

Arthur C. Clarke – Prophet of the Space Age

By John Uri

Manager, History Office

NASA Johnson Space Center

<https://www.jsc.nasa.gov/history/>

Any sufficiently advanced technology is indistinguishable from magic.

Arthur C. Clarke

Introduction

Informally known as The Big Three, Arthur C. Clarke, Isaac Asimov, and Robert Heinlein were arguably the most famous science fiction writers of the latter half of the 20th century. Interestingly, they all knew each other, both professionally and personally; Clarke corresponded with the other two regularly for decades. He even had an informal agreement with Asimov, the Clarke-Asimov Treaty, that if asked, they agreed to say that Clarke was the better science fiction writer and Asimov the better science writer. But Clarke was much more than a science fiction writer – he was an engineer, a scientist, a futurist, a humanist, an explorer, and even an educator.

Biography

Born on December 16, 1917, in Minehead, Somerset, England, Arthur C. Clarke grew up on a farm in nearby Bishops Lydeard, where he enjoyed stargazing and reading American science fiction pulp magazines, nurturing his life-long fascination with space flight. He joined the British Interplanetary Society in 1934, long before space flight travel was considered realistic. Financially strapped after the sudden death of his father, he could not attend university and moved to London in 1936 to find work. During World War II he worked on radar systems for the Royal Air Force. After the war, he received a fellowship and was finally able to attend university, earning degrees in physics and mathematics with honors from King's College London in 1948. Still fascinated by space, he reconnected with the British Interplanetary Society and became its chairman from 1946 to 1947 and again from 1951 to 1953. Around this time, he began his writing career, publishing scientific works as well as fiction, including his first novel *Prelude to Space*, written during his summer break in 1947. He authored nearly 100 books and numerous articles during his lengthy and distinguished career.

In 1956, Clarke relocated from England to Ceylon (now Sri Lanka), mainly to pursue his interest in scuba diving, discovering the underwater ruins of an ancient temple. He contracted polio in 1962 which temporarily limited his movements but he continued writing prolifically. As an occasional TV personality, he was a commentator on CBS News with Walter Cronkite during the 1969 Apollo 11 Moon landing mission and hosted his own programs in the 1980s. In 1988 doctors diagnosed him with post-polio syndrome and he was mostly wheelchair bound for the remainder of his life but his writing continued unabated. Clarke died in Colombo, Sri Lanka on March 19, 2008, aged 90, from respiratory failure.



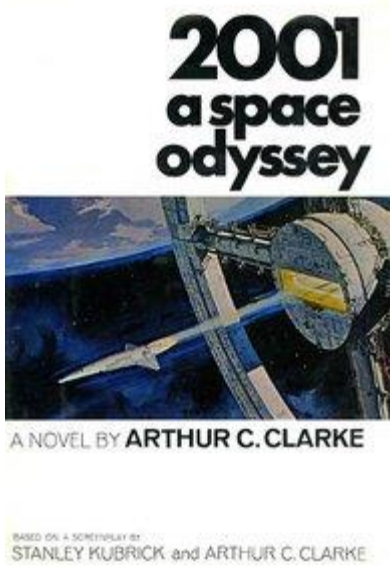
Left: Clarke family photo taken in 1929, with Arthur at center top. Image courtesy of sirarthurclarke.com. Right: Clarke (at right) providing commentary on CBS News during the Apollo 11 mission in 1969, with Walter Cronkite (left) and astronaut Wally Schirra (middle). Image courtesy of CBS News.

Space Odysseys

Perhaps Clarke's best known work and a 1960's cultural icon is *2001: A Space Odyssey*, a collaborative effort conceived in 1964 with film producer Stanley Kubrick. The plot is very loosely based on a short-story called *The Sentinel* that Clarke wrote in 1948 (published as *The Sentinel of Eternity* in 1951) but had other inspirations as well. Essentially, the collaboration required the simultaneous writing of a novel by Clarke and the screenplay by Kubrick, a planned 1-year effort that took more than three years to complete, with the film released first in the spring of 1968 and the novel following a few months later. The film, partly owing to its many groundbreaking special effects, cost \$10 million to produce, an astronomical sum at the time, and garnered an Academy Award nomination in 1969 for both Clarke and Kubrick for Best Original Screenplay (losing to Mel Brooks for *The Producers*). The film's realism, in particular the scenes on the space station, the Moon and the voyage to Jupiter, is astonishing when viewed from the perspective that it was produced well before the first Apollo missions to the Moon! The film won the 1969 Academy Award for Best Visual Effects.

Clarke followed up *2001* with three sequels. The novel *2010: Odyssey Two* was published in 1982 and made into a film that premiered in 1984, with Clarke making a cameo appearance (no spoiler here, watch the film to see in which scene he appears!). Some of the mysteries of the first novel are explained in the first sequel, while others are left for the next two - *2061: Odyssey Three* (published in 1987) and *3001: The Final Odyssey* (1997).

Other notable science fiction works included *Rendezvous with Rama*, published in 1973, which earned the Nebula, Hugo and other literary awards, and spawned three sequels that Clarke co-authored with Gentry Lee. *The Fountains of Paradise* (1979), also a winner of the Nebula and Hugo awards, featured a space elevator, a technology that one day may replace rockets for getting satellites into orbit, an idea Clarke had written about as far back as 1962. His final science fiction novel *The Last Theorem*, co-authored with Frederick Pohl, was published in 2008 shortly after Clarke's death.



Stanley Kubrick and Arthur C. Clarke collaborating on 2001: A Space Odyssey (left); the book cover for 2001 (middle); and a poster advertising the film (right). Images courtesy of MGM Studios.

Scientific Prophet

Although often incorrectly credited with developing the concept of geostationary satellites, in which a satellite in an equatorial orbit at an altitude of 22,236 miles appears to “hover” over a single spot on Earth, Clarke built on earlier ideas to first describe in 1945 how this would be ideal for telecommunications relays. It would be 19 years before the first geostationary communications satellite, Syncom-3, was placed into service over the Pacific Ocean, broadcasting the 1964 Summer Olympic Games from Japan to the United States. It is difficult to imagine today’s world without the instantaneous global communications afforded by these satellites, orbiting in what the International Astronomical Union designated the Clarke Orbit.

eerily prescient, in an essay in 1959, Clarke predicted not only global satellite TV broadcasts, but also a personal transceiver so small that everyone would carry one and be able to call anyone on Earth by merely dialing a number. The device would also be capable of determining your exact position on Earth. Almost everyone reading this article has the device he predicted nearly 60 years before it was available – a smartphone with GPS capabilities. In his 1962 *Profiles of the Future* he predicted inventions and ideas through the year 2100.

Accolades

For his many accomplishments and lifetime contributions, Clarke received numerous awards and distinctions, in addition to the literary awards for his individual works. In 2000, Clarke was knighted by the British High Commissioner in Sri Lanka since he was too ill to travel to England to receive the honor from the Queen. He was granted his adoptive country’s highest civilian honor, the Sri Lankabhimanya

(The Pride of Sri Lanka), in 2005. An asteroid (4923 Clarke) and a species of dinosaur (*Serendipaceratops arthurclarkei*) are named after him. A massive gamma ray burst (GRB 080319B) that occurred 7.5 billion years ago reached Earth just hours before Clarke's death – it was the farthest object visible to the naked eye and science writers suggested that it be named The Clarke Event.

To promote the use of technology to improve quality of life, especially in developing countries, Clarke established the Arthur C. Clarke Foundation in 1983. In 1987, he established The Arthur C. Clarke Award, an award given for the best science fiction novel first published in the United Kingdom during the previous year.

A great supporter of education, especially in the sciences, Clarke served as the first Chancellor of the International Space University from 1989 to 2004, and the Chancellor of Moratuwa University in Sri Lanka from 1979 to 2002.

In an amusing accolade, the Flat Earth Society commented after the Apollo 11 Moon landing that NASA faked the event and that Clarke had written the script!



Clarke receiving his Knighthood from the British High Commissioner in Sri Lanka in 2000. Image courtesy of BBC News.

Two possibilities exist: Either we are alone in the Universe or we are not. Both are equally terrifying.
Arthur C. Clarke