* (1950)
2. *The Rest of the Robots* (1964)
3. *The Bicentennial Man and Other Stories* (1976)
4. *The Complete Robot* (1982)
5. *The Winds of Change and Other Stories* (1983)
6. *Robot Dreams* (1986)
7. *Robot Visions* (1990)

All in all, there are at least fifty or so short stories crumbled into these collections. Some of them were released in more than one collection while others, like "Robot Dreams" (1986), were written for the purpose of rereleasing an old collection.

In addition, these short stories share some topics, themes, and even characters. Most of them are related to Susan Calvin, the Three Laws of Robotics, Multivac, and robots in general.



The *Robot* short stories, all written by Isaac Asimov, are:

1. "Robbie" (1940)
2. "Reason" (1941)
3. "Liar!" (1941)
4. "Runaround" (1942)
5. "Robot AL-76 Goes Astray" (1942)
6. "Victory Unintentional" (1942)
7. "Catch That Rabbit" (1944)
8. "Escape!" (1945)
9. "Evidence" (1946)
10. "Little Lost Robot" (1947)
11. "The Evitable Conflict" (1950)
12. "Breeds There a Man...?" (1951)
13. "Satisfaction Guaranteed" (1951)
14. "Hostess" (1951)
15. "The Martian Way" (1952)
16. "Sally" (1953)
17. "Franchise" (1955)
18. "Risk" (1955)
19. "Someday" (1956)
20. "Jokester" (1956)
21. "First Law" (1956)
22. "The Last Question" (1956)
23. "Galley Slave" (1957)
24. "Let's Get Together" (1957)
25. "Strikebreaker" (1957)
26. "Does a Bee Care?" (1957)
27. "Lenny" (1958)
28. "The Feeling of Power" (1958)
29. "Spell My Name with an S" (1958)
30. "The Ugly Little Boy" (1958)
31. "The Machine that Won the War" (1961)



32. "Eyes Do More Than See" (1965)
33. "Segregationist" (1967)
34. "The Billiard Ball" (1967)
35. "Feminine Intuition" (1969)
36. "Mirror Image" (1972)
37. "Light Verse" (1973)
38. "Stranger in Paradise" (1974)
39. ". . . That Thou Art Mindful of Him" (1974)
40. "A Boy's Best Friend" (1975)
41. "Point of View" (1975)
42. "The Life and Times of Multivac" (1975)
43. "The Bicentennial Man" (1976)
44. "The Tercentenary Incident" (1976)
45. "True Love" (1977)
46. "Think!" (1977)
47. "The Last Answer" (1980)
48. "Lest We Remember" (1982)
49. "Robot Dreams" (1986)
50. "Christmas Without Rodney" (1988)
51. "Too Bad!" (1989)
52. "Robot Visions" (1990)

It was not until 1953 that Asimov published the very first full-length novel regarding his *Robot* universe, *Caves of Steel*. The approach he chose was a crime mystery and how police detectives in the future would approach cases regarding the Three Laws of Robotics and the possibility of robots actually not following them. Characters like R. Daneel Olivaw, "R." stands for robot, and Elijah "Lije" Baley became instant classics.

This novel was followed by a sequel called *The Naked Sun* (1955) and despite the success of it, Asimov decided not to continue these novels until after the release of *Foundation's Edge* (1982). In that novel, he decided to merge his most popular sagas into one which motivated him to continue the *Robot* novels with two more books.



Finally, author Robert Silverberg reworked Asimov's short story "The Bicentennial Man" (1976) into a full-length novel which was released in 1992. Although, it is worth noting this novel does not share the same characters or story arcs featured in the Baley-Olivaw novels.

In total, the novels in the saga are:

1. *Caves of Steel* (1953) by Isaac Asimov
2. *The Naked Sun* (1956) by Isaac Asimov
3. *The Robots of Dawn* (1983) by Isaac Asimov
4. *Robots and Empire* (1985) by Isaac Asimov
5. *The Positronic Man* (1992) by Isaac Asimov and Robert Silverberg

Just like the *Foundation* saga, eventually other authors stepped up to expand and continue Asimov's legacy. Twenty eight novels based on the *Robot* saga were written between 1987 and 2016. These works are sub-divided into self-contained sub-sagas; that is, while they all are canonical to the series, references to characters and locations in Asimov's own works are very limited. Furthermore, cohesion between these sub-sagas is basically non-existent.

In addition, some of them were written by Asimov himself while he was alive since he had asked some writers to have a take on his world. However, most of these novels were written after his death as Asimov's widow wanted to continue the saga.

In short, other *Robots* sub-sagas and novels include:

Isaac Asimov's Robot City

- *Odyssey* (1987) by Michael P. Kube-McDowell
- *Suspicion* (1987) by Mike McQuay
- *Cyborg* (1987) by William F. Wu
- *Prodigy* (1988) by Arthur Byron Cover
- *Refuge* (1988) by Rob Chilson
- *Perihelion* (1988) by William F. Wu

Isaac Asimov's Robots and Aliens



- *Changeling* (1989) by Stephen Leigh
- *Renegade* (1989) by Cordell Scotten
- *Intruder* (1990) by Robert Thurston
- *Alliance* (1990) by Jerry Oltion
- *Maverick* (1990) by Bruce Bethke
- *Humanity* (1990) by Jerry Oltion

Isaac Asimov's Robots in Time

- *Predator* (1993) by William F. Wu
- *Marauder* (1993) by William F. Wu
- *Warrior* (1993) by William F. Wu
- *Dictator* (1994) by William F. Wu
- *Emperor* (1994) by William F. Wu
- *Invader* (1994) by William F. Wu

Caliban Trilogy

- *Isaac Asimov's Caliban* (1993) by Roger MacBride Allen
- *Isaac Asimov's Inferno* (1994) by Roger MacBride Allen
- *Isaac Asimov's Utopia* (1996) by Roger MacBride Allen

Robot Mystery series

- *Mirage* (2000) by Mark W. Tiedemann
- *Chimera* (2001) by Mark W. Tiedemann
- *Aurora* (2002) by Mark W. Tiedemann
- *Have Robot, Will Travel* (2005) by Alexander C. Irvine

"I, Robot" prequel trilogy

- *I, Robot: To Protect* (2011) by Mickey Zucker Reichert
- *I, Robot: To Obey* (2013) by Mickey Zucker Reichert
- *I, Robot: To Preserve* (2016) by Mickey Zucker Reichert



4.2.2 Brief Explanation and Summaries of the Robot Saga

I, Robot, other short story collections and The Positronic Man

As stated earlier in this chapter, there are fifty or so short stories related to Asimov's *Robot* world. All of these adventures take place a millennium before Elijah Baley's novels. Most stories during this time revolve around the manufacturing of robots and how The Laws of Robotics, although useful, are far from perfect. In fact, many stories explore how positronic brains are so complex that *Robots* are "interpreting" some laws.

I, Robot (1950) is the most famous of these collection of short stories, and it does feature a kind of connected story since the main character for most of them is robopsychologist Dr. Susan Calvin. It is through her perspective that readers get to know details of the beginnings of the field of Robotics and the different stages of robot development.

Many of her adventures have to deal with problems about robots becoming more intelligent as mankind has to deal with the peculiarities of their psychology shaped by Asimov's Three Laws of Robotics. Some relevant topics explored by the author are:

"The Evitable Conflict" (1950) puts the three laws to the test as it is revealed that *machines* are deliberately causing economic problems to humans. Dr. Calvin concludes that robots are interpreting the first laws as "A robot might not harm humanity," thus they are causing economic problems so bad leaders to be fired and replaced with better ones.

1947's "Little Lost Robot" forces Dr. Calvin to face robots which had the first law modified. In this tale, one of them becomes rogue and develops a "superiority complex" which forces it to attack the lead character.

1941's "Liar!" explores a different approach as a robot is constructed with the ability to read minds. As a result, it starts lying to humans when it considers that the truth would hurt them. A strange machine, this robot is later confronted by Dr. Calvin.



“Escape” (1945) goes deep into the positronic brain of a supercomputer that starts to malfunction when it realizes that hyperspace travel hurts humans, but humans want to do it anyway. “Evidence” (1946) is a political thriller where a politician running for the highest office on Earth is accused of being a robot.

In short, Calvin’s adventures seem to convey the notion that robots are changing and that have long surpassed humans. For example, their positronic brains are being made by supercomputers not by humans. However, far from creating their own civilization, the Three Laws put the goal on every robot to protect humanity, sometimes even from itself.

At this point, it is worth noticing that the film adaption of *I, Robot* (2004), directed by Alex Proyas and starred by Will Smith, really has absolutely nothing to do with the book, although it is obvious that it took many elements from some of Calvin’s short stories.

Aside from the adventures featuring the robopsychologist, there are lots of short stories featuring just robots but exploring themes like the symbiosis between humans and machines. 1967’s “Segregationist” features a world where humans are replacing their failing organs with robot components while robots, called Metallos, are acquiring organic bodies.

The beginning of this union of “species” was later explored in 1976’s “The Bicentennial Man.” In this short story, later rewritten as a novel called *The Positronic Man* (1990), a robot starts the transition to acquire a human body. Such scenario seems to be a dystopia which apparently was reverted as the *Robot* novels picture future humans on Earth as strongly anti-machines.

Malfunctioning robots and A.I.’s is an exploited trope in many Asimov’s short stories, and in turn it seems that it became an obligatory topic in all SF stories featuring those elements. 1942’s “Robot AL-76 Goes Astray” started such trend with the tale of a robot getting lost and reprogramming itself when it faces an unknown environment. Nowadays, stories would feature a machine, in some cases an “evil” one, getting a contusion and changing dramatically its programming upon restarting, thus, becoming “good.”



Finally, Multivac is another recurrent character featured in many of Asimov's short stories. However, it usually is a secondary one since it is a supercomputer. Its tales are loosely connected to the *Robot* saga, and, in fact, its stories are loosely connected to each other. This occurs because the many adventures featuring this supercomputer often contain moral and philosophical themes like the humanization of machines, the overdependency of mankind towards data banks and computers to solve our problems, among others.

Many concepts Asimov imagined actually predate modern concerns in humanity, like the Internet (a global data bank), supercomputers and the overreliance on technology. Multivac is often portrayed as an Artificial Intelligence which possesses knowledge from people all over the world, and from many different subjects. 1977's "True Love" portrays a normal citizen using a computer to access Multivac in his quest for finding an "ideal match partner." In "Jokester" (1956), scientists use the machine to obtain analysis and information from many subjects since it is a worldwide data base.

"All the Troubles of the World" (1958), is a more philosophical story where Multivac basically becomes sentient. After absorbing so many information, the machine has developed its own desires and goals. For years, mankind used it to solve *all the troubles of the world* since its huge bank data allowed it to come up with solutions to crime, famine, diseases, among others. However, it eventually got "tired" and plotted its own destruction by stating "I want to die."

1975's "The Life and Times of Multivac" presents a dystopian world where Multivac rules supreme and dictates all human behavior causing some humans to plot its destruction. However, "The Last Question" (1956) is this supercomputer's most famous story, and, perhaps, Asimov's most famous short story too. For trillions of years humans ask the machine how can humanity stop the universe from dying but Multivac, later referred to as "AC," every single time responds that it does not contain enough data to answer the question. Eventually, as humans have gone extinct and the universe has died, the machine starts absorbing the remnants of everything that existed to try to solve that last unanswered question. In the end, as all data has been absorbed,



analyzed, and processed, the supercomputer answers “Let there be light” and immediately explodes to recreate the universe.

The Caves of Steel

This novel takes place a thousand years after Susan Calvin’s adventures. It features an overpopulated Earth where humans have become afraid of open spaces and robots. In addition, there are fifty worlds, aside from Earth, populated by humans which have long surpassed Earthers in medicine and technology. However, these “Spacers,” as they are referred to, are afraid of bacteria and have long lost interest in colonizing more planets.

Since this novel is a crime story, an Earther detective, Elijah Wood, and a humanoid robot, R. Daneel Olivaw⁷, are matched to solve the assassination of a Spacer Ambassador before the Spacer worlds send warships towards Earth. Eventually, the case is solved when it is revealed that Wood’s boss killed the Ambassador since his original intention was to destroy the humanoid robot due to fear of it. This occurred because the robot’s appearance was modeled around the Ambassador’s image.

In the end, a Spacer officer offers not to present charges against Earth if its population agrees to start colonization programs beyond the Spacer worlds in order to save humanity from extinction.

The Naked Sun

Elijah Baley and R. Daneel Olivaw are sent in a mission again. This time to solve the mystery of the assassination of a Spacer citizen in the world of Solaria. A strange event since the person in question lived only with robots and none of them could have committed the crime due to the First Law of Robotics.

Just like *Caves of Steel* (1953), this new novel presents an exotic and strange human society. Apparently, Solarians hate human contact and each citizen lives in huge farms populated by robots and distant from other farms. This society hated human contact so much that decided to start procreating

⁷ The “R.” stands for “robot.”



through laboratories.

The case is eventually solved as it is revealed that a robot was indeed the assassin of the Solarian. However, this happened because the antagonist of the story manipulated the robot's programming to make it believe that the human was disposable organic material.

The Robots of Dawn

The third novel in the *Robot* saga, again Baley and R. Daneel Olivaw are united to solve the case of the destruction of a unit called R. Jander Panell in the Spacer world of Aurora. This new robot novel features the struggle of Baley while he tries to defend Earth's right to colonize the galaxy. On the other hand, there are Auroran manufacturers who want to mass produce human looking robots to do the job.

This story introduced R. Giskard Reventlov, another auroran robot which possesses telepathic abilities. It turns out to be the "murderer" of the R. Jander unit. Apparently, it did that to sabotage the plan of an Auroran manufacturer, called Kelden Amadiro, to stop Earth from colonizing the galaxy.

Robots and Empire

As the final *Robot* novel, it also created the real link between this saga and the *Foundation* one. During the events of this story, which take place long after Elijah Baley has died, R. Daneel and R. Giskard are joint in a mission in which Earth is at peril again.

Spacer worlds are dying due to low population and a no-children culture while Earthers have surpassed them in technological and military advancements. This new people, called "Settlers," are the ones who are colonizing the galaxy. This causes the last novel's antagonist, Amadiro, to return and create a machine which would make Earth a radioactive wasteland.

Being limited by the Three Laws of Robotics to take action against Amadiro, Daneel develops the "Zero" law which basically states that robots must protect humanity even if that means to cause disobedience and harm to other humans.



Amadiro is stopped, but his apprentice, Mandamus, reveals that unlike his master's plan, he intended to use the machine to make Earth radioactive over several decades. In doing so, humans would be forced to leave the planet and conquer the cosmos. As Spacer worlds are dying and becoming unpopulated, the fate of humankind rests in Earthers' hands. Considering that abandoning Earth is the best for the human race, Daneel and Giskard allow Mandamus to activate the machine.

4.3 The Robot and Foundation Influence on Science Fiction and Science Fact

As explained throughout this short investigation, Asimov's contribution to the science fiction genre was maximal. His concepts, ideas, and even characters became standards on what readers and general audiences expect when they approach SF. In fact, even in terms of science his contribution was huge. Not only because he wrote many scientific books and papers, but also because his novels are thought provoking and impactful.

Dane Hall and Madison Smith (n.d., para. 4) say Asimov's massive literary production in and out of science fiction pushed him to become one the most influential writers in the genre. He, directly or indirectly, had an impact on science fiction enthusiasts. If his ideas did not reach audiences through his own works, then most likely they did through someone who was inspired by Asimov before.

Furthermore, Asimov's *Foundation* epic was very influential. After it, space operas arose all over the genre featuring the very same elements, Galactic Empires, human directed societies, planets that are one continuous city, mental powers, among others. Since Asimov decided to throw our *Anno Domini* measure of time to create his own -i.e., GE or "Galactic Era" and FE "Foundational Era," many authors have done the same to convey the idea that their epics are set in a distant unknown future.



There have been many attempts for adapting this franchise into both the big and small screens (Fleming, 2017, para 2.). However, after so many franchises taking elements from *Foundation*, it is impossible to convey the same impact the saga had during the 1940s and 50s. In fact, general audiences might be driven to believe that *Foundation* is ripping off other “more successful” sagas like *Dune*, *Star Trek*, *Battlestar Galactica*, or, more specifically, *Star Wars*.

It is undeniable that Asimov’s epic established the ideas that would later be imitated and borrowed by so many authors and directors. However, it is also undeniable that *Foundation* has the limitations of its time. Not only other sagas got to be adapted first into different media, but also Lucas’s and Herbert’s creations, among others, set the bar higher when it comes to develop characters and breathtaking worlds. If Asimov’s stories were driven by ideas where characters were totally disposable, other creations put an effort to develop protagonists and villains that would basically carry the sagas on their shoulders.

This is not to disregard *Foundation* as outdated or inferior. Totally opposite, Asimov’s master piece was driven by ideas, and, in those terms, it still holds its own against others space sagas. In fact, it continues to be a source for inspiration and a place where authors and creators often check to borrow ideas.

It would be impossible, and unnecessary, to list every SF novel, comic book, TV series, and movie that borrow ideas from *Foundation*. However, one prime example of that is world phenomenon *Star Wars*, although the stories are not the same in both, the elements that share are enormous.

For instance, both sagas present Galactic Empires as the enemies. Although in Lucas’s epic the empire does not covers an entire galaxy like in Asimov’s, both also share a capital planet with similar characteristics. Trantor (*Foundation*) and Coruscant (*Star Wars*) are planets whose entire surface is covered by a continuous city.

The mentalics of the second *Foundation* have an enormous mental power which allows them to manipulate other human’s emotions. Something very similar to the “Jedi mind trick” which is rarely used in *Star Wars* movies but a



Jedi ability, nonetheless.

Not only those and other elements seem to have been borrowed by George Lucas, but also names like Senator *Bail Organa* and *Han Solo* which come from Foundation characters *Bail Channis* and *Han Pritcher*. The personalities and roles of these particular characters are totally different, though.

Furthermore, Lucas Arts not only acknowledges the fact that it took inspiration from Asimov, but also paid tribute to *Foundation* through the inclusion in the *Star Wars Extended Universe* of planets named Trantor and Terminus (Bedar et. al, 2000, p. 8). Although there are a lot of similarities, differences among the two are big. *Star Wars* made a name of itself due to ideas like “faster than light speed travel” or the popular “Death Star.”

Asimov (1994, p. 252) made a reference to the other saga many times,

I borrowed freely from Edward Gibbon's *History of the Decline and Fall of the Roman Empire* in planning the *Foundation* series, and I believe that the motion picture *Star Wars* did not hesitate, in turn, to borrow from the *Foundation* series.

Furthermore, other common topics borrowed from this series of books include the very term “Encyclopedia Galactica”, coined by Asimov, which has been featured in many other sci-fi stories. For example, *Rama II* (1989) by Arthur C. Clarke and Gentry Lee (p. 305) makes a reference to such encyclopedia. However, many other examples include Robert A. Heinlein’s *To Sail Beyond the Sunset* (1987, n.p.), *Superman* comic books (Thomas and others, 1986, p. 2), and so on.

Psychohistory is another of Asimov’s concepts which have been long discussed in and out of science fiction. This made up science supposedly uses mathematical formulas on cultural, economic, and demographical data to extrapolate social tendencies and, thus, predict with a certain amount of precision the course of history. Like the very *Three Laws of Robotics*, Asimov never stated that such subject is indeed perfect. In addition, in his own novels he correctly asserted that psychohistory cannot predict the behavior of a single



person, and, that in history, there have been single humans who have influenced the entire planet with the actions, believes, and/or inventions.

While the concept cannot be entirely attributed to Asimov, he was the very first to popularize it in fiction, sometimes directly under the name “psychohistory” and other times just with the concept. For example, there are multiple Multivac stories where the supercomputer is used to predict human behavior.

Critics to Asimov’s psychohistory have compared its concept to Karl Marx’s “Historical Materialism” (Elkins, 1976, pp. 28-29). While Marx actually postulates his vision that due to different means of production, all human civilizations have to pass through different stages until reaching communism (Cardoso and Pérez Brignoli, 1976, pp. 63-64). The assumption that somehow Asimov’s interpretation of history is based on Marx’s one is just ridiculous.

Other authors have tried to explain the history of mankind using the same arguments, i.e., Adolphe Landry in 1945 presented his *Historical Demography*, which stated that human history should be studied through two perspectives: qualitative and quantitative ones. The latter would be used to study tendencies of human populations while the former would be used to study characteristics of individuals as independent variables.

The many ways historians have tried to study history through many concepts are proofs on how complex it is and how many people come to similar conclusions. Quantitative History, New Economic History, Total History, Economic History, the real-world Psycho History, are just a few examples of theories which are similar and different at the same time. Even Plato himself talked about “five stages” of society evolution (Fontana, 1982, p.22).

All in all, although the concept is not entirely Asimov’s creation, it is highly debated outside fiction. Paul Krugman, Nobel Prize winner in Economic Sciences, said that Hari Seldon -character from *Foundation*-, is one of the reasons he became so obsessed with the economy, and that what he learned about psychohistory, although not near to a real science, became the basis for his economical postulates (MacFarquhar, 2010, para. 39).



In addition, within fiction, “psychohistory” has been portrayed and presented many times. Some examples include sagas like *Transformers*, *Star Trek*, *Ghost Rider*, *Legends of Galactic Heroes*, but, perhaps, the most representative one is the homage Stan Lee (2007, n.p.) does to Asimov in *Fantastic Four* issue #542 where Mr. Fantastic, the brightest mind in Marvel’s Universe, stated that he had been trying to develop “psychohistory.”

Matt Groening’s TV Series “The Simpsons” and “Futurama” often pay homage to Asimov and their novels. The many references would be too many to list, but one particular that is worth mentioning is a device called Holophonor which appeared in 2001 *Futurama*’s episode “Parasites Lost.” This is a flute that creates holographic images of the thoughts and music the artist is producing. This is a direct reference to a device called “visi-sonor” which appeared in *Foundation and Empire* (1951).

As for the *Robot* novels and short stories, their influence is even bigger. Asimov himself not only coined the term “robotics,” but his views on the subject became the basis for what it is today a real science and a branch of engineering (Carroll, 2009, p. 13).

In terms of literature and SF, Asimov’s dominance was beyond anyone had ever seen. When we talk about the *Foundation* saga, it can be argued that other authors took Asimov’s ideas and improved them. However, when it comes to his *Robot* world, he was, and still is, undeniably the maximal referent. Roger Clarke (2011, p. 255) says that “He, (Asimov) entered the field (robotics) early, and from 1940 to 1990 he dominated it. Most subsequent science fiction literature expressly or implicitly recognizes his laws of robotics.”

The Three Laws became the standard, and Asimov-like robots became also the standard, even when they were not following the Three Laws. For example, even in James Cameron’s *The Terminator* (1984) which disregards the Laws, the evil supercomputer Skynet resembles Asimov’s Multivac a lot.

When it came to the Three Laws themselves, Asimov, being quoted by Roger Clarke (2011, p. 255) says, “Many writers of Robots series, without actually quoting the three laws, take them for granted and expect the readers to



do the same.” Which is actually true. Not only writers and readers took his stories for granted, but also some of his characters appeared in other authors novels. For instance, in 1971 Joe Morgan’s novel *When the Stars Stop*, Multivac is actually one of the characters aboard a ship of human settlers.

As stated earlier in this research, Asimov’s stories broke the trend of robot-based stories where robots would rebel against their creators all the time, just like Dr. Frankenstein’s creature. Asimov was aware of that and used it many times in his stories. He called it “Frankenstein-complex.” A disorder in which humans fear their own creations.

Although in few of his stories robots actually rebel against their creators, it happens because of logic. The logic that in order to protect humans, they must take control over the world. This, too, is a borrowed concept for many other SF stories.

Most of his stories dealt with robots helping humans at all cause. To nowadays readers, it seems reasonable to think that if humans ever create machines and artificial intelligences, they must have a fail save to protect our kind. However, that idea, that seems too obvious for us today, did not exist before Asimov came up with the Three Laws.

Positronic brains, Multivac, and The Three Laws became what readers expected in robots or A.I. related novels. As stated earlier in this chapter, Asimov even created a nowadays common trope in SF storytelling. In the short story "Robot AL-76 Goes Astray" (1942), he introduced the concept that a robot can change his programming by suffering an accident or being forced to face unknown environments.

Outside fiction, Asimov’s concepts became the basis for the real-world science of robotics. As mentioned before, it is a branch of engineering and it deals with the concept of building robots and artificial intelligences. In addition, as amazing as it might sound, scientists are realizing that Asimov’s Laws are not perfect, a statement the author himself proved dozens of times in his short stories, and they are trying to top his logic to try to develop artificial intelligences.



Robin R. Murphy and David D. Woods (2009, p. 14) deal with the implications of Asimov's laws applied to real-world experiences and reformulated them to accomplish a hypothetical better result in controlling machines:

1. "A human may not deploy a robot without the human–robot work system meeting the highest legal and professional standards of safety and ethics."
2. "A robot must respond to humans as appropriate for their roles."
3. "A robot must be endowed with sufficient situated autonomy to protect its own existence as long as such protection provides smooth transfer of control to other agents consistent with the first and second laws."

These Texas A&M and Ohio University professors, respectively, created the alternative "laws" to make the use of robots safer and to avoid ambiguity in language. Only through these revised laws a real incorporation of A.I.'s might be plausible (Murphy and Woods, 2009, p. 14).

They were not the only ones to come with revisited versions of Asimov's Laws. Other scientific organizations have done that while many experts have come to the conclusion that while useful at the beginning, eventually the Three Laws will become totally obsolete (Barthelme and Furbach, 2014, para. 26).

Other examples of Asimov directly influencing scientists include the creation of UNIMATE, an industrial robot, the very first one which was a real revolution in manufacturing. Its inventors, George Devol and Joseph Engelberger were driven by its creation from their obsession and love for Asimov's stories (Robotic Industries Association, 2017, para. 1).

All in all, Asimov was, and still is, a very influential writer. There has not been an author in history who has written so many books, novels, short stories in and out science fiction. His takes on real sciences like chemistry, biochemistry, physics, mathematics, astronomy, religion, literature, among others, make him a one of a kind individual.



During his time on Earth, Asimov explored science fiction and became a referent for colleges and fans of it alike. Without him, this genre would have been much different, and many ideas and concepts would not have been created. From sci-fi to pure science, from the *Robots* to the *Foundation* saga, among many others, his legacy is enormous and difficult to be matched. There have been many science fiction authors since he died, and there will be more, but probably the world will never see a mind like this one again.



CONCLUSIONS

- Asimov is considered to be the most prolific writer of the twentieth century. His extraordinary literary production in different fields of culture makes him a unique character.
- Isaac Asimov, Arthur C. Clark and Robert A. Heinlein are considered the “Big Three.” In other words, the greatest science-fiction writers of the Golden Age.
- Asimov's career is somewhat differentiated into three phases: Science-Fiction production from 1939 to 1958. From 1958 to 1982, he wrote almost exclusively nonfiction. Then he started writing SF again until his death in 1992.
- Asimov was an autodidact since he taught himself to read at the age of five. Thus, starting a hunger for reading. This caused him to finish school when he was only 15.
- Many critics and authors state that Asimov's greatest achievement in the field of nonfiction was his ability of “translating” information; that is, explaining difficult scientific concepts in easy to understand words.
- John W. Campbell was Asimov’s mentor.
- Among his many works, the *Foundation* and *Robot* series are the ones that made him a worldwide renowned author.
- One of the criticisms against his prose style is his bland, direct, and unornamented writing style, while others think that a clear, direct prose style is still a style: Asimov’s style.
- Asimov was not only a famous writer, but he was also a well-known humanist, ecologist, professor, and scientist.
- Asimov was such a talented writer that he won numerous awards along his writing career.
- The earliest precursors to science fiction can be traced as far back as 2000 years BCE.
- Mary Shelley’s *Frankenstein* (1818) is considered to be one of the archetypal books of science fiction dealing with the use of technology beyond the scope of science at the time.



- Jules Verne and H.G. Wells were the precursors of modern science fiction.
- The *Golden Age of Science Fiction* began with the publication of pulp magazines where the genre obtained its name and recognition.
- Joseph W. Campbell created the style of SF stories during this time.
- Science Fiction stories were meant to be idea-driven and puzzle-based.
- Since the beginning of the *Golden Age* until its end, the genre's best exponents were Robert A. Heinlein, H.P. Lovecraft, Olaf Stapledon, George Orwell, Ray Bradbury, Arthur C. Clarke and Isaac Asimov, probably the greatest of them all.
- After the *Golden Age*, came the *New Wave* which introduced a more stylized writing format for the genre. Frank Herbert's *Dune* (1965) is probably the best piece of work during this era.
- In the beginning of the 1980s, SF began to fade from paper form and become increasingly popular in TV, movies, and video games.
- Literary genres fall into two categories, fiction and nonfiction. Fiction is any work that is a product of the author's imagination. Nonfiction works are all based in real-world experiences.
- Science fiction is any work based on actual, imagined, or potential science, usually, but not always, set in the future or on other planets.
- Some of the main characteristics of science fiction are: Creating a world, non-human characters, social commentary, science and technology.
- There are many subgenres of Science Fiction.
- The *Foundation* series, one of Asimov's most fundamental works, consists of two prequels, a trilogy, and two sequels.
- The *Foundation* series became a model for many other books, movies, and TV shows.
- The Galactic Empire, psychohistory, and mental powers, are among the characteristics that make this saga so popular.
- The *Robots* series is the reason he became a worldwide known author.
- The Three Laws of Robotics, positronics, supercomputers, and A.I.'s are the cornerstone on which old and new sci-fi writers have laid his works



when writing about robots.

- Asimov's *Robot* stories represent a new era on SF.
- Asimov's science fiction and popular science books have had an impact on contemporary scientific and public thought.
- Isaac Asimov will be always remembered as a unique writer because of his massive literary and scientific production and because his works did not only impact science fiction, but also science fact.



RECOMMENDATIONS

- As highlighted throughout this research, the literary genre of science fiction (SF) is very important nowadays. Consequently, I would recommend that it should be the subject of many and more profound studies in the English Language and Literature career of the University of Cuenca.
- While Isaac Asimov is an icon of SF, there are many other writers of this genre that deserve to be studied. Authors such as Arthur C. Clark, H.G. Wells, Robert A. Heinlein, Frank Herbert, and many more are too important in the world literature in order not to be reviewed in the English Language and Literature career.
- It is common knowledge that young people have stopped reading as a negative consequence of technological development, which has diverted their attention to other areas of entertainment such as television, the Internet, and cell phones. In this sense, it is my opinion that SF can be a means to encourage reading to students in the English Language and Literature career.
- As a logical consequence of the reluctance of young people to read, new generations are losing the benefits which such activity provides, like good spelling, an enriched lexicon, and, most importantly, the ability to write properly because no one can be a good writer if he/she is not a good reader first. Therefore, reading literature books throughout the career should be encouraged by the professors.



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