# ISAAC ASIMOV: Genius in the Candy Store

By SAM MOSKOWITZ

IT HAS long been claimed that science fiction is a field and not a road; that the truly gifted craftsman could weave any of the patterns of world literature into its fabric without destroying its design. It has also been admitted that the most difficult element to incorporate into science fiction—without destroying the integrity of both—was the deductive formula of the detective story.

Acknowledgment that this literary feat has been accomplished on a number of occasions appears in the scholarly *Development of the Detective Novel* by A. E. Murch M. A. (Peter Owen, London, 1958), where she states: "Two writers . . . have succeeded admirably in merging 'science fiction' with detective themes: Frederic Brown and Isaac Asimov, whose work has attracted attention on both sides of the Atlantic and who may inspire a vogue for this specialized variation of the *genre*." It is no discredit to Frederic Brown, a master of the detective story in its own right as well as a gifted science fiction writer, to state that when it comes to blending

Photo by Phillip Leonian

the two Isaac Asimov reigns supreme.

By every measurement Asimov's *The Caves of Steel* and its

sequel *The Naked Sun*, are incontestably science fiction. Yet they also adhere to every definition of the detective story, even if the "Dr. Watson" is a robot and "Inspector Lestrade" turns out to be the murderer. The two stories are *the* outstanding masterpieces in the delicate art of honestly solving a plausible crime within the framework of science fiction without succumbing to the temptation of permitting the killer to enter the locked room through the fourth dimension.

Yet the techniques of this achievement represent but one of *three* major contributions Isaac Asimov has made to the development of science fiction in the past two decades. They rank him among the prime movers in the field.

THAT Isaac Asimov was ever permitted to make his contribution to science fiction at all was entirely due to an accident of heredity. He was born in the town of Petrovich, a suburb of the Russian city of Smolensk, in 1920. The name Asimov, in Russian, means "winter wheat grower," and, under the Czar his grandfather did own a mill at which Asimov's father worked as an accountant. Asimov's family was of the Jewish faith. Upon the establishment of a communist regime after World War I, anti-semitism was reinforced. The great Russian famine of 1923 made that government more lenient towards emigration. The Asimovs, with Isaac as a toddler and sister Marcia a babe in arms, seized the opportunity to come to the United States.

Unable to get a job as an accountant because of the language barrier, Asimov's father bought the first of what was to be a series of candy stores in Brooklyn, and Isaac went to public school. In 1929 a brother, Stanley, was born, offering Isaac the prospect of eventual relief from the after-school chores at his father's store. Secondly, it was the year he read his first science fiction magazine.

Though Asimov's father maintained strict censorship over his son's reading matter, they were both fascinated by the drawing of a ball of fire suspended over some test tubes on the August, 1929, cover of AMAZING STORIES. To the elder Asimov, it looked educational enough to pass muster. The story illustrated was *Barton's Island*, by Harl Vincent, a tale of a young inventor exiled from a tyrranical United States who returns to free his nation from bondage. Young Asimov was enthralled. He decided to supplement his education with AMAZING STORIES from then on.

An astonishing recall of facts, verging on the legendary "photo-

graphic" memory, aided Isaac in completing grammar school at the age of 11½. At the age of 15½ he was out of high school. This facility for learning immensely pleased his parents, but Isaac had other characteristics that didn't please them as much. He was, for example, always preoccupied, brushing past people he knew with no sign of recognition. This upset his mother since among the people Isaac so blithely ignored were customers of her husband's candy store. Isaac didn't care what anyone thought. He was, during those early years, extremely introverted. Unlike most young boys, Isaac had an aversion to any physical activity, sports second only to labor.

HIS FIRST ambition was to become a physician. But he was unable to gain admission to any medical school. (This later proved a good thing, because Isaac had a tendency to grow faint at the sight of blood.) Instead he decided to study chemistry at Columbia University. While at college Isaac took a flyer at writing science fiction; and during that same period he made the friendship of aspiring science fiction writers and editors. Asimov helped to found The Futurian Science Literary Society of New York on Sept. 18, 1938—a group pledged to mutually aid one another in climbing the ladder to literary success. Other charter members of the organization included Frederik Pohl, Donald A. Wollheim, Cyril Kornbluth, Walter Kubilius and Robert W. Lowndes, *all* of whom were destined to become well-known figures in the professional science fiction world.

Six weeks later, Oct. 30, 1938, Orson Welles scared the United States out of a night's sleep with his adaptation of H. G. Wells' *War of the Worlds* on radio. The Futurian Society seized the opportunity to hold a debate on whether Earth should voluntarily give up to a superior civilization or whether it should fight. Wollheim debated for the Martians and Asimov advocated terrestrial supremacy. This, was the science fiction world's first exposure to the devastating Asimov barrage of extemporaneous shot-gun humor delivered with the expression of a stricken martyr in the cryful lament that was to become his trademark at meetings for the next 20 years.

A few weeks earlier Asimov had made his first sale to AMAZING STORIES, *Marooned Off Vesta* (March, 1939). The plot was derived directly from Asimov's chemistry studies. Survivors of a disabled space ship find themselves with three days' supply of air and one year's supply of water. They save themselves by utilizing the principle that the

boiling point of water is so low in a vacuum that the slightest heat will turn it into steam, which can be used for jet propulsion. This same principle is today commercially used in processing freeze-dried foods.

*Marooned Off Vesta* was the third story Asimov wrote. All had been submitted to John W. Campbell, Jr., editor of ASTOUNDING SCIENCE-FICTION. He had rejected the first two. Yet, when announcement of the publication of *Marooned Off Vesta* was made in the Jan. 4, 1939, issue of FUTURIAN NEWS, it also carried the statement: "John W. Campbell remarked of Asimov that he expects him to go far as a writer. His work, as far as that editor has seen, being very, very good."

CAMPBELL was as good as his word. He bought another story from Asimov—*Ad Astra*—which appeared in ASTOUNDING, July, 1939, as *Trends*. While not quite hitting the target as a story, the theme was quite advanced for so young a writer: it suggested that an anti-scientific attitude resulting from popular reaction to war might hold back space travel even when all the technical elements for its success were present. (A few months earlier Asimov's story *The Weapon Too Dreadful to Use* had appeared in AMAZING STORIES (May, 1939). It was based on the premise that earthmen will tend to enslave inferior races they meet in their exploration of other planets. Extremely weak as a story, it nevertheless pointed up Asimov's interest in political and sociological aspects of interplanetary exploration, a phase of the field he would eventually settle on. ASTOUNDING was the leading science fiction magazine in 1939. The issue that carried *Trends* also featured the first story of A. E. van Vogt (*Black Destroyer*) as well as a poignant novelette, *Greater Than Gods*, by C. L. Moore. Asimov had to be satisfied with third place in that magazine's *Analytical Laboratory*. But he did have the ego-inflating satisfaction of beating out Nat Schachner, who, along with Edward E. Smith, was one of the two science fiction writers he most admired at that time.

But suddenly many of Asimov's stories began misfiring. In 1938 Isaac had written to Clifford Simak, whose stories were beginning to appear again after a hiatus of some years, criticizing Simak's deliberate commission of transitions between scenes in that author's stories. Now Asimov began to wonder if Simak wasn't right in leaving out the dull parts to get to the point of the action. He decided to adopt that method. Fred Pohl, who had been acting as Asimov's literary agent, went to work with

Popular Publications to edit two new science fiction magazines—ASTONISHING STORIES and SUPER SCIENCE STORIES. ASTONISHING STORIES had the distinction of being the first 10¢ science fiction magazine in history. It carried a novelette by Asimov titled *Half-Breed.* Asimov was horrified by the excess of racial intolerance as practiced by the Third Reich. His "Tweenies," children of Terran-Martian ancestry, identifiable by hair that grew straight up, are subjected to a mixture of the abuses which Jews and Negroes have been heir to. The story of their fight for equality and eventual migration to Venus was the most popular story in the magazine.

ASTONISHING STORIES carried in its April, 1940, issue, *Callistan Menace,* a tale of worms able to kill at a distance by creating a deadly magnetic field. Chronologically, this was actually the second story written by Asimov. The first, and six others between late 1938 and 1940, were never sold, and have been destroyed. After 1940 Asimov sold every story he wrote. (While all this was going on Asimov, with the aid of his trick memory, had obtained his B. A. in June, 1939, at the age of 19½; two years later he had his M. A. The emphasis on physical science displayed in his earliest stories was to shift towards the sociological, but his technical education gave his stories an added touch of authenticity.)

NORMALLY, a story as clever and entertaining as Isaac's next in ASTOUNDING—*Homo Sol*—would have attracted considerable attention. Any hope of that was thwarted by the inclusion in that same Sept., 1940, issue of *Slan,* by van Vogt, and *Blowups Happen,* by Robert Heinlein. As it was, Asimov's satire of the positive and negative aspects of the human race, as evaluated by members of a Galactic Federation considering whether to open commerce with the Earth, rated just below those two landmarks.

The first robot story attempted by Isaac Asimov was *Strange Playfellow,* rejected by Campbell in June, 1939. Pohl published it in the Sept., 1940, SUPER SCIENCE STORIES. A pleasant tale of the affection of a little girl for her play robot, it caused no stir at the time of publication. But it did introduce the name "Robbie" for robot, which has since become as common a designation for a mechanical man as "Rover" used to be for dogs.

Underservedly forgotten was a short story titled *The Secret Sense,* a well-thought out and nicely written account of an Earthman whose cortex is stimulated by Martians to enable him to experience a sensory action

common only to them. When he loses this ability after only 10 minutes, he is overcome by anguish that he can never again know the beauty of that "secret sense."

This story was written gratuitously by Asimov for fellow Futurian Donald A. Wollheim, who had become editor of the low-budget COSMIC STORIES and STIRRING SCIENCE STORIES. When it appeared in the March, 1941, COSMIC STORIES and word got to Campbell that Asimov was donating stories to competitors, Campbell read Asimov the riot act, and insisted that Isaac demand payment for the story if he wanted to remain a contributor to ASTOUNDING SCIENCE-FICTION. Asimov tearfully induced the powers at COSMIC STORIES to pay him. It was indeed fortunate that he did, for he had submitted to Campbell a story about an intelligent robot assembled on a space station who refused to believe that there was an Earth, or that robots were built by man. This story was to make history. Titled *Reason*, and published in ASTOUNDING, April, 1941, it laid the foundation for the now-famous three laws of robotics.

The first time Asimov heard of those laws was when he walked into Campbell's office after the story was accepted and had them recited to him:

1. A robot may not injure a human being, or through inaction allow a human being to come to harm.

2. A robot must obey the orders given it by human beings except where such orders would conflict with The First Law.

3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

Asimov claims Campbell invented the laws. Campbell asserts they were implicit in the story, as indeed they were.

The results were truly revolutionary. Not only did Asimov go on to write a tremendously successful series of robot stories (a selection of which were collected in *I, Robot*, Gnome Press, 1950) most of which were based on seeming breaches of the three laws; but these rules have come to be accepted by an ever-growing body of contemporary science fiction writers. That robots, when they are eventually built, will be subject to the "Three Laws of Robotics" has become axiomatic in a large area of science fiction.

ORDINARILY that should have clinched Asimov's reputation. Unfortunately, Campbell once again, included in the same issue as *Reason* a masterpiece by Theodore Sturgeon (*Microcosmic Gods*) and a novel by L. Sprague de Camp at his satiric best (*The Stolen Dormouse*).

Asimov's ability was not lost on Campbell, however. At his next visit to Street & Smith's offices, Campbell read him the famous quotation from Ralph Waldo Emerson: *"If the stars should appear one night in a thousand years, how would men believe and adore, and preserve for many generations the remembrance of the city of God!"*

"What do *you* think would really happen if men saw stars only once in a thousand years," Campbell asked.

Asimov shrugged.

"They would go mad!" Campbell shouted. "Now go home and write the story."

The realistic delineation of a world of six suns, where an eclipse causes darkness but once every two thousand years, and the psychological doom that overtakes its inhabitants at that time, possessed such an impact that Campbell gave him a financial bonus as well as the cover of the Sept., 1941, ASTOUNDING. An acknowledged masterpiece, *Nightfall* was acclaimed at the time of printing, but—again!—the near-tragedy of including it in the same issue as the conclusion of Robert Heinlein's famed novel *Methuselah's Children* deprived it of a first-place rating. Nevertheless, it proved that Asimov had the stuff that makes front-line science fiction writers.

During the time Asimov was making his mark as a writer he was not oblivious to the positive points of the opposite sex. Among the girls he escorted was Mary G. Byers, one of the few feminine science fiction fans of that era, who was in New York on a visit from a Midwestern farm. Eventually Isaac introduced her to Cyril Kornbluth, whom she later married. The girl who really took as far as Asimov was concerned was Gertrude Blugerman, a Toronto girl whom Asimov met in Brooklyn on St. Valentine's Day in 1942 and married on July 26 that same year. Perhaps one secret of their marital success is, as Isaac put it: "As far as writing is concerned I am my own boss. She neither reads what I write nor offers advice nor in any way, directly or indirectly, guides my professional life. Around the house, it's another matter." (The Asimov's had two children, David in 1951 and Robyn in 1955.)

ONLY weeks before the wedding, Heinlein was instrumental in helping Asimov obtain his first important job at the Naval Aircraft Factory in Philadelphia, where Heinlein himself was working along with L. Sprague de Camp. Asimov spent 1942 to 1945 as a chemist in the experimental laboratories. But neither marriage nor a new job affected Asimov's devotion to

writing. He came to Campbell with the plot suggestion for a story based on the rise of a second galactic empire after the fall of the first. Asimov had just read Edward Gibbon's *Decline and Fall of the Roman Empire* and was mightily impressed. He had initially intended one story, but Campbell suggested a series. The Foundation stories, as they have since become known, were based on the "science" of psycho-history, a means of accurately projecting trends in a highly specific manner thousands of years into the future. The method was perfected by a man named Hari Sheldon, who establishes two "Foundations" to speed the rebuilding of galactic civilization after its forecast collapse. The series—novelettes and novels—ran in ASTOUNDING SCIENCE-FICTION sporadically from 1942 through 1949. They were eventually gathered into three volumes by Gnome Press: *Foundation* (1951); *Foundation and Empire* (1952); and *Second Foundation* (1953).

The series fundamentally possesses the same appeal as Heinlein's "Future History." It adheres to a galactic frame of reference to which most of Asimov's major works, even those not connected with the series, also conform. The action is primarily cerebral. Everything that happens is the result of the machinations of a prime mover, shifting power elements like players on a chess board. In Asimov's own words: "It seems to me that the Conans are less apt to have permanent importance than the Richelieus. Even when a great conniver uses wars as a means to an end, they are only incidental and usually short."

THE most important thing the Foundation series contributed to science fiction was a concept. There had been galactic empires in science fiction before. Olaf Stapledon outlined them magnificently in *The Star Maker*, and they were implicit in the background of Edward E. Smith's *Galactic Patrol*. But this was the first time that any author had the effrontry to insist that *all* the myriad worlds of the vast galactic cluster would be colonized and dominated by a single species: man! Three years later van Vogt's novel *The World of A* laid the biggest egg in years when it built up to a smash climax that never registered. That climax was to be the readers' realization that *all* the inhabited worlds of the galaxy were occupied by human beings! Such a premise had been as implicit in Asimov's *Foundation* stories as the three laws of robotics had been in his robot stories—but no one had ever bothered to point it out.

The psychological basis for this concept does not rest in imaginative inertia, but may be found in Asimov's primer for his own "Future History," *The End of Eternity*. Rejected by the major magazines and finally published as a book by Doubleday in 1955, it is the novel that Asimov most enjoyed writing. Clearly inspired by John Russel Fearn's action epic, *The Liners of Time*, and carrying echoes of van Vogt's *The Search*, it postulates a time traveling "foundation" whose members change the past to enable humans to conquer all the stars of our galaxy before alien intelligences can stop them. As the book nears its conclusion, Asimov, through one of his lead characters, states: *"Without the interplay of human against human, the chief interest in life is gone; most of the intellectual values are gone; most of the reason for living is gone."*

That is why aliens appear so infrequently in Asimov stories.

Drafted *after* World War II, Corporal Asimov was assigned to the Quartermaster Corps and ordered to a Pacific atoll where an atomic test was to be held. He got as far as Hawaii, where he was discharged after six months. Asimov then returned to Columbia where he received his doctorate in 1949, when he became an instructor in bio-chemistry at Boston University.

THE Asimov stories that appeared during the period of his studies at Columbia were few but outstanding. Yet, though growing swiftly in skill and maturity, Asimov still encountered sales problems. At the solicitation of Sam Merwin, Jr., who was in the process of improving STARTLING STORIES and THRILLING WONDER STORIES, Asimov wrote a short novel, *Grow Old Along With Me*. Merwin rejected it. So did Campbell. Two science fiction fans—Paul Dennis O'Connor and Martin Greenberg—scheduled it for a limited edition under the aegis of New Collector's Group, when word came through that Doubleday was looking for science fiction. Asimov sent it to Doubleday editor Walter Bradbury, who suggested the story be lengthened to novel size. The result was *Pebble in the Sky*. Inspired by lines from Robert Browning which Asimov had memorized in his youth:

*"Grow old along with me!*
*The best is yet to be,*
*The last of life, for which the first was made . . ."*

*Pebble in the Sky* preached that the old-age of the planet earth could be anything but beautiful. In the Galactic Era 827 Earth is a radioactive plane inhabited by men who are pariahs to the rest of the galaxy. No one any longer remembers that Earth was the mother planet. Joseph

Schwartz, the older-than-middle-aged co-hero, is catapauletd into the future from the 20th Century by an atomic mishap (he possesses a "trick" memory similar to Asimov's own). A device which temporarily stimulates the intelligence of mice, who usually die from the after-effects, is tried on Schwartz, for he has been helpless as a moron in his strange situation. But with his new advanced intelligence he is able to save himself and the entire galaxy.

MORE than any single factor, this novel was responsible for elevating Asimov into the top rank of science fiction writers. Reviews of the book were excellent. It was reprinted in TWO COMPLETE SCIENCE ADVENTURE NOVELS, in GALAXY NOVELS, in paper back reprint, and abroad. Significantly, it was selected as a Unicorn Mystery Book Club selection by Hans Stefan Santesson, who recognized the classic mystery story technique in its plot structure.

Heartened by this success, Asimov decided to stress the novel. *Tyrann,* his first work deliberately written as a novel, was serialized in GALAXY SCIENCE-FICTION beginning in Jan., 1951. Issued in hard covers by Doubleday as *The Stars Like Dust,* it relates a chase through the galaxy in search of a secret document which may be the key to the overthrow of tyranny. Virtually the *only* redeeming feature of the novel is its denouement. In its early days science fiction was enobled as a medium of utopian proclamation, most often constructively democratic and hopeful in tone. When dictatorship was projected, it was inevitably done as a "warning" factor. Since 1939, however, governments of the future based on *democratic* principles have been all-but-non-existent in science fiction. Perhaps the pessimism created by World War II and the onset of atomic energy are responsible, but it is singularly notable when the "secret document", the object of the galactic search in *The Stars Like Dust,* turns out to be a copy of the Constitution of the United States. When Asimov concludes: *"The time for maturity has come as it once came on the planet Earth, and there will be a new kind of government, a kind that has never yet been tried in the Galaxy,"* he is being virtually the only science fiction author in modern times to suggest democracy as a form of galactic government!

His next novel, *The Currents of Space* (ASTOUNDING SCIENCE-FICTION, Oct.-Dec., 1952), was a far better work. Especially effective was the characterization of Big Lona, the peasant girl of the

planet Florina who befriends Rik, a member of the galactographic corps. Scientific originality is shown in the function of this corps, which measures the nature and movement of particles in space.

Asimov now felt up to attempting a full-length novel based on robots. H. L. Gold suggested the incorporation of a robot detective and the Malthusian outlook on over-population. Serialized in GALAXY SCIENCE-FICTION, beginning in October, 1953, *Caves of Steel* put Asimov in a class by himself. No one had previously succeeded so brilliantly in wedding the detective to science fiction; and his carefully thought out over-populated metropolis of the future was sketched more with love than with loathing.

SCIENCE fiction readers finally offered Isaac Asimov their greatest personal tribute: they made him Guest of Honor at the 13th World Science Fiction Convention in Cleveland in September, 1955. The same year he was made Associate Professor at Boston University, pursuing research in nucleic acid. The pressures of writing made it increasingly difficult for him to do justice to either career. There was University pressure on Asimov to do more research and less writing. But Asimov, who had already written several non-fiction science books, felt he could be of more benefit to the university by writing.

When Asimov had won his professional rank, the rules of the university permitted a faculty member with a requisite number of years of service to retain his title for life, even if he resigned. Those rules had been changed in the interim so that the title could be lost on resignation. Asimov took the matter to a vote of the full faculty. He won. In 1958 he "retired" to full-time writing, retaining his associate professorship by giving several lectures each year.

Asimov now poured his energies into scientific articles and books. The facility to express himself clearly and engagingly, which made him one of the finest lecturers in the history of Boston University, coupled with his extraordinarily retentive memory, added up to instant success as a purveyor of popular science. As many as six books a year flowed from his reference-lined attic workshop: *The Chemicals of Life, The Wellsprings of Life, The World of Nitrogen, The World of Carbon, Inside the Atom, Building Blocks of the Universe, The Clock We Live On, The Realm of Numbers,* and many others were climaxed by the critically acclaimed *The Intelligent Man's Guide to Science,* a two-volume boxed set, ambi-

tiously aimed at familiarizing the layman with the complete range of physical and biological sciences.

THE impact on the public of Isaac Asimov's two-pronged writing career is pridefully and painfully apparent to brother Stanley Asimov, now night city editor of NEWSDAY, a leading Long Island newspaper. "It's gotten so I avoid telling anyone my name," he moans. "Co-workers, chance acquaintances, people I meet in the course of business all follow the same pattern. 'Asimov? Asimov? Any relative to *the* Isaac Asimov?'

"Why, when I was first introduced to my wife Ruth, the first words out of her mouth were: 'Asimov? Asimov? Any relative to *the* Isaac Asimov?'"

If Isaac Asimov has changed in any way in the past 20 years it is in the gradual diminution of his zany exhibitionism and spontaneous explosions of humor. Only the robot stories reflect this aspect of his nature, and then in a satiric vein. At heart, Isaac Asimov is and always has been a serious man. Perhaps the accelerating impetus of the public's acceptance of his scientific expositions have convinced him that it is no longer necessary to guffaw and wiggle his ears to attract attention.

It has been a long time since that was necessary for Asimov even in science fiction. His undeniable ability as a story teller, plus his three major contributions—the three laws of robotics, the concept of an all-human galactic culture, and the technique for combining the detective story with science fiction—insure him a prominent place in the history of science fiction. **THE END**

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