

***SF/Fan* Origins #77**

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The Journal of the National Fantasy Fan Federation's History and Research Bureau
Edited by Samuel Lubell



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Editorial Note

Origins, a National Fantasy Fan Federation (N3F) publication of N3F's Historical and Research Bureau, covers the history of science fiction/fantasy, fandom, and related science focusing on pre-21st century content. Note that reviews and summaries may have spoilers. I urge people to send in articles, letters, reviews of older SF, and anything relevant to SamJLubell@gmail.com. I would be interested in stories on how people discovered fandom and what they did. I am also interested in articles about SF and fandom in other countries. I also welcome art. Thanks to Jose Sanchez for the cover. And a big thank you to Thomas E. Simmons for his article on the Human Torch. Opinions in these pages are those of the author, not N3F or any organization or employer.



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Literary: Review of *Adventures in Time & Space* edited by Raymond J. Healy and J. Francis McComas (Part II) Reviewed by Samuel Lubell

Adventures in Time & Space is one of the earliest important anthologies of science fiction stories of the Golden Age. Originally Published in 1946, the anthology calls itself “A One-Volume Library of Classic Science Fiction by the Best Science-Fiction Writers of All Time.” It is worth noting that many authors have more than one story. Robert Heinlein has *Requiem*, *The Roads Must Roll*, and *By His Bootstraps* (as Anson MacDonald). John W Campbell has two stories as Don A Stuart, *Forgetfulness* and *Who Goes There*. Henry Kuttner and C. L. Moore, as Lewis Padgett, have *The Proud Robot*, *Time Locker*, and *The Twonky*. P. Schuyler Miller has *The Sands of Time* and *As Never Was*. And A E. Van Vogt has *Black Destroyer*, *Asylum*, and *The Weapons Shop*.

“Seeds of the Dusk” by Raymond Z. Gallun (*Astounding Science-Fiction*, June 1938) - In the far future, after mankind have been replaced by the Itorloo, the Children of Man, a spore from an intelligent plant that grew on Mars lands on Earth and grows, reproduces, and spreads. Although Kaw, an intelligent crow, warns the Itorloo about this strange plant, their attempts at destroying the plants fail. They continue their plans to move their population to Venus, unaware that the plant had developed an extremely contagious germ disease and infected the Itorloo. Someday, when Venus was growing old, the plants would move there too. This is an interesting story with some of the feel of Jack Vance’s *The Dying Earth*.



“Heavy Planet” by Lee Gregor (pen name of Milton A. Rothman) (*Astounding Science-Fiction*, August 1939) - Ennis, a patrolman on duty in the Eastern Ocean, sees a spaceship that Shadden had been seeking for many years. He is surprised that the ship is made of weak materials that he could easily bend. He finds the atomic energy engine that he hopes will allow the men on Heavyplanet to leave its crushing gravity. But when a battleship of the enemy Marak also find the ship, Ennis summons scientists and hides on the spaceship, looking for weapons. He fights off two Maraks, but damages the spaceship in the process and it takes on water. Ennis fixes it and uses an alien weapon to kill the Marak and destroy the enemy’s battleship right in time for the scientists to arrive. This is a straightforward action piece.

“Time Locker” by Lewis Padgett (pen name of Henry Kuttner and C. L. Moore) (*Astounding Science Fiction*, January 1943) - This is another in the author’s Gallegher series (called Galloway here) of a man who is a genius inventor when drunk, but when sober cannot always figure out his own inventions. Galloway’s lawyer frequently buys his inventions and lends them to criminals to commit crimes that the police cannot understand. In this story the lawyer, Vanning,

buys a fourth dimensional locker that can shrink things much bigger than the locker should be able to hold. Vanning uses it to hide stolen bonds from the police, although he has to squash a fourth-dimensional creature that tried to take the bonds. He fools the police, but when the robber asks for them back, Vanning discovers they have vanished from the locker. He goes to Galloway who tells him the locker must send things to a different time, most likely a few million years from now since they are smaller in the locker and the universe is shrinking. But after Vanning wins the case, he finds the bonds in his suite; with the police one step behind him, he tries to hide the bonds only to be squashed by a giant hand. Only Galloway knows what happened and says “But I never thought the Universe was shrinking *that* fast.” This is a fun story, although not as good as the first story in the series, “The Proud Robot”.

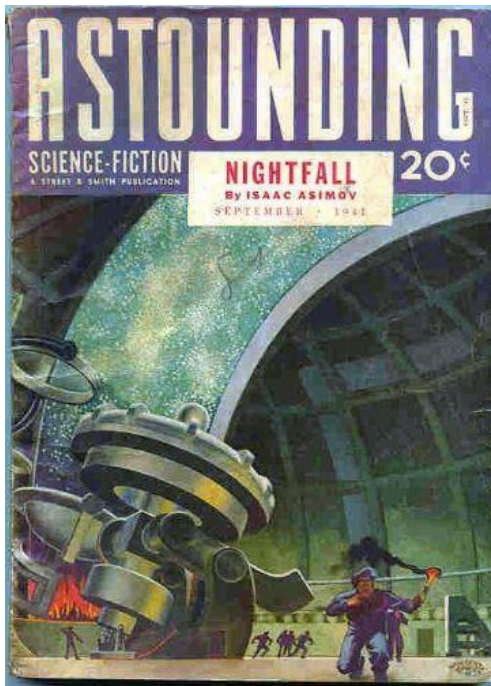
“The Link” by Cleve Cartmill (*Astounding Science-Fiction*, August 1942) – In prehistory, Lok, who was kicked out of his tribe for being different, discovers that if he picked up a tree branch and hit creatures in the head, he could kill them. He returns to his tribe, kills the Old One and proclaims himself master. But the others in the tribe say he is hairless and has a strange smell. Even his mother rejects him. The men charge at him, Lok kills a few but there are too many and he runs away. He discovers a female pinned under a tree, rescues her, and returns with her to the caves.

“Mechanical Mice” by Maurice A. Hugi (This was co-written by an uncredited Eric Frank Russell) (*Astounding Science-Fiction*, January 1941) – Inventor Dan Burman, who created a pocket battery, tells his friend, the narrator of the story, about his latest invention. He confesses that he did not invent the battery. Instead, he invented a machine that allows him to see the future and he copied the battery from the future. He has spent the last 12 years building another machine based on plans he saw from the future, but he does not know what the machine is supposed to do. It turns out to be a Robot Mother that can make mini-robots, the mechanical mice of the title. The robots commit crimes to get the raw materials (mostly from watches) to build more robots. Burman and the narrator are able to destroy the robot mother and Burman says the robot mother had to be defeated since his time machine did not show any robots in the next century. But, just when everything seems resolved, Burman discovers that a queen had escaped and more robots were being made. The two set a trap and defeat the daughter of the Robot Mother. This is a strong story with both ideas and action. I did think the Robot Mothers were too easily defeated and the story should have suggested that it was because they were destroyed before they had time (and the raw materials) to fully develop their robots. There should be more on why Burman thinks time cannot be changed (after all, he did not invent the battery but stole the idea from the future).



“V-2 Rocket Cargo Ship” by Willy Ley (*Astounding Science Fiction*, May 1945). This is a non-fictional essay. The editors wrote that they did not intend on including nonfiction: “But when we read incontrovertible evidence that such matters as rocket-propelled space ships were no longer dreams, or even theoretical designs on a drawing board, we felt our readers would find it as fascinating as the most fantastic fiction we could dig up.” Obviously, such a scientific essay from 1945 is now of historical curiosity only.

“Adam and No Eve” by Alfred Bester (*Astounding Science-Fiction*, September 1941) – Crane crawls through a ruined Earth journeying to the sea, conversing with hallucinations of people he knew. Gradually, the story reveals that Crane built a spaceship and ignored other scientists’ warnings that its atomic engine could destroy the world. It did, leaving just dust and ashes with the only living creature being Crane’s dog, who, mad with hunger, attacks Crane. Finally, Crane realizes he has to get to the sea so that his dead body could, eventually, provide the building blocks to restart life. This is a famous story even though the title gives things away. I found the slow reveal to be very effective.



“Nightfall” by Isaac Asimov (*Astounding Science-Fiction*, September 1941) – This is one of the most famous stories of all time and certainly one of the most anthologized. In this story, a journalist visits a group of scientists who predicted a period of darkness that will drive men mad and destroy civilizations when the stars appear. On re-reading this, I was struck at how timeless and fresh the writing feels. It could easily be published today (although there would probably need to be more character development). Asimov was only 21 years old when he wrote this; the story catapulted him to the ranks of top SF writers. In 1968, the Science Fiction Writers of America voted “Nightfall” the best science fiction short story ever published. In 1990, Robert Silverberg turned the story into a novel, called *Nightfall*

Comics Fandom: The ‘Golden Age’ Human Torch (Part II)

By Thomas E. Simmons

Two of the most popular of early Marvel Comics’ (then known as Timely Comics) superheroes were the Human Torch and the Prince Namor, the Sub-Mariner. (Captain America rounded out the Timely golden age A-list.) Namor debuted in the same comic book issue as the

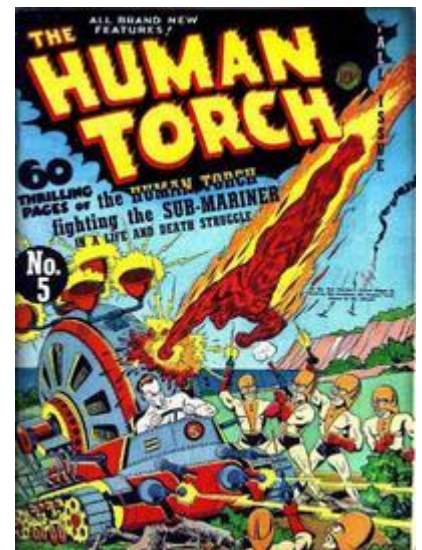
Human Torch, Marvel Comics issue # 1. That particular issue is quite a showcase, containing six yarns. In addition to the Human Torch narrative and the Namor tale, there are stories featuring Ka-Zar, the Angel, and the now-forgotten Masked Raider, a cowboy.

The first narrative block in the Sub-Mariner’s debut sketches his character: “An ultra-man of the deep...Lives on land and in the sea...Flies in the air...Has the strength of a thousand men...Is a youth of dynamic personality...” Namor quickly emerges as a cantankerous, impulsive fish-man, murdering two scuba divers who chance across his lair. The Sub-Mariner is revealed to be a half-human prince, allied with a race of civilized underwater beings who wish to avenge themselves against the men who spoiled their undersea environment with their scientific experiments.

The Human Torch (who Namor likes to call ‘fire bug’ or ‘torchy’) and the Sub-Mariner (who Human Torch taunts as ‘water rat’ or ‘flounder puss’ or ‘fish-face’) first met in a 22-page story in Marvel Mystery Comics issue # 8. Then they banded together against the Nazis over the course of Marvel Mystery comics issues #9 and #10.

But The Human Torch issue # 5 is a 64-page extravaganza of a global war – between the forces of flame and the powers of the sea – with the Italians, Americans, Russians, and Americans combatting one another at their flanks. It spans the globe. It’s a whopper of a golden age yarn; it’s legendary amongst golden age comics enthusiasts.

The opening splash panel reveals the four horsemen of the apocalypse riding blue, white, and grey steeds: Hitler, Mussolini, Death himself, and Namor, the Sub-Mariner. Emerging out of the all-caps title – “HUMAN TORCH” – is the afore-referenced hero who swoops down in his flaming glory to confront the four baddies. The date of the comic is March, 1941; nine months before Pearl Harbor. By then, Americans already knew who the bad guys were.



Coincidentally, the Holocaust perpetrated by Nazi Germany got seriously underway in June of 1941 (three months after the date of Human Torch issue # 5¹), although no one started calling the systematic extermination of Jews and others “the Holocaust” until the 1950s. (Even before WWII, people used the word holocaust (meaning a burnt sacrifice) to describe man-made or natural catastrophes.) So, when the story’s narrator intones: “This book, fittingly enough opens in America ... just before the Holocaust!” it seems eerily prescient.

Later, Namor would be presented as regal and rather stiff-lipped. By the silver age, he spoke like the Silver Surfer. Here, he pops wisecracks like Spider-Man.

The theme of the epic spanning several continents is one of misguided hostilities. Namor is under the spell of a pretty Lady Macbeth-ish fish-gal who talks him out of defeating all the armies to bring an end to warfare into a scheme of world conquest. Namor even dresses himself up as Napoleon and admires himself in a mirror: “My victory uniform! If Goering ever saw it, he’d turn green with envy!”

Human Torch is unwittingly placed, in turn, under the authority of Namor through the surreptitious administration of mind-control drugs. (Never mind

how mind-control drugs work on an android.) But Namor’s flawed plans arose from the influence of Rathia.

The real villain, then, is the gilled temptress, Rathia, “a woman of dazzling beauty” with greenish-colored skin, bulging eyes, and a bouffant hairdo. When she is ultimately apprehended, Human Torch explains that President Roosevelt (who appears in one panel reading a Marvel Comics comic book) will require her to “stand trial as world enemy no. 2... second only to *Hitler!*”).

The Italians are enemies of the good, too. When their navy is moored in muck, an Italian sailor whines, “Mama-Mia! Mama-Mia!” while another gripes, “This is like being caught in a barrel of spaghetti! What a disgrace! Wah!”

After succumbing to the cunning charms of Rathia, Namor summons all of the world’s underwater ocean races to band together and fight the forces that are engaging in naval battles above them (which damage the underwater castles when battleships sink). He assembles an incredible array of advanced weaponry including gargantuan water turbines (which can grant the Third Reich an Atlantic port) along with a fleet of submersible iron whales “the size of a super-dreadnaught” – each carrying a crew of 3,000. The whale-subs overcome the English defense of Gibraltar.

The iron-whales initially trick the Allies who see them as actual whales. When they swing about to reveal their 18-inch starboard guns, a British soldier rubs his eyes: “*Blimey!* H’I musta had too much rum in my tea rations!”

Meanwhile, the drugged Human Torch, under the command of Namor, melts the underside of massive glaciers and propels them toward Moscow and New York City.



¹ There are actually two consecutively numbered The Human Torch issue #5s. This is the second one. The first issue #5 was actually #4 because the first issue was not The Human Torch but rather Red Raven. The reason for all this confusion is linked to an obscure U.S. Post Office second-class bulk mailing privileges rule.

Finally, the drug loses its effect when the Human Torch is confronted with the sight of Old Glory hanging from the American embassy in Moscow and comes to his senses. (The Stars and Stripes will rouse any red-blooded American out of a stupor.) And Rathia's spell over Namor dissipates after the watery prince accidentally bangs his head into the Statue of Liberty.

"Caesar had his Brutus. Napoleon had his Waterloo. And I have the Torch!" Namor muses, surrendering. Then, together, they defeat Rathia and destroy the undersea weapons of war.

Only one loose end remains - Human Torch's sidekick Toro (who was convalescing with delirium for most of the story.) Toro disappeared from a British hospital after it was hit by Nazi incendiary bombs. He's nowhere to be bound. But throwing his arm around his new friend's neck (who has temporarily "flame-offed") Namor assures Toro's older pal, "Brace up, Torch! We'll find the kid somehow and alive too!"

With that, the story ends, but with a motivation for kids to save up a dime for the next issue.

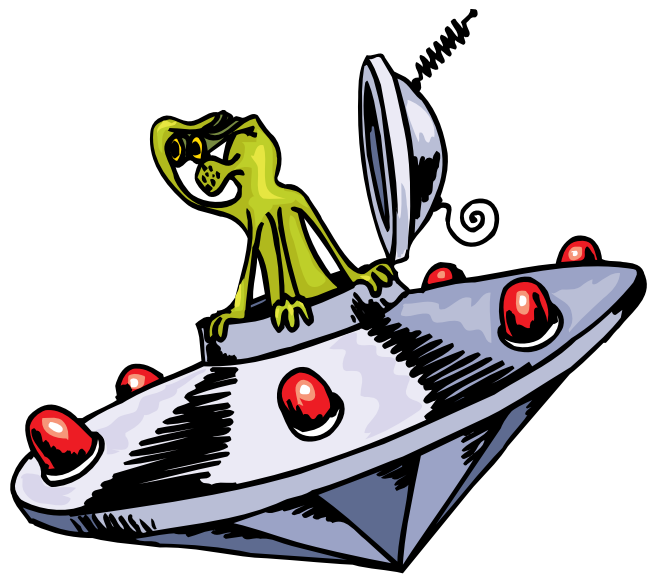
LA Worldcons by Samuel Lubell

The 2026 Worldcon is this August in Los Angeles. While it is called LACon V, there actually have been more than five Worldcons in the LA Area. The first was Pacificon, held in July 4-7, 1946. This was the fourth ever Worldcon and the first after the hiatus for WWII. The convention was chaired by Walter J. Daugherty. The author GoH was A. E. Van Vogt. Although there were no Hugos yet, the 1996 RetroHugos gave best novel to "The Mule" by Isaac Asimov based on its magazine publication (Astounding Nov-Dec 1945). Best novella went to *Animal Farm* by George Orwell. Attendance was just 130 (behind the first Worldcon, but about the same as the second and ahead of the third.

The 16th World Science Fiction Convention (Solacon) was held in Los Angeles (but declared as SouthGate since that's what the bidders advertised) on 29 August-1 September 1958. It was also Westercon 11. Chaired by Anne Moffatt, Solacon had Richard Matheson as GoH. Best Novel Hugo went to *The Big Time* by Fritz Leiber (Galaxy Magazine's March and April 1958). If you haven't read it, stop what you are doing and read it for free at <https://gutenberg.org/ebooks/32256>. Attendance was 322. The convention newsletter was the Daily Dynamic.

The first L.A.Con, L.A.Con I was early September 1972. It was the 30th Worldcon. Author Guest of Honor was Fred Pohl. Fan guests were Buck & Juanita Coulson. It was chaired by Charles Crayne & Bruce Pelz, and had an attendance of around 2,000. The Best Novel Hugo went to the first Riverworld book, *To Your Scattered Bodies Go*, by Philip José Farmer. The convention is most noteworthy for a Masquerade entry, The Turd, that was a person covered in peanut butter, which unfortunately dripped all over the Masquerade. The convention newsletter was *Wabbit Twacks*.

L.A.con II, the 42nd Worldcon, was held at the Anaheim Hilton and the Anaheim Convention Center in Anaheim, California on August 30 to September 3, 1984. Craig Miller and Milt Stevens chaired the convention with Guests of Honor Gordon R Dickson (of Dorsai fame) and fan Dick Eney. Attendance was 8,365, which is still the record for a Worldcon <check>. The Hugo for best novel went to *Startide Rising* by David Brin; other winners included Timothy Zahn, Greg Bear, Octavia Butler, and Return of the Jedi. R. A. MacAvoy won the John W. Campbell award for best new writer. The convention is notable for Larry Niven awarding Jerry Pournelle with a chocolate Hugo. It also made a surplus (don't call it a profit) of around \$200,000, which led to controversy when the committee spent \$10,000 of this money to air condition the LASFS clubhouse. The convention newsletter was the Thought Police Gazette (in honor of 1984).





known for his Sector General series about a Space Hospital).

L.A.con III, the 54th Worldcon, was held August 29 to September 2, 1996 at the Anaheim Hilton, Marriott, and Convention Center. Chaired by Mike Glyer, the convention's guests were James White (writer), Roger Corman (media), and Takumi and Sachiko Shibano (fan). Attendance was 6,703. The Hugo for best novel went to *The Diamond Age* by Neal Stephenson. Allen Steele, James Patrick Kelly, and Maureen F. McHugh also took home Hugo rockets. John W. Campbell Award for Best New Writer went to David Feintuch. The convention also awarded Retro Hugos for 1946. The newsletter was *STAT! The Newszine of Sector General* (GoH James White was

L.A.con IV, the 64th Worldcon was held August 23-27, 2006 at the Anaheim Convention Center, Marriott, and Hilton in Anaheim, California. Christian McGuire chaired the convention with Guests of Honor Connie Willis (author), James Gurney (artist), and Howard DeVore (fan). Spin by Robert Charles Wilson won the Best Novel Hugo. Connie Willis, Peter Beagle, and David D Levine took home Hugo rockets. The John W. Campbell Award for Best New Writer: went to John Scalzi, in the first of several Hugo appearances (he is up again this year). The Newsletter was To Say Nothing of the News. Attendance was 5,913 (including me).

I'm off to LA.con V, this week. It is taking place August 26-September 2, 2026 at the same Anaheim locations. The newsletter will be *The Fuzzy Pink Papers* and I will be its editor.

Literary Fandom: Review of *Astounding: John W. Campbell, Isaac Asimov, Robert A. Heinlein, L. Ron Hubbard and the Golden Age of Science Fiction* by Alec Nevala-Lee (2018)

Reviewed by Samuel Lubell

Astounding: John W. Campbell, Isaac Asimov, Robert A. Heinlein, L. Ron Hubbard and the Golden Age of Science Fiction by Alec Nevala-Lee, is mostly a biography of John W. Campbell, the editor of *Astounding Science Fiction/Analog* magazine. It certainly tells the stories of the other authors, but Campbell is the focus and the book mainly covers the other authors in terms of their relationship to Campbell (I think that Heinlein received the least attention here, but a two-volume biography of Heinlein already exists).

On a radio interview shortly after John W. Campbell's death, a woman called in to ask "Who, in your opinion, did most to improve science fiction. Asimov, although tempted to say "Me" answered "John Campbell." (The woman asking turned out to be Campbell's daughter).

The book builds on the idea that Campbell, though his discussions with and editing of the most important science fiction writers of his generation created the genre of modern science fiction and influenced readers who became writers and scientists themselves. Much of the book focuses on Campbell's relationships with writers, especially L. Ron Hubbard and reveals that Campbell had a greater influence on Hubbard's Dianetics and Scientology than modern readers may know. The book also shows how Campbell mentored a callow Isaac Asimov and how



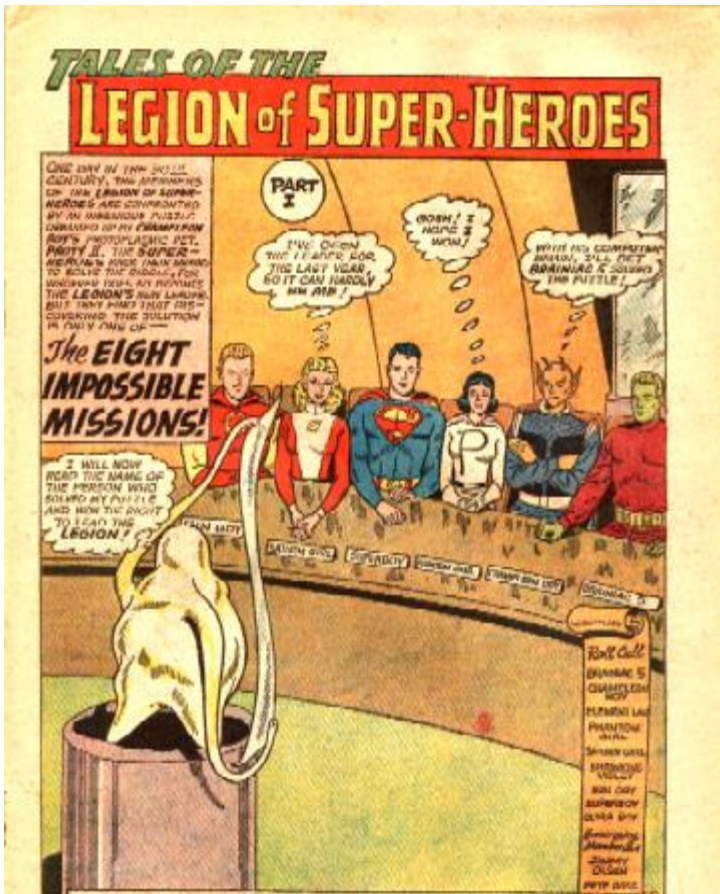
he ultimately outgrew Campbell (while still acknowledging Campbell's importance to his younger self).

Like many fans, as a young boy Campbell turned to books to escape a bad home life, dull schooling meant for students of lower intelligence, and a lack of friends. He read the pulp magazines and *Skylark of Space*. At MIT, he began to write to earn money for a car, selling stories to *Amazing*. But at age 20, he after failing German three times, he was kicked out of MIT. Meanwhile, Robert A Heinlein followed his family's military tradition as a midshipman at Annapolis. But it turned out that Heinlein got seasick and then tuberculosis and was involuntarily retired at age 27. And L. Ron Hubbard grew up in Montana. His poor vision prevented him from entering the Naval Academy so he went to George Washington University where he wrote in different genres, dropping out of college in his second year. And Isaac Asimov, born in Russia, grew up in New York City where his father had a candy shop that also sold magazines, which he at first was not allowed to read until he told his father that science fiction was educational. From these beginnings as very intelligent children who were unsuccessful in school (except for Asimov) and life, they became the great writers of science fiction.

Anyone with an interest in the Golden Age of Science Fiction, the history of SF Magazines, or writers and editors generally will enjoy reading this book. Nevala-Lee does an excellent job showing the virtues and flaws of the characters. By the end of the book Campbell has become a tragic figure, neglected and somewhat ignored by the field he did so much to advance. He spent his life pushing science fiction forward, only to fall behind as it continued to move without him. (This characterization seems unfair as his magazine was winning Hugos five years before his death). But, as Asimov said, he probably was the most important person in modern science fiction.

Comics Fandom: Early Legion of Super-Heroes (part VII) By Samuel Lubell

Superhero comics, by their very nature are science fictional, full of aliens, robots, mutants, and time travel. Still, even in such company the adventures of the Legion of Superheroes (LSH) stand out. The comic is set in the future and the super-powered heroes routinely use spaceships, rocket-belts, and fantastic weapons.



#41-*Lois Lane* #50 (July 1964) - The LSH appear in a picture on Lois' earrings as she goes through her day as a nurse while secretly being helped by various female Legionnaires disguised as members of her fan club. The Legionnaires are there to write an article on the fan clubs of Superman's friends. But Lois' reporter skills enable her to discover the Legionnaires and they have to use a hypnotic mirror to make her forget the LSH was there. This one is for competitors only.

#42 - *Adventure Comics* #222 (July 1964), "The Super-Tests of the Super Pets" - While the LSH and the Subs build weapons to penetrate the Iron Curtain of Time to confront the Time Trapper, the Legion of Super Pets (Superboy's pet dog Krypto, Supergirl's cat Streaky and Super-Horse, and Super-Money_ guard LSH's HQ. Protty II, Chameleon Boy's shape shifting pet wants to join them. Protty tells the history of his species. The Super Pets say he must complete a series of tests to become a member. To do so he has to impersonate Superboy, fool the telepathic Saturn Girl, and create a way to keep the whole LSH out of their clubhouse for a full hour. Then, he has to catch Krypto, who share's Superboy's super-speed. He completes all these missions, even saving Krypto from kryptonite. He is then able to join the Super-Pets. (It seems to me that the Super Pets would make ideal spies

since without their costumes, they look like dumb beasts.) Prot'y II becomes important in later LSH history so this issue gains relevancy then.

#43 – *Adventure Comics* 323 (August 1964), “The Eight Impossible Missions.” – This issue starts with more new applicants, Spider Girl and Double Header. For the LSH election, Prot'y II suggests that the first one to solve his puzzle become the next leader. Saturn Girl has to win a rodeo, Ultra Boy has to capture invisible crooks. Phantom Girl has to discover the greatest award earned by Superboy's father. Element Lad has to fly to an abandoned tower inside an extinct volcano to change marble to uranium. Honorary Member Pete Ross, without any powers, has to do something super. Brainiac 5 beats three computers in simultaneous 3D chess (but points to a broken wire as the reason so cannot accept his victory). Jimmy Olson, Elastic Lad, has to amuse the LSH (he does a puppet show). Saturn Girl figures out Prot'y's riddle, an acrostic spelling out Superboy to celebrate the anniversary of when Superboy joined the Legion. So Saturn Girl stays Legion Leader for another year. When combined with last issue, one has to question Prot'y's status as a pet since he can think and create plans as well as the Legionnaires and use his powers effectively. Is it just that his regular form is a blob rather than humanoid like the other LSH members? One has to wonder. Still, a minor issue.

#44—*Adventure Comics* #324 (September 1964), “The Legion of Super-Outlaws” – Dr. Marden King has a secret blood feud with the LSH. He is the brother of Jungle King, killed in a previous issue. Marden does not believe the LSH's claims that Jungle King was killed by the Super Monsters he forced to commit crimes. Meanwhile, on the planet Lallor, the dictator forces five super-powered youth to leave the planet. King invites them to Earth and tricks them into fighting the LSH. But only Starboy, Superboy, Invisible Kid, and Shrinking Violet are available. Duplicate Boy, one of the Super Outlaws, saves Shrinking Violet and they fall in love. The Super-Outlaws capture LSH HQ and plan to surprise the other LSH members when they return from their missions. King continues to trick both groups to think the other is evil. Mon El defeats Duplicate Boy and Shrinking Violet confesses her love. Meanwhile, at LSH HQ, the Super Outlaws go through the LSH records and realize they are not at all evil and that King has lied to them. They make peace with the LSH and King vows revenge. The LSH take the others back to Lallor and tell the people there that the powered youth can be champions. They become the Super Heroes of Lallor and Duplicate Boy says he can visit Earth swiftly so this is not the end of his relationship with Shrinking Violet. This issue does showcase some of less powerful LSH members and creates a new team of allies who could appear in the future (hint, hint). And there's the start of a romance that can extend beyond one issue.



#55 – *Adventure Comics* #325 (Oct 1964), “Lex Luthor Meets the Legion of Super-Heroes” – Matter Eater Lad and Triplicate Girl land on a planet run by Super-Villains to capture their leader, Atro. They are rescued by a time-travelling boy scientist from Earth's past. The LSH are shocked to learn that it is a young Lex Luthor from before he lost his hair and turned evil, but he in turn is shocked when he learns that he becomes a criminal and the arch enemy of his current buddy Superboy. He asks them to change his destiny. But Luthor later monologues that the hair is a wig and he really is the evil Lex and plots to use what they showed him to destroy the LSH. Based on what he learned from touring LSH's HQ, Lex creates a super-dissolving weapon which he uses on the LSH members (although since several have super-speed, they should have been able to dodge it. And it shouldn't have had an

effect on Phantom Girl). But, just when Luthor thinks he has gotten away the LSH reappears. It turns out the dissolving weapon really was a modified phantom zone projector and Mon El who had spent centuries in the Phantom Zone knows how to escape it, as the LSH uses their combined psychic power to mentally command Luthor to press the button to reverse the projector's effect). The LSH allows Luthor to return to his era but he promises to get revenge. The ending was a bit deus ex machina especially when the LSH had several ways to avoid being sent to the phantom zone. Still, not a bad story, just one that could have been better.

Literary Fandom: From Wizard to Scientist: Changing Views towards the Scientist from Hawthorne to Twain (Part VII)

By Samuel Lubell

This excerpt from my 1989 undergraduate History and Literature thesis has not been reprinted before. This section continues an analysis of 19th century science.

The last half of the nineteenth century, between Hawthorne's 1840's and Twain's 1890's, was a period of transformation for science. As John Burnham notes, science changed from a "philosophical diversion to a specialized occupation, from probing into nature into a way of life itself."² The earlier generation's definition of science as all practical knowledge grew more specific to adapt to the changes in the field. In 1872, E.L. Youmans, as the editor of *Popular Science Monthly*, explained the change as:

The increasing interest in science, in its facts and principles, its practical applications and its bearings upon opinion is undeniable; and with this augmenting interest, there is growing up a new and enlarged meaning of the term which it is important for us to notice. By science is now meant the most accurate knowledge that can be obtained of the order of the universe by which man is surrounded and of which he is a part.³

A few years later the definition needed to also include the process of science as well. In 1880, the magazine *Science* defined its subject as "the knowledge of a whole system of facts, principles and laws pertaining to a phenomenon."⁴ This view of science stressed organization and system instead of just isolated facts. Theory and method became intrinsic to science, as it transformed itself from a general category of all learning into a distinct branch of knowledge with its own procedures for investigation.

With this new definition of science came a new, more professional, definition of scientists. In the early nineteenth century, science was conducted mainly by amateurs, and even the scientific societies contained large numbers of interested non- scientists. Beginning in the 1840's, however, a professional scientific community formed, composed of full time practicing scientists. In a major change from the scientific community of earlier days, most members were professors or researchers, and only a few were physicians.⁵ A new organization, the American Association for the Advancement of Science, stated in its charter that: "the fellowship of the association is limited, by its constitution, to such members as are professionally engaged in science, or have by their labors aided in advancing science."⁶ Scientists began to



² John Burnham, *Science in America* (New York: Holt, Rinehart and Winston, Inc. 1971) p.66

³ "Editor's Table", *Popular Science Monthly* Vol I, 1872. p. 113

⁴ Samuel Fleming, "The Classification of Science" *Science: A Weekly Record of Scientific Progress Illustrated* Dec 25, 1880 p.312

⁵ By the 1840's, an American scientific community had emerged, numbering between 3 and 6 hundred with an elite of half a hundred or so of the most productive workers. Three-fourths or more of the elite were professors of science of one kind or another." Burnham, p.72

⁶ TG Mendenhall, "The Relations of Men of Science to the General Public" *Science: A Weekly Record*, Oct 24, 1890. p.229

work in groups, where they could specialize in a small area of science, and rely on others to fill in the rest. With the fragmentation of science, scientists, like ordinary citizens, depended on the popularizers to keep them informed on developments outside their own field. The new special societies and magazines in each field were only comprehensible to the people in it.

From the beginning of the century, American science emphasized utility. Both the general public and scientists themselves believed that "science was primarily applied science, technology and invention."⁷ But, while the early nineteenth century erroneously equated science and technology in order to show science as utilitarian, in the latter half of the century science became truly useful. Scientists began to examine technology, analyze the principles on which it functioned, and from that basis suggest improvements. All machines using electricity, including the telegraph, electric light (not invented until the 1880's), and the phonograph resulted from the scientific inquiries into electrical phenomenon. These inventions fascinated Americans. "Telephone" concerts were given in 1876 whereby people in Boston, through a telephone, could hear instruments making music in Philadelphia.⁸ In the same year, the Centennial Exposition in Philadelphia stressed mechanical marvels of technology. People took an interest in science to understand these inventions, but even as late as 1889, they considered the invention itself more important than the science behind it.⁹

The increasing employment of science in technology produced a growing faith in progress as the use of ever greater amounts of science. America led the world in its emphasis on utilitarian science,¹⁰ applying it to industries. Industry used the results of science and even set up laboratories of their own. Andrew Carnegie, the supreme man of business, best expressed the public's belief in utility of science; he once said that he would rather lose his buildings and plants than the services of his scientists.¹¹ The machines were changing the world and science was the force behind the machines. This faith in progress, and confidence in science, created an expectation that it could solve all of the world's problems:

To some thinkers., the promise of science could be fulfilled by an endless accumulation of facts, the process by which ignorance and superstition is pushed back and science, in time, solves all problems. Earlier in the century, scientists had been preoccupied with aggregating facts but tended to lack the fanatical faith in the adequacy of science that later flourished.¹²

As science became more popular, more magazines were devoted to chronicling its activities. While in the early 1800's there was no magazine devoting itself strictly towards science, by the end of the century even weekly science magazines were successful. Benjamin Silliman's 1818 *American Journal of Science and Arts* consisted of both science and non-science; in the first issue, its editor defined its purpose to include: "Music, Sculpture, Engraving, Painting..."¹³ When the general popular magazines published science, they often just printed listings of new inventions or discoveries. The title of *The Scientific American*, proclaimed its similar focus on "mechanical and other improvements"¹⁴ However, in the second half of the century, new magazines focused on science to meet the increased demand for scientific information. *Popular Science*, begun in 1872, wrote not just about new discoveries, but also about the purposes and philosophy of science¹⁵; and grew to a circulation of 12,000 in just two years.¹⁶ By

⁷ Burnham p.69

⁸ Mott, Frank *A History of American Magazines* Vol III: 1865- 1885 p.120 (citing *American Journal of Science* CXIII, 402 (May 1877))

⁹ Technology in fact was more popular than science; the social value of science lay in its utility in creating inventions. The British scientist T.H. Huxley, explained the popularity of the science of electricity as a result of its mechanical creations: "The great development of technical applications of electricity has stimulated the public interest in this science." article "Twenty Years" in *Science: A Weekly Record*, Dec 13,1889 p. 398

¹⁰ "Mechanical ingenuity engages a greater number of minds in the United States than in any other nation in the world" Tyndall in *Popular Science* Vol 14, March 1879 p, 569, cited in Mott Vol III p.115

¹¹ Daniels, *Science in American Society* p. 272

¹² Burnham *Science in America* p. 68-9

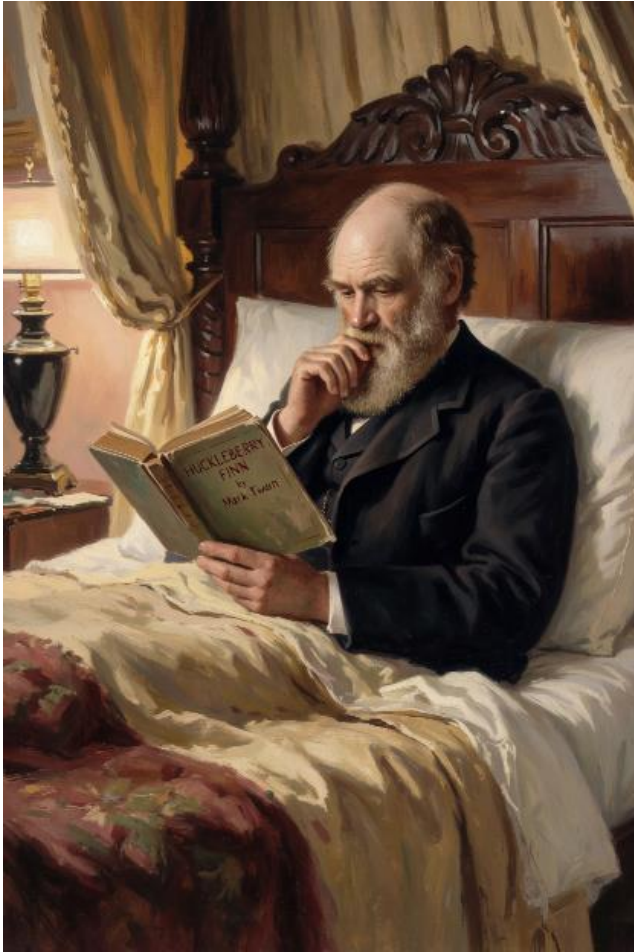
¹³ Mott, Frank *A History of American Magazines: Vol II 1850- 1865* (Cambridge: Harvard University Press 1938) p.303

¹⁴ The subtitle of *The Scientific American* was: The Advocate of Industry and Journal of Mechanical and Other Improvements

¹⁵ For example see: Kingdon Clifford, "Aims, etc. of Scientific Thought" *Popular Science*, November 1872 p. 95

1880, enough people were interested in science to support a weekly magazine, *Science: A Weekly Record of Scientific Progress Illustrated*, which defined its purpose as to allow scientists to quickly communicate with each other and the world.¹⁷ The older magazines also responded to this new popularity of science. The *Scientific American*, in 1876, established a less mechanical weekly supplement and in 1880 the *Journal of Science* dropped the Arts from its old title.¹⁸ The acceptance of science even penetrated the cultural establishment; *The Atlantic Monthly* and *Harper's Monthly* both added science columns.

In the late nineteenth century, enthusiasm for science colored all aspects of society. Science ventured into the territory of religion: scientism taught that everything could be seen and solved through science.¹⁹ Philosophy and art adopted the themes and basic outlook of science. Even literature, in its increasing emphasis of details and truth in fiction, paralleled the advancement of science. George Pound wrote in *Galaxy*:



"[The historian] of the 20th Century who shall study the literature of the 19th will note an epochal earmark. He will discover a universal drenching of belles lettres with science and sociology, while the ultimate dominant tinge in our era he will observe to be Darwinism. Not only does all physical research take color from the new theory; but the doctrine sends its pervasive lines through poetry, novels and history."²⁰

Scientific movements, especially Darwinism, had a great effect on American culture. Even if Social Darwinism merely provided a justification for already entrenched business practices, the use of the language of science for the rationale demonstrates the field's increasing power and influence. The general public started to conceive of life in scientific terms, rather than those of religion or philosophy; theories of science dominated the country's view of civilization. Science was the harbinger of progress to the new age, both the Edison creating mechanical wonders and the Huxley proclaiming a new philosophy of life.

This changing conception of science in the latter half of the century naturally affected Twain. Samuel Clemens, as a pilot on a Mississippi steamboat, found that his growing technical knowledge of the river ruined his natural enjoyment of the river's beauty.²¹ Yet, Twain clearly valued his river pilot days, appropriating his pen name from a steamboat term. He always wrote enthusiastically about the power and force of machines.²² While he accused some men of science of quackery, he praised others for their diligence and, despite occasional doubts, never rejected science. On the contrary, he described himself as a scientist. In his essay "Was the World made for Man" in 1903,

¹⁶ Mott, Vol III. p.897

¹⁷ Editors, *Science: A Weekly Record* Vol I, July 3, 1880 p.6

¹⁸ Mott, Vol II, p. 321

¹⁹ "Science was not merely loved or used, as understanding or as power; it was also believed in, and therefore it was also preached." Knight, *The Age of Science* p. 127

²⁰ Mott, Frank *A History of American Magazines: Vol III 1865- 1885* p. 106

²¹ Leo Marx, *The Machine and the Garden* (NY: Oxford University Press, 1964) p. 323

²² "For just as he never developed any distinctions between invention and creation, or between the mechanical and the beautiful, so too he only rarely took the machine age to task because it had destroyed the beauty in human life." Kreuter p.254

Twain asserted, "I seem to be the only scientist and theologian still remaining to be heard from on this important matter..."²³ Twain gave Darwin special tribute, and gleefully told of Darwin reading his novels to fall asleep.²⁴ He praised inventors, specifically Marconi, Morse, Bell, and Edison, as "men who have added the top story to the majestic edifice of the world's modern material civilization."²⁵ In *A Connecticut Yankee*, he puts similar sentiments into the mouth of Hank Morgan.

Twain's fiction reflects the importance of science to society and the public's growing knowledge of the field. Twain himself, in his late period, was a scientific determinist. Sherwood Cummings writes that Twain's philosophy was based on scientific ideas, especially Darwinism:

Although he did not understand precisely the methods of scientists, he could not really, in his role as an enlightened citizen of his century, deny the authority of their conclusions. Nor could he as a philosopher speak to his age if he ignored these discoveries of science which were challenging or transforming the concepts of virtually all its citizens.²⁶

Just as science emphasized exact facts and accuracy, so did Twain's fiction; he took special care to transcribe dialogue for each character in the appropriate vernacular. There is even an element of Darwinism in his fiction, in which his characters are greatly influenced by their environment.²⁷ The Widow Douglas's failure in her efforts to reform Huckleberry Finn reflects Twain's Darwinian sense of how environment shapes one's character. Similarly, in *Pudd'nhead Wilson*, a white boy who mistakenly grew up as a black slave cannot adjust to being suddenly recognized as white and is only at home in the kitchen with the slaves.²⁸

Mark Twain's *A Connecticut Yankee in King Arthur's Court* directly exhibits the new role of science and technology in late nineteenth century America. When Hank Morgan builds a modern industrial and mechanical civilization in the sixth century, many of his innovations- the telegraph, electric lights, and the telephone- were very recent even in Twain's time. The Yankee always assumes that this new civilization is a good thing, and while Twain sometimes satirizes a few of the Yankee's excesses, the bulk of the novel supports the idea of technology as progress. Twain's novel capitalizes on the conception of science in his era, and on its progress since Hawthorne's time. The Yankee is the quintessential utilitarian scientist, directing his knowledge to the goal of practical use. He is not a theoretician or philosopher but a maker of concrete things, like the late nineteenth century scientists who similarly produced technology. The Yankee sets up schools and "man- factories" just as scientists in the late nineteenth century worked to improve schools for scientific study and formed associations of scientists. While Hawthorne's scientists worked alone, Twain's Yankee surrounds himself with assistants: Clarence, the former page who became his chief assistant; the "experts" he has trained; the graduates of his "West Point" and his "Man-factories"; and the people who ran his telegraph lines. Twain also brings in evolution, with an ironic note wondering if man was worth the trouble, a procession of ancestors that stretches back a billion years to the Adam-clam or grasshopper or monkey from whom our race has been so tediously and ostentatiously and unprofitably developed.²⁹

²³ Mark Twain, "Was the World made for Man", in *What is Man? and Other Philosophical Writings, The Works of Mark Twain*, Volume 19. Paul Baender ed. (Berkeley, California:University of California Press, 1973) p.33

²⁴ In a speech given to the Nineteenth Century Club in November, 1900, Twain said "I thoroughly appreciate that compliment, and consider it the highest one that was ever paid to me. To be the means of soothing to sleep a brain teeming with bugs and squirming things like Darwin's was something that I had never hoped for. Mark Twain "The Disappearance of Literature" speech in *Mark Twain Speaking* Paul Fatout ed. (Iowa: University of Iowa Press 1976) p.356

²⁵ Mark Twain, "Theodore Roosevelt" (July 16, 1908) in *Mark Twain in Eruption: Hitherto Unpublished Pages* Bernard DeVoto, ed. (New York:Harper and Brothers Publishers, 1940) p. 9.

²⁶ Sherwood Cummings, "Mark Twain's Acceptance of Science", *The Centennial Review* Vol VI, Number 2, Spring 1962 p. 261

²⁷ see Sherwood Cummings "Science and Mark Twain's Theory of Fiction" *Philological Quarterly* Vol 37, Jan 1958

²⁸ Mark Twain, *Pudd'nhead Wilson* (New York: P.F. Collier and Son Company 1893, 1922) p. 202

²⁹ Samuel Clemens, *A Connecticut Yankee in King Arthur's Court: A Facsimile of the First Edition* (Toronto: Chandler Publishing Company, 1963) p. 217.