Isaac Asimov's Foundation Series:

A Historiographical Analysis

The *Foundation* series by Isaac Asimov is a seven-volume science-fiction drama of epic Galactic struggle covering hundreds of years and dozens of characters. Its popularity was confirmed when "the 1966 World Science Fiction Convention awarded it a Hugo as 'the greatest all-time science fiction series". [1] In many ways, the prolific author, who wrote more than 450 books before his death in 1992, was one of the founding fathers of the science fiction genre. The *Foundation* series is a wonderful set of books to read for pleasure, and most readers will leave it at that; but a careful analysis of the writings reveal an underlying historiographical belief system. Inherent in Isaac Asimov's saga of Galactic Empire is the belief that history, and by extension the future, is cyclical, and thereby predictable, and ultimately hopeless.

Isaac Asimov loved to learn about history. One of the observations he had of history is that, "we do not learn from the lessons of the past". [2] By failing to learn from history, man has ensured that "history does repeat itself in large sweeping ways". [3] To support his observation, Asimov developed "an outline, which can be filled in by at least three historical periods in European history". [4] For Isaac Asimov, this cyclical aspect of human history affected the very nature of government, empires, and institutions/beliefs.

In the *Foundation* series the nature of government evokes continual change but no real progress. Each "generation's solution is the next generation's problem". [5] It is difficult for governments to foster substantial positive change because "every innovation rigidifies into sterile tradition, which must, in turn, be overturned". [6] The cycle continues again and again as each successive generation overthrows its entrenched predecessor only to end up seeking to entrench itself and stifle change.

When applied to the government of a Galactic Empire, Asimov's theory of cyclical history resembles the model he admired, Gibbon's *Decline and Fall of the Roman Empire*. [7] The parallel to Rome in Asimov's Galaxy is the world-city of Trantor, a behemoth with a food import dependent population of 400 Billion administrators. Trantor is responsible for the government of twenty-five million worlds, the "ever-increasing weight of administering" them are always growing. [8] Like Rome, the decay was evident on the frontier long before it devoured the center, as the character Ducem Barr notes, "circulation ceases first at the outer edges. It will take a while yet for the decay to reach the heart". [9]

An empire that lasts as long as Rome did begins to develop an aura of permanence. When Hari Seldon began to forecast the Galactic Empire's downfall, the multitude was skeptical because "how can one say that the Galactic Empire was dying? It had existed for 10,000 years as an accepted Empire". [10] Thousands of years of *Pax Imperium* had dulled the collective memories and blocked out the "interstellar anarchy that preceded it". [11]

The difficulty of administering such a massive government contributed to the inherent

flaws and inevitable fall of the empire. The fall itself had been gaining momentum for hundreds of years before Hari Seldon expressed it mathematically. "The fall of Empire is a massive thing, and not easily fought. It is dictated by a rising bureaucracy, a receding initiative, a freezing of caste, a damning of curiosity- a hundred other factors". [12] With such a massive government the decline had been going on for centuries before it was noticed.

Trantor was as beholden to its soldiers as Rome was to her soldiers. In a Galactic Empire a rebel could never defeat the massive military of the state, he could, however, topple the government at its heart, Trantor. As Rashelle, a pretender the throne boasted, "there are 25 million worlds, with the Imperial forces scattered over them". [13] If the Emperor is to remain safe he must ensure the loyalty of the garrison of Trantor. To ensure the loyalty of the troops, the "armed forces are much better-paid...so the credits still go-unproductively- to the armed forces and vital areas of the social good are allowed to deteriorate". [14] Pacifying the military only creates more problems, and thus the beginnings of the cycle of decay.

Another threat that Rome knew well was that of a popular general. Asimov utilizes this tenant heavily through the story of the successful general Bel Riose. Riose is an example of the inherent flaws of empire, and later of the struggle between freewill and predestination. The foil to Riose's character, Ducem Barr explains why Riose must fail in his attempt to win glory by destroying the Foundation

The social background of the Empire makes wars of conquest impossible for it. Under weak Emperors, it is torn apart by generals competing for a worthless and surely death-bringing throne. Under strong Emperors, the Empire is frozen into a paralytic rigor in which disintegration apparently ceases for the moment, but only at the sacrifice of all possible growth...a man like Riose would have to fail, since it was his success that brought failure; and the greater the success, the surer the failure. [15]

Because the empire is vulnerable at the center, it cannot afford to have successful generals. Without successful generals, any minor rebellion or insurrection is likely to spread and become a major uprising, further weakening the empire. Riose's success raises the suspicion of the emperor, who recalls Riose to Trantor, falsely accuses him of plotting against him, and has Riose executed.

The similarities between Rome and the Galactic Empire exist because Asimov believed that history repeats itself. In the *Foundation* series, institutions and beliefs bear this out as well. "Even though the stories take place in a Galactic Empire setting hundreds of thousands of years in our future, very little seems to have changed so far as social patterns and human behavior go". [16] This is possible because a necessary presupposition of a cyclical history is a static humanity. If humanity doesn't change, neither will the essence of its social systems. Asimov illustrates this with the example of the "life cycle" of a dogma. The Foundation attempts to use a dogma to its advantage only to later realize that

any dogma, primarily based on faith and emotionalism, is a dangerous weapon to use on others, since it is almost impossible to guarantee that the weapon will never be turned on the user. For a hundred years now, we've supported a ritual and mythology that is becoming more and more venerable, traditional- and immobile. In some ways, it isn't under our control any more. [17]

The evolution of dogmas once again show Asimov's belief in cyclical history as new ideas sprout up, replace the old, and then struggle to entrench themselves in a never-ending cycle.

The sciences themselves are not immune to this cycle of birth and stagnation. In the empire the "rate of technological advance has been slowing for centuries and is down to a crawl now...Scientists are very good these days at saying that things are impossible, impractical, useless. They condemn any speculation at once". [18] Thus for Asimov, even the rate of technological advance has a life cycle.

Asimov's view of history made possible the theory of psychohistory put forth by the protagonist, Hari Seldon. As a science fiction writer Asimov wasn't free to invent anything he wanted. "The science-fiction writer disciplines his imagination...Only that goes that fits science as we know it today or as that science can be plausibly extrapolated". [19] Thus Seldon's ability to predict the future, even in generalities, rests upon the certainty of a cyclical history and a static humanity.

Seldon defines psychohistory as "that branch of mathematics which deals with the reactions of human conglomerates to fixed social and economic stimuli". [20] Psychohistory assumes that the populace is unaware of the predictions, and that the sample studied is large enough. H.G. Wells gave a speech to the Sociological Society in which he claimed that "a true science of sociology was impossible because there aren't enough people involved to make accurate prediction possible...in the Foundation stories you supplied enough people". [21] By setting the series in a galaxy with twenty-five million inhabited worlds, Asimov has ensured that the Uncertainty Principle can be applied.

Asimov believed that atomic theory could provide insight into mass human interaction. In his series, "mankind has reached sufficient numbers...that the Uncertainty Principle can quite accurately predict what will happen under certain sets of circumstances, in much the same way that we can make predictions about atomic theories today". [22] By comparing psychohistory to atomic theory the role of the individual is eliminated. We cannot predict the actions or location of individual electrons. We can predict the actions and locations of electrons in general. The analogy is an apt one. Asimov never has psychohistory apply to the individual, and it is never applied with certainty, only probability.

In order to study humanity sufficiently Hari Seldon must find a sample large enough to make the mathematics work, yet small enough to be studied. The solution was the multi-sectional Trantor. "Trantor possessed an extraordinarily complete social system, being a populous world made up of eight hundred smaller worlds". [23] Once Trantor was studied sufficiently Seldon and his team of scientists were able to test their predictions, refine their techniques, and eventually chart the probable future of the galaxy.

Even though Asimov doesn't attempt to apply psychohistory to individuals or to apply it with absolute certainty, the inevitable questions of freewill arise. The test case in the *Foundation* series is Bel Riose. Riose, the successful general, is "the only character who stares into the face of determinism, only he is frustrated by psychohistorical necessity rather than by the actions of an individual". [24] The discussion between Riose and Ducem Barr illustrates Asimov's view of the role of freewill in psychohistory:

Riose- You are trying to say that I am a silly robot following a predetermined course into destruction.

Barr- No...I have already said that the science had nothing to do with individual actions. It is the vaster background that has been foreseen.

Riose- Then we stand clasped tightly in the forcing hand of the Goddess of Historical Necessity.

Barr- Of Psychohistorical Necessity.

Riose- And if I exercise my prerogative of freewill? If I choose to attack next year, or not to attack at all? How pliable is the Goddess? How resourceful?

Barr-Attack now or never; with a single ship, or all the force in the Empire; by military force or economic pressure; by candid declaration of war or by treacherous ambush. Do whatever you wish in your fullest exercise of freewill. You will still lose.

Riose- Because of Hari Seldon's dead hand?

Barr- Because of the dead hand of the mathematics of human behavior that can neither be stopped, swerved, nor delayed. [25]

According to Asimov, the individual is inconsequential. Riose was firmly in the grip of the social dynamics of a weak emperor and a strong general. If he failed, he failed; if he succeeded, he would fail. Barr acts as the apologist for Asimov as he insists that Riose can do whatever he wants, it is only the outcome that is predicted.

There is a similar line of thinking in the Judeo-Christian explanation of human freewill. The Bible says that man has freewill. The Bible also says that God has a plan for history and that his plan will be carried out. The role of individuals is unknown, but the end results are certain. In many ways "psychohistory is no more restrictive of freewill than the Judeo-Christian deity". [26]

The source of Asimov's ideas of freewill and determinism was the rise of Hitler. Asimov lived through the Hitler era "where no matter what anyone did, Hitler kept winning victories, and the only way that I could possibly find life bearable at the time was to convince myself that no matter what he did, he was doomed to defeat in the end. That he couldn't win" [27] An economic/production analysis of WWII could very well read like Asimov's analysis of Riose's situation. No matter what Hitler did, or didn't do, the social forces doomed him to defeat in the end.

The cyclical and predictable aspects of Asimov's psychohistory permeate the over two thousand pages of the series. The last aspect, hopelessness, doesn't appear in the original trilogy published from 1951 to 1953. The last four volumes, published between 1982 and 1993 illustrate that hopelessness has begun to seep into Asimov's beliefs. Asimov had "dedicated himself to the education of the masses through numerable book and innumerable articles. Nevertheless, as he looked around him, he must have seen the world as ignorant as it was when he began". [28] The youthful idealism of a man in his twenties has been replaced by the measured cynicism of a man in his twilight years.

The origins of Asimov's hopelessness go beyond the simple advance of time. Asimov believed that history was cyclical, that endless repetition rules. How then is hope for the future possible? The future will be in essence the same as the present. Even with Seldon's ability to predict and guide the future, man is still the same. Because Isaac Asimov did not believe in a God who would intervene, he was left with little room to work out a rational solution to his problem. [29]

Rational solutions are the hallmark of Asimov's writing. "More than any other writer of his time...Asimov spoke with the voice of reason". [30] Time after time in the series reason triumphs. Not over "irrationality or emotion but over other rationality, as in the conflict between the Mule and Bayta...between the Mule and the First Speaker, and between the Second Foundation and the First Foundation". [31] However, when faced with the near completion of

Hari Seldon's plan to restore a galactic empire, reason fails Asimov.

Reason has failed because Asimov has to resort to a mystical solution to the problem of cyclical history. A confrontation in *Foundation's Edge* provides the backdrop for a discussion of the merits and flaws of empire by Mayor Branno, representing the First Foundation's physical empire, Stor Gendibal, representing the Second Foundation's mental empire, and Gaia, representing the mystical solution. Asimov uses the character of Golan Trevize to decide between these three future courses of humanity, another mystical element, because Trevize is noted for his "grasp on correctness- when he is 'sure' he is always right". [32]

Gaia claims that the "Second Galactic Empire- worked out after the fashion of Terminus- will be a military Empire, established by strife, maintained by strife, and eventually destroyed by strife. It will be nothing but the first Galactic Empire reborn". [33] Hari Seldon's efforts may have shortened the period of Barbarism, but it cannot stop the cycle of birth and death of empire. Gaia isn't satisfied with the Second Foundation's mental control of the Galaxy either. "The Second Galactic Empire- worked out after the fashion of Trantor- will be a paternalistic Empire, established by calculation, maintained by calculation, and in perpetual living death by calculation. It will be a dead end". [34] Pyschohistoric control of the galaxy by the Second Foundation is still control by the same humanity, it would eventually fail.

The representatives of the First and Second Foundations reject Gaia's imputation of their worth. The First Foundation argues for freedom at any cost because "it is better to go to defeat with freewill than to live in meaningless security as a cog in a machine". [35] Thus mayor Branno of the First Foundation impugns both the Second Foundation and Gaia. The Second Foundation representative, Stor, defends the motives of his people saying, "the Second Foundation will in no way hamper the freewill of humanity, we are guides, not despots". [36] With both the First and Second Foundations protesting that their motives are pure, Asimov offers the mystical option: Galaxia.

Galaxia is an experiment begun on the planet Gaia in which "every inhabited planet (is) as alive as Gaia...a living galaxy and one that can be made favorable for all life in ways that we yet cannot foresee. A way of life fundamentally different from all that has gone before and repeating none of the old mistakes". [37] The key element is the fundamentally different way of life. The only way to avoid repeating the old mistakes is to change the nature of humanity itself. The planet-wide consciousness of Gaia will eventually combine all of humanity, along with the rest of the matter in the galaxy, into one galactic mind. Asimov has trapped the plot within a rational framework and been forced to resort to a mystical solution to avoid the endless repetition of galactic empire.

The final decision between the physical, mental, and mystical versions of the future rests with Golan Trevize. Golan decides in favor of Galaxia, but spends the bulk of *Foundation and Earth* trying to figure out if he made the right choice. Asimov posits an unprovable rationale for Golan's choice, the possible existence of intelligent life in other galaxies. Golan realizes that "the galaxy is not the universe. There are other galaxies". [38] If humanity ever encounters another intelligent lifeform, "the only true defense is to produce Galaxia, which cannot be turned against itself and which can meet invaders with maximum power". [39]

The end result of Asimov completing the storyline in the fourth through seventh books of the series is that the rational roots of the original trilogy are abandoned in favor of a mystical harmony. Asimov had begun with a predicable cyclical history that showed by mathematics that man is doomed to repeat his past mistakes and that the empire which rises must eventually fall.

Psychohistory confirmed that individuals were free to do whatever they wanted, but that social forces would be the decisive factors.

The rational thinking of Asimov left no venue for the author to write a happy ending. Simply calling a particular point in an endless, and predicable, cycle a happy ending would not do. Hopelessness was unavoidable if Asimov clung to the notion of an unchanging humanity. Thus even though there is no hint of mysticism in the original trilogy, the mystical element was certain to come into the story if the implications of psychohistory were born out. When humanity is left with only its rational mind to solve the divisiveness of hundreds of thousands of years, he is sure to fail. Mysticism is the only way out. The *Foundation* series is still one of the greatest science-fiction series of all time, but its author was forced by "Psychohistorical Necessity" to finish it apart from its original rational thesis.

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- [<u>20</u>] *Foundation*, 18.
- [21] Gunn, 255.
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- [25] Foundation and Empire, 31.
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