CHAPTER II
DREAMS ARE NEAR REALITIES

Strategies for the future need not be idle exercises in utopian thinking. Given our needs as well as our capabilities, if we can envisage a desirable and realistically attainable world order, we can also devise strategies for achieving it. (Laszlo 65)

The drama in the Foundation Trilogy is an approved, tolerated, encouraged, manipulated and promoted process. The Foundation Trilogy is described as a drama of galactic intrigue. Intrigue is the method adopted to bring about a "purposive action for a better future". For, these are the charted courses a falling or disintegrating civilization takes before reorganising itself into a new civilization. This is our education in these long years of observed changes be it from the Roman Civilization to the Christian civilization, for example, as we are given to understand about the Trilogy. This is our insight from analysing the civilizational collapse in the bygone years. Our knowledge is based on evidence and the evidence appears to be apocryphal in origin. If we have gained anything from our study of civilizations we must have deduced certain laws. On the other hand it all seems inscrutable how civilizations rise and fall. Theoreticians are vertically divided on the basis of the school of thought they subscribe to—viz. teleological and empirical. Until the eighteenth century our world remained in a state of stasis as regards advancement in science and the application thereof. Modern day societies are scientific societies undoubtedly, for, they have learnt to make use of scientific
findings. In the sixteenth century during the *Baconian* days knowledge was pursued for its own sake to understand the secrets of nature. The lessons of such knowledge were not applied to any benefit or for the improvement of the lot of man as a whole. But, modern man has employed science to shape his life and environment. As a result we are today a tailored society. Not so much yet. We have had our environment and living conditions to our whims. There remains yet the least understood part of our existence -- what is it that shapes our civilization to which we all cling with great passion and derive strength from. We appear as pawns in a grand chess game we neither see nor decipher. We do not see the hand that makes us work the way we do. Going by the evidence of periodic changes in civilization, it is supposed that there is a periodicity of 2000 years between each civilization beginning from the Mesopotamian to the present Christian civilization. Man appears to be a vassal in the hands of a shaping spirit. A sleight of hand seems to be at the back of everything. Modern man might bemuse himself with the inflated notion that he is the master of his environment but cannot boast the same of his own destiny, since, the shaping forces of civilization are the least understood.

In the recent days there had been attempts at getting closer to an understanding of these forces shaping societies. They fall under the category of parasciences, for, they defy logical analysis unlike absolute sciences or physical sciences. We have not been able to devise appropriate foolproof yardsticks to estimate these sciences. Further, nothing that is said here can be said for sure and that has begged their categorization as
parasciences and hence as it were their being construed less credible as pure sciences in contrast to absolute sciences. Nevertheless, they are tangibly the forces at work behind the perceivable and perceived social changes. We are ready to acknowledge their handiwork but would not believe in their existence since they appear insubstantial. It may not therefore be improper to apply the findings, however ill founded and based on hearsay, to effect desired changes and manipulate to get desired changes. They are not exact sciences with exact laws. They could be approximations or assumptions arrived at scientifically. They demand a certain allowance to be made in computing their accuracy. They are neither inconsequential nor unrealizable. They are sciences in as much as they are reproducible with more or less the same accuracy. Even in absolute physical sciences some are gray areas -- quantum physics for instance. Asimov himself talks of gas laws as having led him to contemplate veracity in parasciences (SFS V.14 (1987); 68-77). Since conclusions have to be necessarily based on approximations, probability plays a crucial role. On a similar footing these parascientific findings are based on approximations. If we could trust these absolute sciences for our everyday applications, so could we trust parasciences too for "social engineering".

SF is seized of this fact. SF deals with the world as it promises, or threatens to become later on when science enables us to understand secrets of Nature. In short SF is a world of change.

The conditioning of most cultures on this planet tends to set up absolute categories .... Western culture is
particularly obsessed with this absolutism through its narrow vision of a linear pragmatism hitched to technology. We have been taught to believe that for every problem there is a scientific answer. (Herbert, Frank in Bretnor 123)

In the present circumstances this could be considered an advantage. Asimov's Foundation Trilogy revolves around this hypothesis that psychohistory, a new science, can help tide over the phenomenon of civilizational cycles and alleviate human misery during civilizational resurrection. In the Foundation Trilogy an interregnum of 30,000 years between two civilizations is reduced to a mere 1000 years with the use of technology! It is a humane endeavour. Asimov is not fantasizing in his Trilogy. Being a hard-core sf writer, Asimov has made a cognitive use of these forces the rudiments of which were beginning to be understood with the help of psychohistory. "In academic terms, what we do is to create our own intellectual ethic and aesthetic out of the structural parts already available around us" (Herbert, Frank in Bretnor 124). Asimov was no exception. Indeed he was self consciously doing what he is attempting at though he would change his convictions later in his life. To quote Asimov: "People forget that the great revolutionaries of science knew thoroughly what they were revolutionizing. In other words Galileo knew Aristotelian physics.... No one has revolutionized science by not knowing what came before.... And you just can't do it that way." (Asimov in SFS 14:1 [1987]:71) Science fiction deals with the advances in science and their effects on society. This is a clear indication that Asimov was drawing in on exact knowledge and was trying to
incorporate the new discoveries and insights into his predictive future history. Whatever the objections it is an experiment. He may give us a designer civilization but the objective of this is to shower benefit to all mankind. To say that it is dabbling in undesirable areas is to deny oneself the good of science, which we know is hypocritical in so far as these objections are made by men who have benefited from science. The world has accepted the atom bomb, a destroyer of civilizations, nay, mankind itself. World had accepted the German war machine during the Second World War. There sure could be ways to get over the vagaries of history just so far as man could help, not such events that had changed the world like the Ice Age swallowing up the Mammoth, not that event that had swallowed up the gigantic animals like the dinosaur, the allosaur and the diplodochus. Man is subject without any doubt to vagaries of Nature like the hailstorm and bleat, but that does not warrant yielding to decipherable causes, like the whims of one man or groups of men. Toynbee, on the other hand feels that historical changes can be averted in so far as they are due to man made causes. However considered, it is the masses who suffer in the transition from one kind of ethos to another during changes in civilization. It is the man in the street who goes without the benefit of the knowledge of his forebears that has been meticulously built up. Asimov did what Francis Bacon did in his days, of directing like minded people to collect between two wrappers the achievements of scientists until his time and they came to be called the encyclopaedists. After Bacon the concept was smuggled into Europe and many more joined the group and the result was a pan European compendium of verifiable knowledge which otherwise would have wilted away
languishing on ant eaten shelves. The movement resulted in a new awareness and in the eighteenth century the Age of Enlightenment was born. Modern man realized the worth of looking into the past the past that had lessons to be learnt, the past contained in history. It spread from one sphere of human activity to another until it became the mode in the modern era.

Karl Marx is credited with the discovery of laws governing human societies. His dialectic materialism is based on the supposition that societies behaved the same way as the natural forces and they were conditioned by definite laws. In fact Wolheim (Universe Makers 1972) accused Asimov's Foundation novels as striving to achieve what Karl Marx could not. On the contrary, Elkins quotes Frederick Engel's speech during the funeral of Karl Marx: "[J]ust as Darwin discovered the laws of evolution in organic nature, so Marx discovered the laws of evolution in human history ..." (SFS 3:1 1976 29). Lenin attributes to Karl Marx the concept of studying socio economic systems.

[H]istorical materialism made it possible for the first time to study with scientific accuracy the social conditions of the life of the masses and the changes in these conditions... Marxism indicated the way to one all-embracing and comprehensive study of the processes of the rise, development, and decline of socio-economic systems ... Marx drew attention and indicated the way to a scientific study of history as a simple process which, with all its immense variety and contradictions is governed by definite laws. (SFS 3:1 1976 29)
Asimov proclaims in his book *The Early Asimov*, that: "In telling future history ... I always felt it wisest to be guided by past history. This was true of the 'Foundation' series too" (155). Asimov was presumably thinking of eliciting lessons from past history. For, in this sphere of human life, the most essential requirement for our survival is stability of society. Man is without any beacon of guidance to go by except for our past history. Elkins wonders at this conviction of Asimov since it "so intrigues both the readers of the Foundation novels and those who study Marxism" (SFS 3:1 1976 26-35). If it is to be believed that human history is subject to definite laws as Marx would feign believe, then this concept raises the traditional conflict of free will versus historical determinism. Oedipus Rex faces the same problem but then, at least, they were sure there was an Apollo over man's destiny. Curiously, Asimov's characters, especially the First Foundationers and the temporary warlords feel the inevitability of their destiny. Marx joins forces with Bukhanin, his political mentor, who asserted that: "society and its evolution are as much subject to natural law as is everything else in this universe" (SFS 3:1 1976 29). Reginald Bretnor in *The Craft of Fiction* while attempting a critique on the Trilogy feels that in certain unexamined assumptions of our society certain phenomena have been locked up and that SF is one branch of study that explores and reveals this phenomena (1977). Bretnor is sure that science fiction alone can reveal by making a study. "What other human activity ventures this deeply into the crystallised (and crystallising) structures of our society and exposes these structures to a broader view?" (Herbert, Frank in Bretnor 128). For any society to assume a
corpus, some guiding element should crystallize from its first formation, and should slowly gain preponderance over other less important features which will get swept away. One of the ways is to entrust the responsibility of reconstruction with a select team of savants. It was believed of socialism that: "[s]ocialism will come inevitably because it is inevitable that men, definite classes of men, will stand for its realization, and they will do so under circumstances that will make these victory certain" (Bukhanin qtd. in SFS 3:1 1976 29). That socialism would be brought into existence by definite classes of men points to the method adopted by Asimov in his Trilogy. In Asimov's conception we see a parallel of Bukhanin's words that of entrusting the safety of the Seldon Plan in the hands of savants, namely the Second Foundationers, the psychologists. Le Comte, the historiographer, approves of the same in his prescription for a renewal colony.

Much before Asimov there had come into existence the psychology of Freud, there, was the study of sociology and political science. There was even the application of psychology to history. In the Foundation Trilogy therefore, Asimov imagines a future when these sciences have reached their height of perfection and therefore are advanced technologies equally as the technologies of physical sciences now known to man. Physical sciences are almost always laboratory sciences. Contrarily the parasciences are not laboratory sciences, nor do they deal with materials. They deal with masses of people and their laboratories are everyday life and history of our lives. Their results are known from the conduct of societies. Societies,
cultures and civilizations are their playfields. Incidentally the study of these parasciences led to comprehending less prominent but more instrumental functional elements, namely, symbolic logic, organized and disorganized complexities, probability, behaviour modification and stimulus diffusion. These are the palpable modes of getting at the working of parasciences. If we do not come to grips with these cognitive methods, our ability to comprehend the purpose of the Foundation Trilogy stands undermined. The exercise of conceiving the Foundation Trilogy is not an exercise in futility. Knowledge of the parasciences is presumed in the readers of the Foundation Trilogy. It is the purpose of this study to bring to light the fact that the various members of this parascientific domain are cognisable and real and are at various stages of development and practice. Nevertheless, Asimov kicked up a lot of dust as is evidenced by Frank Herbert's conspiratorial, diametrically opposed trilogy named *The Dune, Children of Dune* and *Dune the Messiah*, where man will not dabble with his destiny just because deciding our fate is not in our domain. Frank Herbert would show man as product of chance and inscrutable destiny. But Asimov knew his duties to the society as shown later in this chapter. He was an optimist and kept exploring till the very end. The Foundation Trilogy is in his opinion a social science fiction, as it does not extrapolate a scientific fact but examines the influence of a parascientific fact on society. It is a pre-emptive approach to indicate that the parasciences are in operation, already. After all, "[o]ut of generous dreams come beneficial realities. Utopia is the principle of all progress, and the essay into a better future" (Mumford 22). Hence, Asimov's
explorations of the possibility of helping the course of conducted history.

The Foundation Trilogy is in actuality nine novellas ... (they) hypothesize a deterministic, 'psycho-history' that calls into question the free will of his anti-heroic protagonist. In a crumbling Galactic Empire they try to keep the spirit of scientific enquiry alive throughout a Dark Age until civilization can again be consolidated ... Asimov's work was different: decision-making replaced blood and thunder action, and its empire ... was a civilization of humans only. (Twentieth Century science fiction Writers 1986 ed.)

Asimov revolutionised empire story writing, and his is no mean achievement. In spite of the relevance of Asimov's work the science suggested by him to reconstruct society is held in doubt.

Reservations about achieving results through parasciences are many. One of the reservations about getting an understanding of history by contemporaries is that an average individual cannot perceive changes taking place in his own lifetime. His vision is a limited vision. Nor can he perceive changes in the near historical time span. But not necessarily. Some are capable of looking into the changes as this passage tells us.

Events that are too large to be perceived in immediate history register in the unconscious in the collective form of myth, and since artists and visionaries possess strongly mythopoeic imaginations, they can express in
the microcosm of their works what is going on in the macrocosm of mankind. Because they lack economic power, they are open to other possibilities, and they can cultivate other faculties. Ironically, it is only the man who is free to do without technology who is in a position to master it. (Thompson, 123)

It may be said here that Asimov possesses this mythopoeic imagination of an artist, seer and contrary to the stated phenomenon a man of science.

A Seer with the help of his extraordinary ability is able to detect disorder. System and chaos are linked opposites. Celestial bodies, we know, are concretised chaos. In the Foundation Trilogy, by organising its forces through its executive limb the First Foundation, the Second Foundation would bring about stability. Another six hundred years were to go in the truncated time frame to stem the fallout from the collapse to the First Galactic Empire to the regeneration of a Second Galactic Empire, from the collage like splintered civilization, the promotion of which is safely ensconced in the Second Foundationers, the psychologists.

Technologically speaking it is the transfer of power from the physical scientists to the psychologists. Physical science as a discipline has come to occupy an inferior second place in the face of the superior mind readers possessed of the new sciences, the parasciences. The new scientists deal with parasciences, a neglected field of study incomprehensible to the physical scientists. This is the longing of modern day scientists that social forces if understood and categorised could
result in a technological tool enabling better control of the social forces that go into the making of societies, spiraling into cultures and further into civilizations. Karl Marx and his disciples believed in it. In the recent years Ervin Laszlo has postulated a three phased growth for any system to come about. "Conceived in general categories, phase one is the strategy of consciousness mobilizing; phase two, of the organization of multi level decisions; and phase three of supranational guidance implementation" (111). Laszlo is of the view that at the Phase three stage the strategy must of necessity be theoretic. Asimov now dabbling in the areas of parasciences is not far away from Laszlo's hypothesis, and he is sure that physical sciences are not enough. Use of science in the sphere of history is generally resented by the conservative historians. Asimov could not be blamed for bringing in science to shape society, since, "science is today in a position to claim the leadership of societies ... It is science that will provide the truly human basis of morals and politics in the future" (Berthelot, Marcelin qtd. in Dubos 9). It seems that this science as universal panacea in every branch of life in the nineteenth and twentieth centuries invited lot of angry criticism. This gave cause for the accusation that science is rendered bankrupt "la faillite de la science " (the bankruptcy of science) (Dubos 10). This opinion was prevalent among philosophers, litterateurs and scientists too. Use of science in society is usually resented by the unscientifc minded.

G.B. Shaw joined the bandwagon of the opposition to the use of science. "Science is always wrong, it solves problems only to replace them by others" (Shaw, G.B. qtd. in Dubos 11). The
basis on which the objections seems to be raised is one of overmuch caution stemming from parallel examples. Aldous Huxley feared that the advent of science in the areas of human social life could lead to an intoxication which in turn would result in indiscrete indulgence. He cites the French Revolution as the parallel when reason ran over the banks of admissibility. The plebeians then believed that utopias remained to be reached through political liberty and more advanced technology. Another objection to application of reason to society was that it robbed men of their humanity as warned by Huxley: "[R]eason may intoxicate itself as it did during the French Revolution" (Dubos 14).

During the Renaissance men undertook scientific studies as a way to manifest their spirit of independence and their desire to do things. It was the result of a mechanistic view of the world. A clockwork model of the universe was sought to be established. It was again the result of the spread of knowledge having been brought into the open after the demolition of the cloisters during the Reformation. Science used at this time was rationalised philosophy professionally applied. Before the Reformation science was amateurish. The new enthusiasm lasted till the early twentieth century and then the balloon burst. Modern man firmly believes that science is a:

concept that ... could be disciplined and organised into a systematic body of operation applicable to all human problems. What is really peculiar to the modern world is the belief that scientific knowledge can be used at will by man to master and exploit nature for his own ends (Dubos 16).
Thus, not every opinion was antithetical. Reason did have its disciples. In the eighteenth century Marquis de Condorcet in his book entitled 'Sketch for a Historical Picture of the Progress of the Human Mind' declared that man is perfectible and he was hopeful of a time when "sun will shine only on free men who know no other master but their reason" (Dubos 14). In Condorcet we come across a promoter of reason in a world barren of sympathisers. Resort to science was deemed "an expression of will to power" (Dubos 18). This attitude may appear denunciatory in spirit. But without any doubt modern science had an overt purpose. The pursuit of science and scientific temperament point to the fact that scientific activities and social organization are intimately interwoven with the social fabric.

Using science for social problems is a question of rising to the occasion. It is a fitting tool of the modern era. Science is application specific and need based. As and when the society requires a remedy, the scientific reasoners would come out with a solution. There was a need for electric lamp and there came an Edison. Twentieth century man cannot be otherwise. Asimov devised a way for himself by becoming a science fictional writer and a hard core science fiction writer at that. He would resort to the puzzle-solving mode in all his plots. He is a staunch supporter of the principle that science has to be judiciously employed to solve human problems. This he suggested when general credibility on science was at a low ebb after the Second World War. He was not alone in this endeavour.
Science is the activity whereby man discovers the basic laws which govern the constitution and functioning of physical matter and of all living things. It is a way of solving problems -- not all problems but, nevertheless, a large class of important and practical problems; namely, those in which the predominant factors are subject to the basic laws of logic and are usually quantitative in character. Science is a way of organising reproducible knowledge about such problems, of focusing and disciplining imagination, of weighing evidence, of deciding what is relevant and what not, of impartially testing hypothesis ... and of making the facts of nature the servants of man

(Asimov in Knight, 19).

There are, in addition, clear indications that Asimov was drawing in on extant hypotheses and laboratory experiments for providing his own hypothesis with the needed veritability and demand credibility.

Every SF story describes a certain, particular change and decides whether it's for the better or the worse, or threatens to be worse ... SF teaches that there are numerous changes and that mankind by its action can pick and choose among them. We should choose one which is for the better. That is the proper interpretation of the role of SF (Asimov in SFS 14.1 (1987):76).

Asimov believed that there are alternatives to our future and could be achieved with a common will. There was in addition to
Asimov, Campbell, and also Heinlein. He is not like H.G.Wells cautioning against dangers and thus distancing the ultimate beneficiaries of this discipline of thinking. Asimov was not a dystopist. He always set a positive attitude towards science and the use of science. In the present context, soon after the II World War, when the whole world was plunged in a man-made Dark Age, the need of the hour was circumventing the cyclic changes in history that are a dead weight on human progress and consumed its advancement everytime the scale dipped to a new low.

Francis Bacon inspired the scientific revolution, and "became the prophet of scientific civilization" (Dubos 19). It was Francis Bacon again who diverted the energies of science to the betterment of life. Denouncing the ethos of the then exponents of science whose object was to know the working of nature and never to pragmatically apply the findings, Bacon admonishes them and hints at the greater gains awaiting the intelligent and timely application of science: "Knowledge, that tendeth but to satisfaction is but as a courtesan, which is for pleasure, and not for fruit or generation." (Bacon, Francis qtd. in Dubos 22). The method that Bacon advised was the experimental method. "[T]he nature of things betrays itself more readily under the vexations of art than in its natural freedom" (Bacon, Francis qtd. in Dubos 24). Continuing on the same line, Bacon's guidance to the scientists is that they should be like the bee, digest the material they collect from the surrounding and transform it to a new material. That is, the scientist should be imaginatively selective. It could be observed that modern shapers of society are selective and at the same time pragmatic. Asimov freely drew upon the researchers of various fields for his
Asimov has imbibed the scientific spirit behind Bacon's pronouncements and seems to have carefully chosen, for building his ark of the new covenant, the parasciences that under "vexations of art" seem to be yielding results to this day. Especially, Asimov's desire was that of reinstalling a new empire not bankrupted of its accumulated knowledge as it used to happen in the previous occasions but reinfused with the treasures of the past, intact, as was attempted upon by his literary forebear Francis Bacon in *The Advancement of Learning*, which is a classification and a critical survey of all knowledge until Bacon's time.

Much before Bacon the classical thinker Aristotle exhorted man to take to developing technologies. In his *Mechanics* he says: "[V]anquished by nature, we become masters through techniques" (qtd. in Dubos 31-32). This effort further has to be an ongoing process with the active co-operation of dedicated men over generations. Bacon's *Salomon's House* is a society controlled by such select band of men. Buckhanin as seen earlier had in mind a select band of men. Putting dedicated savants behind the process of society appears to have been the method advocated by thinkers old and new. "Strategies of this kind are usually addressed to elites" (Laszlo 65). Bacon advises that we make a society founded on science whose purpose would be to organize human life in terms of a master plan framed by a scientific thought. Not alone was the society to be planned according to tenets of science but there ought to be a master plan behind such a design. Utopias and ideal societies had a
master plan, and very often had a body of savants. Asimov's Empire is founded on a plan "framed by scientific thought". In Bacon's New Atlantis technocrats take technology to every department of life. Karl Marx echoes Bacon when he says: "Hitherto philosophers have sought to understand the world. Henceforth they must seek to change it" (qtd. in Dubos 38). Philosophers are to operate as savants according to Karl Marx. The desire and effort to convert knowledge to usable tool was in the mind of almost all the social thinkers past and present. The goal sought to be achieved in The Foundation Trilogy is to change the world to their ways, namely, to free the world from carpetbagger-like time servers in the name of warlords, whose aims are short lived, immediate, and egoistic, and steer the society on the grand path of common good to all with the common goal of preservation of stability in the aeons to come through technological manipulation of society. It may be resented to by many who fear loss of individuality and those who willingly submit to inevitability of fate, time and destiny. But where the interests of the majority are at stake there must be a regulatory conformity. "As people become numerous ... there is bound to be increasing reglementation amounting to regimentation, a spread of uniformity and progressive disappearance of most individual liberties" (Dubos 60). Our societies from days of yore had been conformity societies for the purpose of ensuring maximum good for the most and loss of liberties in this framework is a not just a necessary evil, but a prerequisite. Any member born into this world is born into a whole gamut of rules and regulations of all proportions and magnitude.

To achieve this end Asimov employs the parascientific
tools, namely, to repeat, psychohistory, behavior modification, symbolic logic and arrives at his decisions by psychohistoric statistical probability. The first book in the Foundation Trilogy stands testimony to this hypothesis of Asimov. He does not so much elaborate on the workings of these forces as indicate them in discursive dialogues. We the readers perceive the action.

There were no doubt objections to propositions of this kind especially when a proposition is bound to change the very course of history. As mentioned earlier the world we live in is the one that has accepted the atom bomb, a destroyer of civilizations -- the logical extension of the world that had earlier accepted the German War Machine. A way out of the precipitate whims of men is a necessity, and science could be employed in that direction.

At odds in this devolution of the plan, the Seldon Plan, are the traditional dichotomy, free will and determinism. In the Foundation Trilogy Asimov has employed both determinism and free will. If determinism alone were Asimov's view then the characters would be continually solving problems. Nothing in the story happens unless someone makes it happen. To this extent free will is ensured. The reader is told that Seldon's laws help those who help themselves, even as Christians get their free will under Judeo Christian dispensation. So do the characters from their author.

The forces of the First Foundation resist being supervised by the Second Foundation on the ground of making inroads into their moral being, civil liberties and robbing of their free
will. This act of resistance to the deterministic directives of the Second Foundation itself is ironically the product of a deterministic doctrine, the Seldon Plan, and to boot, the First Foundation is one of the two inventions of Hari Seldon, the master planner, the Second Foundation being the other. It is a preposterous action on the part of the First Foundationers -- on the one hand an exposure of their ignorance and on the other, a vindication of the successful concealment of the plan. What is defeat for the first foundationers is success for the Second Foundationers. The First Foundation is only the agent of execution, contrary to the self-exalting notion of the first foundationers. The anger that the first foundation is inferior in its conceptual role is indicative of the successful, yet not so successful, concealment of the fact that they are agents of a larger but hidden design, secrecy being an essential epistemological requirement to the successful outcome of any plan aimed at society and its shaping forces, much still if it is to revive a civilization. "Any plan of this scale must be hidden from people" (SF 116) because to find out the natural reaction to a given stimulus the affected must be unaware that he is being affected. Otherwise, the knowledge would mar or alter one's behaviour, and thus reduce chances of predictability. Dr. Darell's refusal to go to Trantor to trace his daughter Arcadia in the Second Foundation is an example of this. In effect the Seldon Plan envisages a renewal colony, as the crowning effect of the devolution of the grand Seldon Plan, on a mega scale, of a whole civilization on an entire galaxy. This enormity is another epistemological necessity in any statistical analysis dealing with the masses, constituting numerous
There had always been attempts to revitalize maladjusted societies. Utopian attempts are one among them and renewal colonies another. Looking into the origin of utopias, or renewal colonies, we perhaps have the best example of a utopia from the covenants in Noah's Ark. Noah rescues the species from the Great Deluge, towards raising a new colony letting the old undesirable, maladjusted one to drown in the Floods. There is a religious apocalypse in the parable. But in these degenerate days when man had come far away from God he has to survive by his own efforts. There are no more Noahs.

Asimov in this Trilogy, especially, engaged in examining the possibility of inventing a plausible technology to tackle the problem of the Spenglerian cycle in civilizational rise and fall taking a toll of human advancement and human well being. Science fiction offers the right platform to try his hypothesis. Asimov points toward the existence of a spiral in historical development rather than a cycle. Each civilization in his opinion starts at the same point as in a game of chess, but the stages of growth and decline are not the same.

Asimov is of the firm opinion that science fiction deals with the effect of advancement on society. "Science Fiction is that branch of literature which deals with a fictitious society, differing from our own chiefly in the nature or extent of its technological development" (Asimov in Knight, 1936) and especially at a stage when it has been deciphered that: "technological changes lie at the root of political change" (Asimov in Knight
Not alone the technologic change, but, "scientific-economic change is the master and political change the servant" (Asimov in Knight, 35). Anyone who had a vision and an insight into the working of societies would seek science and its tools to mend the society. Asimov claims that the Greeks did not think of Industrial Revolution not because they had no scientific advancement but because they lacked social insight. Application of science to promote human well being is a recent development. Asimov feels that we are facing a situation when we cannot afford to leave the future to take care of itself (Asimov in Knight 29-61). Technological change brings about political change and if so, possession of a tool like psychohistory should bring about a political change as it happens, and can only happen then in the Trilogy. For, "[p]sychohistory is the art of prediction as a science; later it might have been called "futurology" or "futuristics" (Gunn 39), prediction that banks on probability and not on certainty as chapter four would show. There is in the first book of the Trilogy, Foundation, a grand account of Trantor the central part of the empire during its heydays, with all its economic boom and tremendous activity as the seat of power. The same Trantor at the end in the Second Foundation, the third book in the Foundation Trilogy, is a rotting remnant, with an agricultural economy. Trantor had been left to ruin by the lack of foresight of powers that be and also caused to ruin by the forces shaping history.

Cycles in civilization are a historical phenomenon. According to an opinion:
All civilizations grew weak in fairly regular five hundred year cycle; but when no barbarian force was nearby ... a long period of feudal chaos would commence which resulted in such hardship that people partially regained their religious faith and frugal habits of living. After such an age, people welcomed unification and centralized rule ... The resurgence ... resulted from a combination of military conquests and the renaissance of religion ... especially with the adoption of some new cult.... (Spengler 58-59)

Asimov's search for a way to deal with the problem of change fell on psychohistory, consciously. He says: "I was interested in psychohistory from the very start; and I was careful to show that when heroes had psychohistory on their side, they won; when they did not, they lost" (SFS 14:1 1987 74). In the story, Hari Seldon is the greatest psychohistorian and after him Ebling Mis to an extent. No other individual can claim any expertise in this field nor do they understand the workings of psychohistory. They merely wait for the fatalistic, dubious, inscrutable Seldon Plan to take its course. Whereas, the Second Foundationers are the puppeteers who understand the Seldon Plan and create favourable conditions for implanting their ideas. This is a strategy Ervin Laszlo would describe as "consensus formation".

It is a precondition for all further steps, big and small ... For example, in the late 1960s a sufficient number of ecology conscious representatives and
senators were elected to office that a few years later the SST bill could be voted down, reversing a pattern of many decades. (Laszlo 67)

Planting ideas in the environment to grow towards a predetermined stage is described as intrigue and it is the method adopted in the Trilogy as pointed out in the beginning of this chapter.

Answering a question that psychology, psychoanalysis, sociology were not conducive to developing any technologies, Asimov said: "Yes, but in Foundation Trilogy I deliberately and specifically dealt with what we might call political science or the science of history, and developed a technology for it. That was my attempt to broaden the notion of science in SF" (Twentieth Century Science Fiction Writers, 1986 ed.). Asimov usually sets and solves puzzles to educate the reader in science and technology. This study is to show that Asimov did more than merely desire, to educate his readers, that he had enough knowledge of the advancing parasciences to work his hypothesis and make his hypothesis not only credible but corpuscularly conceivable. Commending the work of Asimov it is observed:

Having brought into field a low-key anti-melodramatic style, a love for playfully solving puzzles and problems, and a respectable air of scientific detachment, Asimov has written a body of work which is already one of the cornerstones of modern science fiction". (Twentieth Century Science Fiction Writers 1986 ed.)
Asimov in his Trilogy tries the science fictional method and makes his hypothesis of psychohistory into a veritable working principle. He is talented in his craft. Of course, Asimov as an author takes and demands certain liberties. The time spoken of is 30,000 years in the future. The science recommended is already in vogue, in the twentieth century and to hasten its advancement further, there are eager scientists.

The objective of Asimov is spelt out in the following words, which denotes also the model on which the Foundation Trilogy is based and how it is to be construed:

The Foundation series is admittedly based on Gibbon's *Decline and Fall of the Roman Empire*, but with an optimistic difference: if the causes for the decline can be analysed and the course predicted through the application of science to history, then perhaps it may be possible to control the events to some extent and contain the harm. (Krishnamurthy 37)

There were such thinkers as Spengler to lend credence to this proposition of Asimov by providing the ground work. The Spenglerian concept that historical forces operate in the same manner as the biological forces is central to Asimov's fictive future history. Spengler wanted history to snatch itself independently from the accident standpoint; just like Copernicus did with regard to the ideas of the earth. "A similar emancipation of world-history from the accidental standpoint ... is both possible and necessary" (Spengler 94). Spengler's cyclic theory of history is said to have spurred many writers to
conceive future histories as plots for their novels. There were also the other historicists: Buckhanin, Marx and Berthelot, who were behind the conception of future history. Psychohistory, it was felt, had the power as a tool to deliver what Spengler and the others wanted. Then the world encountered Erik Erikson and his school of psychohistorians, and then the behaviourists, chiefly, B.F. Skinner. Spengler did not approve of making a science of history, since he held that every civilization had a "soul".

All the same Asimov is thinking otherwise in *The End of Eternity* wherein the emphasis is on the idea that tinkering with time or mankind's destiny could be counter productive, taking a different and opposite stance to the one he had while conceiving the Foundation Trilogy.

The road to a scientific history was not free of problems of technical and scientific nature. One of the problems faced by social planners is the need to deal with numerous individuals. But, an answer to such problems was advanced by the mathematician Warren Weaver who hypothesised a certain uniform behaviour pattern in humans. Warren Weaver called it 'organized' and 'disorganized complexity'. A detailed discussion of Warren Weaver's hypothesis is taken up in chapter four.

As if to enable deduction of laws from the functioning of society made up of individuals, after the year 1900 Josiah Willard Gibbs and other exponents of the physical sciences developed a dramatically new kind of thinking. Rather than study the problem which involved two variables or at most three or four, some imaginative minds developed analytical methods which
can deal with billions of variables. That is, the probability theory and statistical mechanics which can deal with problems of disorganised complexity. More about this is explained in chapter four captioned "Tools and Tools: Ways to Work the Utopias" At this juncture it would be appropriate to mention Ervin Laszlo's word of caution mentioned earlier that at the third and last level of creating a system the strategy required would be of a theoretic nature. Any systemic plan of society has to be based on theory if orchestrated change is desired.

The search for a viable tool for a study of the masses was a longing in the mindset of many social researchers and scientists. One such expression is: "Indeed, if we only could, in the biological field, begin to learn how to deal with problems of organised complexity, then there might be opportunities to extend these new techniques ... into vast areas of the behavioral and social sciences" (Weaver 32). Herein we see a tendency towards formulating a theory to deal scientifically with this parascientific domain.

Our inferences from the study of the masses are based on evidence, the wholesome outcome, and the evidence showed that there could be repetition and uniformity in things that are found at random in individual behaviour or tendency. "Indeed, the whole question of evidence and the way in which knowledge can be inferred from evidence, is now recognized to depend on these same ideas" (Weaver 30). Things appear to behave quite unpredictably when they are in isolation, whereas their collective behaviour is absolutely predictable. There is a general feeling that even in the physical sciences knowledge has been and is being based on
evidence obtained from numerous variables. On the other hand organised complexity denotes that the variables should be organised on the same conditions or opinions. For example a trade union whose members though various are subject to the same conditions and ideology. In the Trilogy the whole galaxy is subject to the historical phenomenon of disintegrating civilization and its evidential fallout manifested in various happenings predictable but immaterial at the moment. Hari Seldon the master of the science of psycho-history in the book *Foundation* makes an exponential speech on this phenomenon and his firm but novel way to deal with it. Asimov gives us a brief of the status of psycho-history at this advanced scientific age through his prognostication. Probability notions are essential to any theory of knowledge itself, and here when dealing with numerous variables, more essential. Probability stood not for the exact, but the near exact, presumably exact.

So far the question had been how to predict. Now the question is who could predict. He shall be the 'Seer', or one individual who could predict the future. In the Foundation Trilogy, Hari Seldon is the only gifted person to predict the fall of the Galactic Empire. But, the opinion is divided on this ability of a single individual to predict the future course of history. On the other hand one would rather believe in the consensus of numerous individuals. For, a group may intuitively sense where we are going. Ervin Laszlo feels that individuals may not be in any position to influence when faced with millions. "But individuals communicate with one another, and can jointly
motivate all the changes that need to be brought about to implement viable strategies for the future" (67). Psychohistory is sometimes taken as the plausible guiding principle for predicting the future, whether by an individual or by a consensus. Psychohistory is capable of taking huge segments of population and analyse their views scientifically. What these scientific means could be is not clearly stated. Some are positively sure that we have not reached that stage of accurately forecasting as Asimov had done in his books. There are others too who believe similarly. Yet, we are heading towards opening up newer frontiers. The yearning and the labour are evident in such thoughts and actions. No wonder Asimov had pushed that future to a far distant future when man on the possible side of things would have populated the galaxies and spread his sway over worlds and distances.

To put to rest any doubt in the minds of his readers, if psychohistory could have come of age at that distant time, Asimov has presented in the Trilogy a scientific society. There had been a galactic empire, there is hydroponic cultivation, hyper space galactic travel, atomic ray guns (might be replacements of six shooters as has been objected to) and so on. Asimov is conscious that a fictitious society conceived and presented in the form of a story cannot by itself become scientific society (Knight 68-77). Bacon's New Atlantis society is not a scientific society. A scientific society is conceivable only when the mind of mankind is so oriented by circumstance that it becomes reasonable to them that any society other than the one in which
we live can be conceived of, if not in the present, at least in the future. It should be possible to conceive more than one society to invoke the ideas of probability. A Second Foundation apprentice calls attention to this fact (SF 116). The small warlords are fully aware that other societies could be created. Individually, they are trying to create an empire, if not, a mini-empire. The Mule alone succeeds to a large extent. But even he would face failure due to a metaphysical reason dealt with later in chapter four in the context of the leader.

If newer societies could be created at the will of the technocrats, then history as a teleological principle can have no role to play in shaping societies. This is a grey area where the concept of linear, teleological history overlaps our notions of causality. Spengler's notion of history as the "become" of becoming would clash with our endeavours towards creating a science of history. History will have its sway. Man wants to direct his energies in a desired direction and not allow chance to decide human course since modern man would like to be sure of what he wants. Still, there is no denial of the phenomenon called history.

Asimov's stand is non committal to the question of history as inexorable. When he wrote the Foundation trilogy he believed that history is inexorable. Later on he had to change his view of history. Asimov thinks of it as an artistic problem rather than as a personal conviction (SFS 14:1 68-77). An explanation to this belief is found in his essay Social Science Fiction:
To a man who lived his life as his father had done ... it would inevitably seem that there was a "natural order" of things. This natural order was prescribed either by the innate qualities of the human being and his world (if we listen to the Greek thinkers) or it was imposed by the greater wisdom of some supernatural being.(if we listen to the Judean thinkers). In either case, it could neither be fought nor changed.

(Knight 32)

If we attribute greater wisdom to an entity outside of the human sphere, then we must believe in the teleological order of historical devolution when history should be construed as inexorable. On the other hand, if it were to be the resultant of an innate quality in man, history becomes empirical and therefore within the ambit of technology, and hence indeterminate. In the Trilogy we have a Seldon Plan and nothing else. Asimov makes full exercise of his authorial liberty to decide the premises within which his tales are to be understood. Above everything the Second Foundationers are endowed by Asimov with mind-reading ability.

Spenglerian world view amounted to this inexorable nature of history in so far as it stood for changes in history. However, Asimov insists that it is better to fight these forces rather than merely submit to these overweaning forces. Any value could be achieved only in conflict with the opposite forces:
As a matter of fact, what we might call "SF attitude" - "hard SF" - is essential if we are to survive as a technological society. ... Now, no matter what we do, we may go under, but I would prefer to do something which would give a chance than do nothing, which give us no chance at all (Asimov in SFS 14.1(1987):75-76).

We do understand and share the view of Asimov that we must give a good fight before yielding especially when it is a question of creating an "SF - attitude". As Aristotle had said, and quoted here earlier, man is a slave of his environment and has only to invent techniques to overcome this disadvantage.

While postulating a way to meet the challenge of change, Asimov was cautious not to incur the wrath of traditionalists:

To have viewed science as a means by which mankind could control his environment and deliberately change social structure would have made ... man ... a possible blasphemer ... A man who wanted practical applications was no true scientist (Knight 32-33).

Application of science to history as well as to everyday life had long been resented by many. We are encouraged to adopt a scientific attitude not science itself, because, "[w]e cannot forever face the future only as the present's object lesson; we must look at it as the future, something as valid as the present" (Asimov in Knight 36). Looking at future as "the present's object lesson" is the view of the dystopians. The society in the Foundation Trilogy is a galactic society, as yet unexplored.
That society travels in speeds faster than light, in parsecs, a concept as yet beleagured by Einsteinian edict against speed limits on terrestrial travel. There is hyperspace as yet unknown to us.

The modern man must humbly accept his limitations, at least, going by the fact he can only create a future not the future. Chances are that there may not be a continuation of what we know and use. Very often man finds himself at a blind alley whether it is biological or physical sciences. Frank Herbert informs us in The Craft of Fiction: "The scientists of Franklin D'Roosevelt Brain Trust, asked to predict the course of technological development from 1933 through 1958, said not one word about transistors, atomic power, jet engines or anti-biotics" (Herbert, Frank in Bretnor 133). What the future, near or far, has in store for man is unpredictable. But, science fiction need not bother much about experimenting on paper.

Asimov avers that psychohistory is an advanced science in the Foundation empire though it might not have emerged even as science proper today. After all, science fiction is the result of technological advancement growing at an ever faster pace.

Science fiction is a new literature that meets change head on, romanticising the change, and "devoted to the principle that change was continuous, inevitable and even desirable" (Asimov in Knight 36). This science fiction of Asimov is not Wellsian in that it is not moralizing to the world. This is a social science fiction of which Campbell is the father. The foundation series
is a social science fiction as Asimov is dealing with the effects of psychohistory, a science the germ of which was already present and contemplated upon by serious minded social technocrats. In the pre-Campbell era i.e. before 1938, it was adventure science fiction, dealing with science that was inaccurate or even ridiculous in terms of what was actually known at the time. Social science fiction deals with sciences that already exist. There is no attempt at extrapolation. Yet, extrapolation in social sciences is not anathema since it can be applied to social, religious, psychological ideas as well as to political ideas or institution.

Asimov introduces a note of caution to the science fiction writers and warns the readers against fantastic tales. The fantastic tales take liberties with science:

[T]here is a great difference between taking liberties with the unlikely and taking liberties with the impossible. The liberties allowed legitimate science fiction are so great that there is no need to drag in outright impossibilities; and there is an important social reason why it should not. (Asimov in Knight, 42).

Asimov says why: "To appeal to adults, to gain serious consideration in our society, it must not offend reason. It must be coherent with the life we know in the sense that it does not contradict that which is known to be uncontradictable" (Knight, 43). Asimov could be believed to have relied for his sources upon existing technologies or budding technologies as later chapters would try to establish.
Asimov had known his responsibilities to society. Science fiction, then, is not beguiling readers. In that sense Asimov cannot be accused of misleading the readers with the notion of psychohistory. This attempt is to show that the technologies specified here on which Asimov had chosen to work were budding technologies though on the side of sociology.

The Foundation Trilogy was a success in its own day due probably to the fact that it is "a concept of history which is, in its grand sweep similar to one of the main ingredients of Marxism -- historical materialism" (Elkins SFS 3:1 1976 28). It is true that the Foundation stories were written during a particular period in time when the world was carried away by Marxism. Asimov himself was suspected of having had leanings towards communism.

The nature of historical materialism is described thus:

The perspective of historical materialism entails the assertion of overriding historical laws. ... it involves the old puzzle of historical inevitability (predestination) versus free will which itself flows out of the unsuccessful yet desperately necessary, and therefore always repeated, struggles of men to control their futures and the future of their societies (Elkins SFS 3:1 1976 28).

In this, Asimov's hypothesis is similar to the goals set by historical materialism.
Still, Marxism cannot be denied its place as the pioneering tenet. Marxism was the first to show that mankind needed to be studied to understand its movement in history, and plough back the insight thus gained to guide societies. Asimov's empire is not what Marxism could not be. Asimov himself had denied it. It is a step in advance of Marxism in that a technology is being developed by the application of psychology to historical analysis. History is not an alien phenomenon but the product of the psychologic man and his movement in the face of time and environment, in the face of responses to stimuli. The social man is predictable by and large. It is his individual volition that is unpredictable. But man is never found in isolation. He is found in groups. He is a dependent weakling, if we may say so. A social animal. Man in isolation and man in society are two different entities. Our concern here is the social man. Psychohistory deals with the social animal called man, wherein he is always reckoned as one in a congregation.

Laws of history can also be deduced from the past just as the physical laws can be deduced from evidence. As I have already said, evidence is the source of all knowledge historical or scientific. It is shown in the Foundation Trilogy where Bayta, the woman who is responsible for overthrow of the Mule in Second Foundation, asserts this fact.

The laws of history are as absolute as the laws of physics, and if the probabilities of error are greater, it is only because history does not deal with as many humans as physics does atoms, so that individual variations count for more (FE 11).
A way out of this compulsion is to increase the number to be handled to achieve near certainty. In the Fondation Trilogy Seldon's plan is reduced to "[t]he synthesis of the calculus of n-variables, and of n-dimensional geometry" (SF 8). In other words it stands for the quintillion population in the galactic empire to satisfy the "n-variables" and galactic empire or the spatial establishment is to satisfy the "n-dimensional geometry".

Asimov, a scientist by calling, refers to this concept prevailing at the source of all physical sciences and deductions connected with them. If it is true that we can work with a functional hypothesis in physical sciences, with as little evidence as the approximations amount to, then, it should be possible to found laws upon approximations in respect of sociological and other parascientific hypotheses. Asimov's analogy is to the gas laws.

At the time I started these stories, I was taking physical chemistry at school, and I knew that because the individual molecules of a gas move quite erratically and randomly, nobody can predict the direction of motion of a single molecule at any particular time. The randomness of their motion works out to the point where you can predict the total behaviour of the gas very accurately using the gas laws. I knew that if you decrease the volume, the pressure goes up; if you raise the temperature, the pressure goes up, and the volume expands. We know these things even though we don't know how individual molecules behave (SFS 14:1 1987 70).
This prompted Asimov to contemplate the possibilities of lending support to the proposition concerning the movement of societies and cultures and much greater still of civilizations.

It seemed to me that if we did have a galactic empire, there would be so many human beings - quintillions of them - that perhaps you might be able to predict very accurately how societies would behave, even though you couldn't predict how individuals composing those societies would behave. So, against the background of the Roman Empire written large, I invented the science of psychohistory (SFS 14.1 (1987):70).

Having launched on to the belief that social sciences can also be based on approximations just as physical sciences by a process of analogy Asimov exploited the conflicting ideas of free will and inevitability, as he mentions that in the Trilogy these are the opposing forces, that of "individual desire" and "social inevitability" (SFS 14.1 (1987):68-77). This is a moot question with the historians and historiographers themselves, whether history is phenomena or man made record. This will be discussed in the next chapter.

Whatever the belief, one ideal remains constantly with the Seers or utopists: "The final desire remains constant: happiness and a better life" (Eurich, Introduction 8). The proclamation in the American Constitution states the ideal of the land America: pursuit of happiness. Pursuit of happiness entails finding means to make life easier whether in the physical or social world. In the modern scientific world one has recourse
only to science and the principles of science to create a better world though a different method was pursued. It is also true that:

[t]here were times when virtue was the sole means for reaching a blessed state either here on this earth or in the hereafter; other periods and authors have held that political reorganization was the primary way to create a better world. Still others placed their belief in economic and social reform or education as the major road leading to the perfect society. And finally science in the modern sense entered to provide the blessings for man in utopia (Eurich, Introduction 8).

Following the encouragement afforded by the modern social thinkers, there have been many World Order Model Projects, fictional and factual. H.G. Wells believed that the tendency was to escape catastrophe by building an ark or founding an apocalyptic colony far removed from the collapse of civilization. This question of physical removal is patent in imagined societies, New Atlantis of Bacon for instance is a lonely colony. Laputa in Gulliver's Travels is another remote colony in space. S.T. Coleridge planned his revival colony named 'Pantisocracy' in the New World, far removed from his homeland. Many such colonies were planned by Europeans on the American continent. America itself is a revival colony in so far as it is based on break away norms contrary to that which prevailed in Europe and England. Webster's language reform is a stark
indicator of this sentiment of liberating themselves from the traditional and the rutted. A society could be designed or a world take over could be planned in two ways as suggested by H.G. Wells.

Wells in spite of his opinion of utopias as escapes from the compelling present, suggested two different ways to establish such renewal colonies. The "open conspiracy" method and the secret "freemasonry" method generally encountered in science fiction. Open conspiracy is the method adopted by Noah in the Old Testament. Secret "freemasonry" is the one suited for Savants or elites. It is also the opinion of W.Warren Wagar, Wells's student and historian, in his 'Building the City of Man: Outlines of a World Civilization', chose the conspiratorial method of world take over. He was of the belief that "if only greedy businessmen, ambitious politicians ... can be gotten out of the way, enlightened men of science will rule wisely and well" (Thomson, 63). This yearning and conviction that a select band of 'enlightened men' with certitude of vision, can steer the world is a pet means to achieve world take over and achieve world order. Asimov suggests the same by collecting like minded mathematicians, similar to the "select class of men" of the communist ideology, on Terminus the seat of the First Foundation. Again, Warren Wagar had this conviction: "I suggest quite seriously that one fragment of the world ... should detach itself ... and direct its energies towards ... a renewal colony ... to guide the universe ... to human unity" (Wagar, Warren qtd. in Thomson, 62). H.G. Wells in his Shape of Things to Come deals with the concept of freemasonry of science to build his imaginary colony. It is after the style of Wagar's elite men
conducting the affairs of the colony. War ravages Europe and takes a toll of all knowledge and resources and the world collapses into a Dark Age. From this confusion some engineers and scientists escape and develop a superior technology in secret. When the war is receding into tribal warfare, a pattern found in all civilizaional collapse, the engineers emerge from hiding and conquer. It seems a facile arrangement from the surface. But, to some, a society with superior technology conquering another with inferior technology cannot just happen. The inferior society cannot be vanquished easily. "If they have any superior science that constitutes a threat to the nations, they will be killed" (Wagar, Warren qtd. in Thomson, 71-72). Such is the observation of Prof. Von Weizsacher, the scientist behind the atomic bomb research in Germany during the World War II period, on Wagar's renewal colony. He was opposed to the idea of Wagar's no-conflict theory too. To him, conflict or betrayal would be inevitable in a colony. But, Asimov is otherwise disposed.

The First Foundation of Asimov is one specialised group and the Second Foundation is another. In this two tier system the latter would conspire from hiding to enable good happen. While, the former would implement without being aware that they are being managed. Both the groups would be fired by an identity of objective, namely, to revive and reinfuse the lost inertia in the civilization. Considered in a local, familiar context, according to our scale of events in the last few centuries, this could represent the splintered European states after the collapse of the Roman Empire striving to make their presence felt. As Wagar
states the scheme of things in his perfect renewal colony would look like this:

In this perfect renewal colony there will be no conflict, no politics, no problem that cannot be solved by problem solvers; all will agree on the good, all will see the good in the same way, and all will choose to act for the good with the same methods (Wagar, Warren in Thomson, 63).

The Second Foundation members are of this group -- the problem solvers. But as said earlier here, both the Foundationers are inspired by the same goal. They do not see eye to eye on just one count, on the question of free will. The First Foundationers would have to play the role of the takers, while the Second Foundationers would by design play the role of the dispensers. Though exercise of free will is a god given right to prelapsarian Adam, the exercise thereof had landed the postlapsarian Adam in trouble. There is an element of caution for modern man in Adam's fall -- that indiscrete use of free will could render a boon into a bane. Further, B.F. Skinner is of the opinion that modern man had never been free. He is forced by compulsions as various as society, culture and morals to subscribe to in the name of conformity. We are aware that society that is made up of individuals can at best be a euphemistically free society but forced to compromise at every stage. Liberties are the usual casualties if a society should go on. Ultimately, loss of some good results, we believe, in effecting more good. Asimov is different from Wagar in not expecting a problem free, perfect
society. "[I]n his science fiction of dark ages and renewal colony, Foundation, Isaac Asimov is willing to be realistic about the inevitability of problems with the solution" (Thomson, 63). Asimov expects a society to throw up problems. Otherwise, there would not be any need for problem solvers. Wagar had a set of problem solvers but could not find any problems for them to solve. Whereas, the Second Foundation psychologists have been conceived to confront problems; one of the main problems being to keep the conspiracy to take over the world with the direct but concealed aid of the First Foundationers a secret. In these days of CIA and spy satellites, Wagar feels that:

Obviously, the best strategy would be to make the renewal colony out in the open, but with a psychological cover that gave it perfect protection. As a matter of fact this is exactly what Father Noah did; he just started right in the open to build his ark hundreds of miles from the sea — to the delight of all his neighbors. So, if one would find a way to violate the reality of society so outrageously (but sanely) that one were not taken seriously, he might stand a chance of hiding the conspiracy for world takeover (Wagar, Warren qtd. in Thomson, 65).

There have thus been novels dealing with the concept of changing history by attempting renewal of colonies from their undesirable old states to one of desired and acceptable states. It is generally considered that cyclic history stories could be taken
as fictionalised form of speculative philosophy of history.

A few science fiction novels have been conscious speculations on meaning of history - one thinks of Wells' *The Time Machine*, Olaf Stapleton's *'Last and First Men'* and *The Star Maker*, or Arthur C. Clarke's *Childhood's End* ... these are based on linear philosophies of history; all but Wells' are telelogical, even theological in their import ... civilisations rise and fall but man moves on to his destiny, which is God (Canary, Robert H. qtd. in Clareson, 167).

The linear end point of this growth is God. This brings us to the conclusion that there have been attempts at figuring out our past and fashion a future on the lessons of the past. The science needed for doing that has been so long in the making. Some have directly propounded the principles to be adopted, like entrusting the revival work in the hands of the enlightened and the able. Methods for world take over have also been propounded -- the 'open conspiracy' and the 'freemasonry' methods. Some novels have come about treating history as cyclic, some others have treated history as linear and telelogic with a metaphysical purpose.

Now it remains to examine the nature of history and how utopians have changed history finding leeways in history, before
and after the Hegelian dialectic, and find whether history permitted change through extraneous influences.