

Foundation series

The **Foundation series** is a science fiction series of books written by American author Isaac Asimov. For nearly thirty years, the series was a trilogy: *Foundation*, *Foundation and Empire*, *Second Foundation*. It won the one-time Hugo Award for “Best All-Time Series” in 1966. Asimov began adding to the series in 1981, with two sequels: *Foundation's Edge*, *Foundation and Earth*, and two prequels: *Prelude to Foundation*, *Forward the Foundation*. The additions made reference to events in Asimov's *Robot* and *Empire* series, indicating that they were also set in the same fictional universe.

The premise of the series is that the mathematician Hari Seldon spent his life developing a branch of mathematics known as psychohistory, a concept of mathematical sociology. Using the laws of mass action, it can predict the future, but only on a large scale. Seldon foresees the imminent fall of the Galactic Empire, which encompasses the entire Milky Way, and a dark age lasting 30,000 years before a second great empire arises. Seldon also foresees an alternative where the interregnum will last only one thousand years. To ensure the more favorable outcome, Seldon creates a foundation of talented artisans and engineers at the extreme end of the galaxy, to preserve and expand on humanity's collective knowledge, and thus become the foundation for a new galactic empire.

1 Publication history

1.1 Original stories

Foundation was originally a series of eight short stories published in *Astounding Magazine* between May 1942 and January 1950. According to Asimov, the premise was based on ideas set forth in Edward Gibbon's *History of the Decline and Fall of the Roman Empire*, and was invented spontaneously on his way to meet with editor John W. Campbell, with whom he developed the concepts of the collapse of the Galactic Empire, the civilization-preserving Foundations, and psychohistory.^[1] Asimov wrote these early stories in his West Philadelphia apartment when he worked at the Philadelphia Naval Yard.

1.2 Foundation trilogy

The first four stories were collected, along with a new story taking place before the others, in a single volume published by Gnome Press in 1951 as *Foundation*.

The remainder of the stories were published in pairs by Gnome as *Foundation and Empire* (1952) and *Second Foundation* (1953), resulting in the “Foundation Trilogy”, as the series is still known.^[2]

1.3 Later sequels and prequels

In 1981, Asimov was persuaded by his publishers to write a fourth book, which became *Foundation's Edge* (1982).^[3]

Four years later, Asimov followed up with yet another sequel, *Foundation and Earth* (1986), which was followed by the prequels *Prelude to Foundation* (1988) and *Forward the Foundation* (1993). During the two-year lapse between writing the sequels and prequels, Asimov had tied in his *Foundation* series with his various other series, creating a single unified universe. The basic link is mentioned in *Foundation's Edge*: an obscure tradition about a first wave of space settlements with robots and then a second without. The idea is the one developed in *Robots of Dawn*, which, in addition to showing the way that the second wave of settlements were to be allowed, illustrates the benefits and shortcomings of the first wave of settlements and their so-called C/Fe culture. In this same book, the word *psychohistory* is used to describe the nascent idea of Seldon's work. Some of the drawbacks to this style of colonization, also called *Spacer* culture, are also exemplified by the events described in *The Naked Sun*.

2 Plot

2.1 Prelude to Foundation

Main article: [Prelude to Foundation](#)

Prelude to Foundation opens on the planet Trantor, the empire's capital planet, the day after Hari Seldon has given a speech at a conference. Several parties become aware of the content of his speech (that using mathematical formulas, it may be possible to predict the future course of human history). Seldon is hounded by the Emperor and various employed thugs who are working surreptitiously, which forces him into exile. Over the course of the book, Seldon and Dors Venabili, a female companion, are taken from location to location by an aide, Chetter Hummin, who introduces them to various Tran-

torian walks of life in his attempts to keep Seldon hidden from the Emperor.

Throughout their adventures all over Trantor, Seldon continuously denies that psychohistory is a realistic science. Even if feasible, it may take several decades to develop. Hummin, however, is convinced that Seldon knows something, so he continuously presses him to work out a starting point to develop psychohistory.

Eventually, after much traveling and introductions to various, diverse cultures on Trantor, Seldon realizes that using the entire known galaxy as a starting point is too overwhelming, then decides to use Trantor as a model to work out the science, with a goal of using the applied knowledge on the rest of the galaxy.

2.2 *Forward the Foundation*

Main article: [Forward the Foundation](#)

Eight years after the events of *Prelude*, Seldon has worked out the science of psychohistory and has applied it on a galactic scale. His notability and fame increase and he is eventually promoted to First Minister to the Emperor. As the book progresses, Seldon loses those closest to him, including his wife, Dors Venabili, as his own health deteriorates into old age. Having worked his entire adult life to understand psychohistory, Seldon instructs his granddaughter, Wanda, to set up the Second Foundation.

2.3 *Foundation*

Main article: [Foundation \(Isaac Asimov novel\)](#)

Called forth to stand trial on Trantor for allegations of treason (for foreshadowing the decline of the Galactic Empire), Seldon explains that his science of psychohistory foresees many alternatives, all of which result in the Galactic Empire eventually falling. If humanity follows its current path, the Empire will fall and 30,000 years of turmoil will overcome humanity before a second Empire arises. However, an alternative path allows for the intervening years to be only one thousand, if Seldon is allowed to collect the most intelligent minds and create a compendium of all human knowledge, entitled *Encyclopedia Galactica*. The board is still wary but allows Seldon to assemble whomever he needs, provided he and the “Encyclopedists” be exiled to a remote planet, **Terminus**. Seldon agrees to set up his own collection of Encyclopedists, and also secretly implements a contingency plan—a second Foundation—at the “opposite end” of the galaxy.

Once on Terminus, the inhabitants find themselves at a loss. With four powerful planets surrounding their own, the Encyclopedists have no defenses but their own intelligence. The Mayor of Terminus City, **Salvor Hardin**, proposes to play the planets against each other. His plan

is a success; the Foundation remains untouched, and he is promoted to Mayor of Terminus (the planet). Meanwhile, the minds of the Foundation continue to develop newer and greater technologies which are smaller and more powerful than the Empire’s equivalents. Using its scientific advantage, Terminus develops trade routes with nearby planets, eventually taking them over when its technology becomes a much-needed commodity. The interplanetary traders effectively become the new diplomats to other planets. One such trader, **Hober Mallow**, becomes powerful enough to challenge and win the seat of Mayor and, by cutting off supplies to a nearby region, also succeeds in adding more planets to the Foundation’s reach.

2.4 *Foundation and Empire*

Main article: [Foundation and Empire](#)

The current Emperor of the Galaxy perceives the Foundation as a growing threat and orders an attack on it, using the Empire’s still-mighty fleet of war vessels. However, eventually convinced, as foretold by psychohistory, that his power would be most vulnerable to that of his own successful general (a possible analogy with that of the Roman empire at various times), the Emperor finally orders withdrawal of his fleet. In spite of its undoubted inferiority in purely military terms, the Foundation emerges as the victor and the Empire itself is defeated.

More than a century later, an unknown outsider called the Mule has begun taking over planets belonging to the Foundation at a rapid pace. When the Foundation comes to realize the Mule was not foreseen in Seldon’s plan, and there is no predicted way of defeating him, **Toran and Bayta Darell**, accompanied by **Ebling Mis**—the galaxy’s current greatest psychologist—and a court jester named **Magnifico** (whom they agree to protect, as his life is under threat from the Mule himself), set out to find the Second Foundation, hoping they bring an end to the Mule’s reign.

Eventually, working in the still-functional Great Library of Trantor, Mis comes to learn of the Second Foundation’s whereabouts. Mis also deduces that the Mule’s success stems from his mutation; he is able to change the emotions of others, a power he used to first instill fear in the inhabitants of his conquered planets, then to make his enemies devoutly loyal to him.

Having worked out that the Mule is also attempting to find the location of the Second Foundation, Bayta Darell kills Mis before he can reveal where the Second Foundation is. Bayta explains that she regrets her actions, but that the secret had to be kept from the Mule at all costs. Magnifico reveals that Bayta’s suspicions about him are correct and that he is the Mule and has been laboring to find the Second Foundation in order to start his own Second Empire, hundreds of years before the Seldon Plan is to be complete. Dismayed at having made a mistake which allowed Bayta to see through his disguise, he leaves Trantor to

rule over his conquered planets while continuing his own search.

2.5 *Second Foundation*

Main article: [Second Foundation](#)

As the Mule comes closer to finding it, the mysterious Second Foundation comes briefly out of hiding to face the threat directly. It is revealed to be a collection of the most intelligent humans in the galaxy, the descendants of Seldon's psychohistorians. While the first Foundation has developed the physical sciences, the Second Foundation has been developing the mental sciences. Using the might of its strongest minds, the Second Foundation ultimately wears down the Mule. His destructive attitude is adjusted to a benevolent one. He returns to rule over his kingdom peacefully for the rest of his life, without any further thought of conquering the Second Foundation.

The first Foundation, learning of the implications of the Second, who will be the true inheritor of Seldon's promised future Empire, greatly resents it—and seeks to find and destroy it, believing it can manage without it. After many attempts to unravel the only clue Seldon had given as to the Second Foundation's whereabouts ("at Star's End"), the Foundation is led to believe the Second Foundation is located on Terminus. By developing a technology which causes great pain to telepaths, the Foundation uncover a group of 50 of them, and destroys them, believing it has thereby won. However, the Second Foundation has planned for this eventuality, and has sent 50 of its members to their deaths as martyrs to preserve its anonymity.

At the very end, the Second Foundation is revealed to be located on the former Imperial Homeworld of Trantor itself. The clue "at Star's End" was not a physical clue, but instead based on an old saying, "All roads lead to Trantor, and that is where all stars end". Seldon, being a social scientist and not a physical one, placed the two Foundations at "opposite ends" of the galaxy, but not in a physical sense. Foundation was located on Terminus, out in the Periphery of the galaxy, where the Empire's influence was minimal. Second Foundation was hidden on Trantor, where, even in its dying days, the Empire's power and culture was strongest.

2.6 *Foundation's Edge*

Main article: [Foundation's Edge](#)

Believing the Second Foundation still exists (despite the common belief that it has been extinguished), a young politician [Golan Trevize](#) is sent by the current Mayor of the Foundation, [Harla Branno](#), to uncover the group while accompanied by a scholar named [Janov Pelorat](#). The rea-

son for their belief is the Seldon Plan appears to be proceeding fully on course, despite all the disruptions caused by the Mule. They attribute this fact to unknown interventions by the Second Foundation.

After a few conversations with Pelorat, Trevize comes to believe the Second Foundation lies on the mythical planet of [Earth](#). No such planet exists in any database, yet several myths and legends all refer to it, and it is Trevize's idea that the planet is deliberately being kept hidden.

Meanwhile, [Stor Gendibal](#), a prominent member of the Second Foundation, discovers a simple local—who lives on the same planet as the Second Foundation—has had a minor alteration made to her mind. This alteration is far more delicate than anything the Second Foundation can do and, as a result, he determines a greater force of Mentalics is operating in the Galaxy—a force as powerful as the Mule himself. Having shown interest in Trevize earlier (as he is an individual who has spoken out against the Second Foundation frequently), Gendibal endeavors to follow Trevize, reasoning that he could find out who has altered the mind of the native.

Using the few scraps of reliable information within the various myths, Trevize and Pelorat discover a planet called Gaia which is inhabited solely by Mentalics, to such an extent that every organism and inanimate object on the planet shares a common mind. Having followed Trevize by their own means, Branno and Gendibal reach Gaia at the same time. Meanwhile, Trevize is forced to decide between three alternatives for the future of the human race: the First Foundation's mastery of the physical world and its traditional political organization (i.e., empire), the Second Foundation's mentalics (and probable rule by mind control), or Gaia's absorption of the entire Galaxy into one shared, harmonious intellect.

After Trevize makes his decision for Gaia, the intellect of Gaia adjusts Branno's mind so that she believes she has successfully negotiated a treaty tying Sayshell to the Foundation (and that Gaia is just a Sayshellian myth); Gendibal is sent back to the Second Foundation under the impression that the Second Foundation is victorious and should continue as normal. Trevize remains uncertain as to why he has chosen Gaia as the correct outcome for the future.

2.7 *Foundation and Earth*

Main article: [Foundation and Earth](#)

Still uncertain about his decision, Trevize continues on with the search for Earth along with Pelorat and a local of Gaia, advanced in Mentalics, known as [Blissenobiarella](#) (usually referred to simply as Bliss). Eventually, Trevize finds three sets of co-ordinates which are very old. Adjusting them for time, he realises that his ship's computer does not list any planet in the vicinity of the co-

ordinates. When he physically visits each location, he discovers an uncharted planet: *Aurora*, *Solaria*, and finally *Melpomenia*. After searching and facing different dilemmas on each planet, none has given him the answers he seeks.

Aurora and *Melpomenia* are long deserted, but *Solaria* contains a small population which is extremely advanced in the field of Mentalics. When their lives are threatened, Bliss uses her abilities (and the shared intellect of Gaia) to destroy the Solarian who is about to kill them. This leaves behind a small child, who will be put to death if left alone, so Bliss makes the decision to keep the child as they quickly escape the planet.

Eventually, Trevize discovers Earth, but it, again, contains no satisfactory answers for him (it is also long-since deserted). However, it dawns on Trevize that the answer may not be on Earth, but on Earth's satellite—the Moon. Upon approaching the planet, they are drawn closer and then to inside the Moon's core, where they meet a robot named *R. Daneel Olivaw*.

Olivaw explains that he has been guiding human history for thousands of years, and this is the reason the Seldon plan had remained on course, despite the interventions by the Mule. Olivaw also states he is at the end of his runtime and, despite replacement parts and more advanced brains (which contain 20,000 years of memories), he is going to die shortly. He explains that no robotic brain can be developed to replace his current one, and to continue assisting with the benefit of humanity—which may come under attack by beings from beyond our Galaxy—he must meld his mind with an organic intellect.

Once again, Trevize is put in the position of deciding if having Olivaw meld with the child's superior intellect would be in the best interests of the galaxy. The decision is left ambiguous (though likely a 'yes') as it is also implied that the melding of the minds may be to the child's benefit and that she may have sinister intentions about it.

3 Development and themes

The early stories were inspired by *Edward Gibbon's The History of the Decline and Fall of the Roman Empire*. The plot of the series focuses on the growth and reach of the Foundation, against a backdrop of the “decline and fall of the Galactic Empire”. The themes of Asimov's stories were also influenced by the political tendency in SF fandom, associated with the *Futurians*, known as *Michelism*.

The focus of the books is the trends through which a civilization might progress, specifically seeking to analyze their progress, using history as a precedent. Although many science fiction novels such as *Nineteen Eighty-Four* or *Fahrenheit 451* do this, their focus is upon how current trends in society might come to fruition, and act as a moral allegory on the modern world. The *Foundation* series, on the other hand, looks at the trends in a wider scope, deal-

ing with societal evolution and adaptation rather than the human and cultural qualities at one point in time.

Furthermore, the concept of psychohistory, which gives the events in the story a sense of rational fatalism, leaves little room for moralization. Hari Seldon himself hopes that his Plan will “reduce 30,000 years of Dark Ages and barbarism to a single millennium,” a goal of exceptional moral gravity. Yet events within it are often treated as inevitable and necessary, rather than deviations from the greater good. For example, the Foundation slides gradually into oligarchy and dictatorship prior to the appearance of the galactic conqueror, known as the *Mule*, who was able to succeed through the random chance of a telepathic mutation. But, for the most part, the book treats the purpose of *Seldon's plan* as unquestionable, and that slide as being necessary in it, rather than mulling over whether the slide is, on the whole, positive or negative.

The books also wrestle with the idea of individualism. Hari Seldon's plan is often treated as an inevitable mechanism of society, a vast mindless *mob mentality* of quadrillions of humans across the galaxy. Many in the series struggle against it, only to fail. However, the plan itself is reliant upon the cunning of individuals such as *Salvor Hardin* and *Hober Mallow* to make wise decisions that capitalize on the trends. On the other hand, the Mule, a single individual with mental powers, topples the Foundation and nearly destroys the Seldon plan with his special, unforeseen abilities. To repair the damage the Mule inflicts, the Second Foundation deploys a plan which turns upon individual reactions. Psychohistory is based on group trends and cannot predict with sufficient accuracy the effects of extraordinary, unforeseeable individuals, and as originally presented, the Second Foundation's purpose was to counter this flaw. Later novels would, however, identify the Plan's uncertainties that remained at Seldon's death as the primary reason for the existence of the Second Foundation, which (unlike the First) had retained the capacity to research and further develop psychohistory.

Asimov unsuccessfully tried to end the series with *Second Foundation*. However, because of the predicted thousand years until the rise of the next Empire (of which only a few hundred had elapsed), the series lacked a sense of closure. For decades, fans pressured him to write a sequel. In 1982, Asimov gave in after a 30-year hiatus, and wrote what was at the time a fourth volume: *Foundation's Edge*. This was followed shortly thereafter by *Foundation and Earth*. The story of this volume (which takes place some 500 years after Seldon) ties up all the loose ends and brings together all of his Robot, Empire and Foundation novels into a single story. He also opens a brand new line of thought in the last dozen pages regarding Galaxia, a galaxy inhabited by a single collective mind. However, this concept was never explored further. According to his widow *Janet Asimov* (in her biography of Isaac, *It's Been a Good Life*), he had no idea how to continue after *Foundation and Earth*, so he started writing the prequels.

4 The Foundation series

4.1 Merging with other series

The series is set in the same universe as Asimov's first published novel, *Pebble in the Sky*, although *Foundation* takes place about 10,000 years later. *Pebble in the Sky* became the basis for the *Empire series*. Then, at some unknown date (prior to writing *Foundation's Edge*) Asimov decided to merge the *Foundation/Empire* series with his *Robot series*. Thus, all three series are set in the same universe, giving them a combined length of 15 novels, and a total of about 1,500,000 words. The merge also created a time-span of the series of around 20,000 years.

4.2 Timeline inconsistencies

Early on during Asimov's original world-building of the *Foundation* universe, he established within the first published stories a chronology placing the tales about 50,000 years into the future from the time they were written (circa 1940). This precept was maintained in the pages of his first novel *Pebble in the Sky*, wherein Imperial archaeologist Bel Arvandan refers to ancient human strata discovered in the Sirius sector dating back "some 50,000 years". However, when Asimov decided decades later to retroactively integrate the universe of his *Foundation* and *Galactic Empire* novels with that of his *Robot* stories, a number of changes and minor discrepancies surfaced—the character R. Daneel Olivaw was established as having existed for some 20,000 years, with the original *Robot* novels featuring the character occurring not more than a couple of millennia after the early-21st century Susan Calvin short stories. Also, in *Foundation's Edge*, mankind was referred to as having possessed interstellar space travel for only 22,000 years, a far cry from the 50 millennia of earlier works.

In the spring of 1955, Asimov published an early timeline in the pages of *Thrilling Wonder Stories* magazine based upon his thought processes concerning the *Foundation* universe's history at that point in his life, which vastly differs from its modern-era counterpart. Many included stories would later be either jettisoned from the later chronology or temporally relocated by the author. Also, the aforementioned lengthier scope of time was changed. For example, in the original 1950s timeline, humanity does not discover the hyperspatial drive until around 5000 AD, whereas in the reincorporated *Robot* universe chronology, the first interstellar jump occurs in 2029 AD, during the events of *I, Robot*.^[4]

4.3 Fictional timeline

Below is a summarized timeline for events detailed in the series. All dates are quoted in Galactic Era (GE) and Foundation Era (FE) which starts in 12,068 GE.

5 Other authors

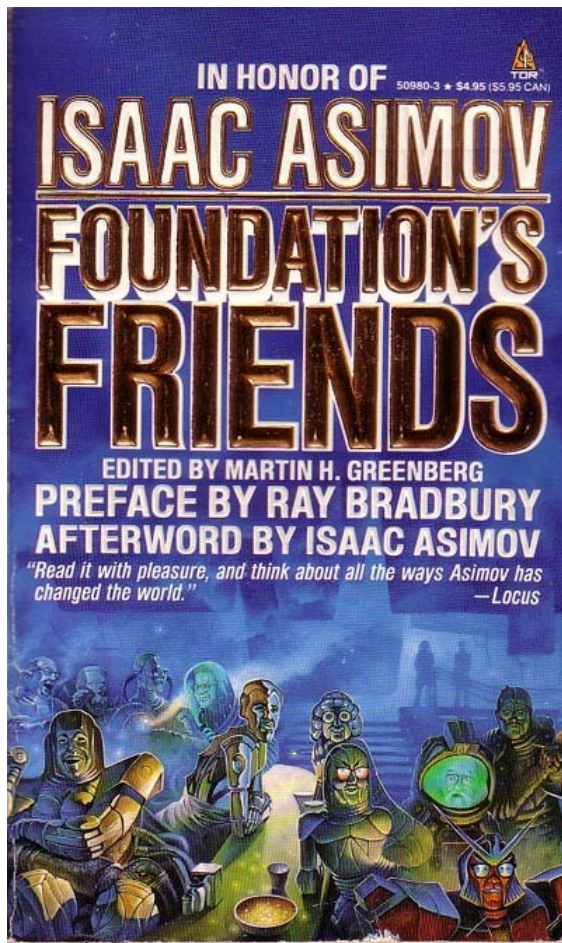
Asimov's novels covered only 500 of the expected 1,000 years it would take for the Foundation to become a galactic empire. The novels written after Asimov did not, however, continue the timeline but rather sought to fill in gaps in the earlier stories. The *Foundation* universe was once again revisited in 1989's *Foundation's Friends*, a collection of short stories written by many prominent science fiction authors of that time. Orson Scott Card's "The Originist" clarifies the founding of the Second Foundation shortly after Seldon's death; Harry Turtledove's "Trantor Falls" tells of the efforts by the Second Foundation to survive during the sacking of Trantor, the imperial capital and Second Foundation's home; and George Zebrowski's "Foundation's Conscience" is about the efforts of a historian to document Seldon's work following the rise of the Second Galactic Empire.

Also, shortly before his death in 1992, Asimov approved an outline for three novels, known as the Caliban trilogy by Roger MacBride Allen, set between *Robots and Empire* and the *Empire* series. The Caliban trilogy describes the terraforming of the Spacer world Inferno, a planet where an ecological crisis forces the Spacers to abandon many long-cherished parts of their culture. Allen's novels echo the uncertainties that Asimov's later books express about the Three Laws of Robotics, and in particular the way a thoroughly roboticized culture can degrade human initiative.

After Asimov's death and at the request of Janet Asimov and the Asimov estate's representative, Ralph Vicinanza approached Gregory Benford, and asked him to write another *Foundation* story. He eventually agreed, and with Vicinanza and after speaking "to several authors about [the] project", formed a plan for a trilogy with "two hard SF writers broadly influenced by Asimov and of unchallenged technical ability: Greg Bear and David Brin."^[7] *Foundation's Fear* (1997) takes place chronologically between part one and part two of Asimov's second prequel novel, *Forward the Foundation*; *Foundation and Chaos* (1998) is set at the same time as the first chapter of *Foundation*, filling in background; *Foundation's Triumph* (1999) covers ground following the recording of the holographic messages to the Foundation, and ties together a number of loose ends. These books are now claimed by some^{[8][9]} to collectively be a "Second Foundation trilogy", although they are inserts into pre-existing prequels and some of the earlier *Foundation* storylines and not generally recognized as a new Trilogy.

In an epilogue to *Foundation's Triumph*, Brin noted he could imagine himself or a different author writing another sequel to add to *Foundation's Triumph*, feeling that Hari Seldon's story was not yet necessarily finished. He later published a possible start of such a book on his website.^[10]

More recently, the Asimov estate authorized publication



Science fiction authors such as Orson Scott Card paid tribute to the *Foundation* series in the collection of short stories *Foundation's Friends*

of another trilogy of robot mysteries by Mark W. Tiedemann. These novels, which take place several years before Asimov's *Robots and Empire*, are *Mirage* (2000), *Chimera* (2001), and *Aurora* (2002). These were followed by yet another robot mystery, Alexander C. Irvine's *Have Robot, Will Travel* (2004), set five years after the Tiedemann trilogy.

In 2001, Donald Kingsbury published the novel *Psychohistorical Crisis*, set in the *Foundation* universe after the start of the Second Empire.

Novels by various authors (*Isaac Asimov's Robot City*, *Robots and Aliens* and *Robots in Time* series) are loosely connected to the *Robot* series, but contain many inconsistencies with Asimov's books, and are not generally considered part of the *Foundation* series.

In November 2009, the Isaac Asimov estate announced the upcoming publication of *Robots and Chaos*, the first volume in a trilogy featuring Susan Calvin by fantasy author Mickey Zucker Reichert. The book was published in November 2011 under the title *I, Robot: To Protect*.

6 Cultural impact

6.1 Impact in nonfiction

In *Learned Optimism*,^[11] psychologist Martin Seligman identifies the *Foundation* series as one of the most important influences in his professional life, because of the possibility of predictive sociology based on psychological principles. He also lays claim to the first successful prediction of a major historical (sociological) event, in the 1988 US elections, and he specifically attributes this to a psychological principle.^[12]

In his 1996 book *To Renew America*, U. S. House Speaker Newt Gingrich wrote how he was influenced by reading the *Foundation* trilogy in high school.^[13]

Paul Krugman, winner of the 2008 Nobel Memorial Prize in Economic Sciences, credits the *Foundation* series with turning his mind to economics, as the closest existing science to psychohistory.^{[14][15]} Businessman and entrepreneur Elon Musk counts the series among the inspirations for his career.^[16]

In the nonfiction PBS series *Cosmos: A Personal Voyage*, Carl Sagan referred to an *Encyclopedia Galactica* in the episodes "Encyclopaedia Galactica" and "Who Speaks for Earth".

6.2 Impact in fiction and entertainment

In 1965, the *Foundation* trilogy beat several other science fiction and fantasy series to receive a special Hugo Award for "Best All-Time Series". The runners-up for the award were *Barsoom series* by Edgar Rice Burroughs, *Future History series* by Robert A. Heinlein, *Lensman series* by Edward E. Smith and *The Lord of the Rings* by J. R. R. Tolkien.^[17] The *Foundation* series is still the only series so honored. Asimov himself wrote that he assumed the one-time award had been created to honor *The Lord of the Rings*, and he was amazed when his work won.^[18]

Science fiction parodies, such as Douglas Adams' *The Hitchhiker's Guide to the Galaxy* and Harry Harrison's *Bill, the Galactic Hero*, often display clear *Foundation* influences. For instance, "The Guide" of the former is a spoof of the *Encyclopedia Galactica*, and the series actually mentions the encyclopedia by name, remarking that it is rather "dry", and consequently sells fewer copies than the guide; the latter also features the ultra-urbanized Imperial planet Helior, often parodying the logistics such a planet-city would require, but that Asimov's novel downplays when describing Trantor.

In 1995, Donald Kingsbury wrote "Historical Crisis", which he later expanded into a novel, *Psychohistorical Crisis*. It takes place about 2,000 years after *Foundation*, after the founding of the Second Galactic Empire. It is set in the same fictional universe as the *Foundation* series, in considerable detail, but with virtually all *Founda-*

tion-specific names either changed (e.g., Kalgan becomes Lakgan), or avoided (psychohistory is created by an unnamed, but often-referenced Founder). The novel explores the ideas of psychohistory in a number of new directions, inspired by more recent developments in mathematics and computer science, as well as by new ideas in science fiction itself.

The oboe-like holophonor in Matt Groening's animated television series *Futurama* is based directly upon the "Visi-Sonor" which Magnifico plays in *Foundation and Empire*.^[19] The "Visi-Sonor" is also mirrored in an episode of *Special Unit 2*, where a child's television character plays an instrument that induces mind control over children.

During the 2006–2007 Marvel Comics Civil War crossover storyline, in *Fantastic Four* #542 Mister Fantastic revealed his own attempt to develop psychohistory, saying he was inspired after reading the Foundation series.

According to lead singer Ian Gillan, the hard rock band Deep Purple's song *The Mule* is based on the Foundation character: "Yes, The Mule was inspired by Asimov. It's been a while but I'm sure you've made the right connection...Asimov was required reading in the 60's."^[20]

6.3 Radio adaptation

An eight-part radio adaptation of the original trilogy, with sound design by the BBC Radiophonic Workshop, was broadcast on BBC Radio 3 in 1973—one of the first BBC radio drama serials to be made in stereo. A BBC 7 rerun commenced in July 2003.

Adapted by Patrick Tull (episodes 1 to 4) and Mike Stott (episodes 5 to 8), the dramatisation was directed by David Cain and starred William Eedle as Hari Seldon, with Geoffrey Beevers as Gaal Dornick, Lee Montague as Salvor Hardin, Julian Glover as Hober Mallow, Dinsdale Landen as Bel Riose, Maurice Denham as Ebling Mis and Prunella Scales as Lady Callia.

6.4 Film adaptation

By 1998, New Line Cinema had spent \$1.5 million developing a film version of the *Foundation Trilogy*. The failure to develop a new franchise was partly a reason the studio signed on to produce *The Lord of the Rings* film trilogy.^[21]

On July 29, 2008, New Line Cinema co-founders Bob Shaye and Michael Lynne were reported to have been signed on to produce an adaptation of the trilogy by their company Unique Pictures for Warner Brothers.^[22] However, Columbia Pictures (Sony) successfully bid for the screen rights on January 15, 2009, and then contracted Roland Emmerich to direct and produce. Michael Wimer

was named as co-producer.^[23] Two years later, the studio hired Dante Harper to adapt the books. This project failed to materialize and HBO acquired the rights when they became available in 2014.^[24]

6.5 Television series

In November 2014, *TheWrap* reported that Jonathan Nolan was writing and producing a TV series based on the *Foundation Trilogy* for HBO.^[25] Nolan confirmed his involvement at a Paley Center event on April 13, 2015.^[26]

7 List of books within the *Foundation Universe*

The "Author's Note" of *Prelude to Foundation* contains the chronological ordering of Asimov's science fiction books, in which he also said, "they were not written in the order in which (perhaps) they should be read".^[27] *Forward the Foundation* does not appear in Asimov's list, as it was not yet published at the time, and the order of the Empire novels in Asimov's list is not entirely consistent with other lists. For example, the 1983 Ballantine Books printing of *The Robots of Dawn* lists the Empire novels as: *The Stars, Like Dust*, *The Currents of Space*, and *Pebble in the Sky*. Given that *The Currents of Space* includes Trantor and that *The Stars, Like Dust* does not, these two books possibly were accidentally reversed in Asimov's list.

1. *The Complete Robot* (1982) and/or *I, Robot* (1950)
2. *Caves of Steel* (1954)
3. *The Naked Sun* (1957)
4. *The Robots of Dawn* (1983)
5. *Robots and Empire* (1985)
6. *The Currents of Space* (1952)
7. *The Stars, Like Dust* (1951)
8. *Pebble in the Sky* (1950)
9. *Prelude to Foundation* (1988)
10. *Forward the Foundation* (1993)
11. *Foundation* (1951)
12. *Foundation and Empire* (1952)
13. *Second Foundation* (1953)
14. *Foundation's Edge* (1982)
15. *Foundation and Earth* (1986)

An expanded and corrected strictly chronological reading order for the books is:

Another alternative is to read the books in their original order of publication, since reading the *Foundation* prequels prior to reading the *Foundation Trilogy* fundamentally alters the original narrative structure of the trilogy by spoiling what were originally presented as plot surprises. In that same *Author's Note*, Asimov noted that there is room for a book between *Robots and Empire* (5) and *The Currents of Space* (6), and that he could follow *Foundation and Earth* (15) with additional volumes.

7.1 Tangential books

While not mentioned in the above list, the books *The End of Eternity* (1955) and *Nemesis* (1989) are also referenced in the series.

The End of Eternity is vaguely referenced in *Foundation's Edge*, where a character mentions the Eternals, whose “task it was to choose a reality that would be most suitable to Humanity”. (*The End of Eternity* also refers to a “Galactic Empire” within its story.) In *Forward the Foundation*, Hari Seldon refers to a 20-thousand-year-old story of “a young woman that could communicate with an entire planet that circled a sun named Nemesis”, a reference to *Nemesis*. In *Nemesis*, the main colony is one of the Fifty Settlements, a collection of orbital colonies that form a state. The Fifty Settlements possibly were the basis for the fifty Spacer worlds in the *Robot* stories. The implication at the end of *Nemesis* that the inhabitants of the off-Earth colonies are splitting off from Earthbound humans could also be connected to a similar implication about the Spacers in Mark W. Tiedemann's *Robot* books.

On the other hand, these references might be just jokes by Asimov, and the stories mentioned could be just those really written by himself (as seen in *The Robots of Dawn*, where Fastolfe makes a reference to Asimov's *Liar!*) and still being read twenty thousand years later. Furthermore, Asimov himself did not mention *The End of Eternity* in the series listing from *Prelude to Foundation*. As for *Nemesis*, it was written after *Prelude to Foundation*, but in the author's note Asimov explicitly states that the book is not part of the *Foundation* or *Empire* series, but that some day he might tie it to the others.

8 Major characters

- **R. Giskard Reventlov**, the first robot able to alter human minds (of the 'diaspora' era, see **I, Robot** story “Liar!”)
- **R. Daneel Olivaw**, a humanoid robot who organizes the creation of both the Seldon plan and Gaia and Galaxia, he also assumes the names Chetter Hummin and Eto Demerzel (First Minister).

- **Hari Seldon**, leader of the Psychohistorical movement which creates the Foundation and the Seldon plan; first First Speaker of the Second Foundation (traditional), **First Minister** of the Galactic Empire under Cleon I, after Eto Demerzel
- **Dors Venabili**, Seldon's wife and protector, known as the “Tiger Woman” for her physical prowess and swiftness to action, she is eventually revealed to be a humanoid robot like Daneel.
- **Yugo Amaryl**, Seldon's colleague, a heatsinker from the Dahl Sector of Trantor
- **Raych Seldon**, Hari Seldon's adopted son from the Dahl Sector of Trantor
- **Wanda Seldon**, Raych Seldon's eldest daughter who later becomes a Psychohistorian and second First Speaker of the Second Foundation
- **Emperor Cleon I**, Entun Dynasty, emperor during the first part of Hari Seldon's stay on Trantor
- **Gaal Dornick**, one of the last Psychohistorians to join the Project
- **Salvor Hardin**, first mayor of Terminus, first Founder to realize the “farce” of the Encyclopedia Galactica
- **Hober Mallow**, the first “Merchant Prince” during the Foundation's “Trader” days
- **Bel Riose**, general of the Galactic Empire
- **The Mule**, a mutant who was extremely adept at altering human emotions
- **Bayta Darell**, Foundation citizen instrumental in the defeat of the Mule.
- **Ebling Mis**, thought to be first person to discover the location of the Second Foundation
- **Arkady Darell**, granddaughter of Bayta Darell, who theorizes a location of the Second Foundation
- **Preem Palver**, a farmer living on Trantor and First Speaker of the Second Foundation
- **Golan Trevize**, councilman of Terminus who discovers the secret location of Earth
- **Janov Pelorat**, historian, accompanies Trevize

9 See also

- **Earth** (Foundation universe)

10 Notes

- [1] The final section of *Forward the Foundation, Epilogue*, appears to directly precede Hari Seldon's death. Therefore at least this part of the book would be located after the events of *Foundation and Chaos, Foundation's Triumph* and the first chapter of *Foundation*.

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- [6] Gaia (Foundation universe)#Galaxia
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- [8] <http://www.sikander.org/foundation.php>
- [9] <http://kaedrin.com/fun/asimov/newfound.html>
- [10] Denouement (a dream to follow *Foundation's Triumph*)
- [11] Seligman, Martin. *Learned Optimism* ((c) 1998 by Alfred A. Knopf, Inc.), 185ff.
- [12] Seligman discusses the successful prediction of the Presidential and 33 Senatorial elections based on an evaluation of the candidates' optimism as expressed in their speeches, and the principle that American voters systematically favor optimistic candidates.
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12 External links

- 15-Book Reading Order as Suggested by Asimov From “Author's Note” of *Prelude to Foundation* Doubleday (1988 hardcover edition)
- Johnny Pez's Complete chronological listing of all stories in the series
- Timeline for The Robots and Foundation Universe
- The Foundation Trilogy (BBC Radio)

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