

My friend Arthur C Clarke

By Ray Wijewardene



I have known Arthur C Clarke for over 40 years -- and what a fascinating and inspiring friendship it has been!

It was through a close friend from our teens -- Rodney Jonklaas -- that I first got to know Arthur. They used to say 'All Jonklaas' are mad' -- but they were just uniquely eccentric. And Rodney had his tremendous knowledge of zoology even as a schoolboy, and had a particular love for marine biology. At that time, well over half a century ago, this was a rare talent, which he indulged in as a most unusual hobby of underwater excursions. It was only natural that equally unusual visitors to our country should seek him out as the authority on the local underwater scenery, and for his experienced guidance to this new underwater world.

The unique visitors were Arthur C. Clarke, then known simply as a 'space visionary' author of science fiction books, and his diving partner, the tremendously talented underwater cinematographer Mike Wilson. Both shared with Rodney a passion for marine life and for drifting silently and

weightlessly into the very different and new world around our coasts. Naturally they came together as a team to share this unique experience, each with a particular talent of his own; sharing but never invasive.

After Mike and Arthur both settled down in Ceylon in the late 1950s, they developed various diving, literary, cinematic and scientific endeavours -- sometimes unusual combinations of these.

Their adventures and activities were not just for personal fulfilment or recreation, but had far reaching implications for life and times on our island nation. A good example is *Ran Muthu Duwa*, the first Colombo feature film in Sinhala that Mike directed and Arthur financed in 1962. Not only did they literally usher in colour to the local cinema, but introduced movie-goers to the romance of underwater adventure.

Their natural talents blossomed. Rodney developed an international recognition as a marine biologist. Mike, with his rare gift for expressing himself through pictures, dabbled in both photography and Sinhala films. He was a perfectionist -- whether as a sportsman or as a creator and artist of unusual talent. Their home in Bambalapitiya soon became an *ashram* (or *ambalama*?) for a wide range of talent from around the country, and often from overseas. My happiest memory of Mike was when hydroplane racing together on Bolgoda Lake.

Rodney passed away first, leaving a remarkable menagerie of marine and mammalian life to mourn his departure. Mike, the deepest of the trio, later drifted even more deeply into Hindu Swami-ism through which to express the depths of his lonely excursions into the mind and its supremacy over matter. One can well understand such extension of the feeling of weightlessness, of existence in a totally different and silent world underwater.

They all shared their love for space, whether the silent underwater spaces of the sea, or space far above. It was in Arthur that the interests in both combined -- he says that his life has revolved around three 'S's -- space, sea and Serendip.

Arthur is a highly competent and very well qualified mathematician and physicist, but he is not trapped within the traditional norms of either discipline. He has an extraordinary facility to project his mind beyond what is currently known. In fact, way beyond the limits of the possible, and into 'what might be' and 'what could be'.

Writer extraordinaire

Add to that his talent for expressing his thinking, vision and dreams in words...and you have the truly remarkable author who has turned out some of the most readable and accessible science fact and science fiction of our times. His brand of science-fiction has a solid background of science, immersed in a philosophy for life and people woven into the mystical worlds he creates. I have often tried to 'penetrate' the intricate science behind his stories and often discussed his line of thinking. My favourite of all his 'inventions' (after the original concept of the 'communications satellite') is the Space Elevator: a cable which stretches out centrifugally from Earth to a satellite in orbit, using which people and cargo can be launched into orbit inexpensively.

As a fellow inventor, it interests me a great deal that Arthur never took any patents to personally benefit from his inventions. Few men can claim to have spawned an entire multi-billion dollar industry as Arthur has, with his 1945 paper in *Wireless World*. Sixty years later, he says "I still think it was a good idea". Indeed, Arthur, it was.

We share friends and associates from his days with the British Interplanetary Society, where his vision for the possibilities of communications satellites was first discussed. A special friend from his BIS period was Ralph Slazenger, heir to the 'tennis racquet, balls and sports goods empire'. Ralph was, in fact, far more interested in gliding and flying than in the sports goods industry which he was happy to leave to expert managers. He preferred to spend balmy weekends with us in the skies above Cambridge with the University Gliding Club of the late 1940s. A few years ago, Ralph came to Sri Lanka specially to visit with Sir Arthur, and reminisced for several days about 'the early days' of the BIS and the phenomenal changes which had, since then, taken place in aerospace industry following Arthur's visionary predictions.

Clarke's Laws

Arthur's early forays into the Sinhala cinema came full circle when, in 1978, he accepted Lester James Peries' invitation to act as Leonard Woolf in the Sinhala adaptation of *The Village in the Jungle*. Arthur very much looked the part of colonial revenue and judicial officer as he presided over the Hambantota courts. But few people who watched that scene of Arthur dispensing justice might have realized that he had laid down his own three 'laws' back in the early 1960s.

These 'laws', of course, are related to how science and technology advance, and were first published in the path-breaking *Profiles of the Future* (1962).

Clarke's First Law states: *"When a distinguished but elderly scientist says that something is possible, he is almost certainly right. But when he says that something is impossible, he is very probably wrong!"* That early discourse into the arenas of 'possibility' and 'probability' opens up a whole new area of thinking for us. While there is always the 'possibility' of another tsunami devastating Sri Lanka, the scientific 'probability' of such a recurrence is believed to be minimal. On the other hand, Arthur has long held the view -- even if only a minority of physicists currently agree with it -- that 'Cold Fusion' is not only possible but also probable in the next few decades.



Arthur and I have shared a particular interest in energy. I can still remember his bold statement in the early 1970s, when OPEC oil price hikes rocked the world: *"The age of cheap power is over – the age of free power is still 50 years ahead."* With less than two decades more to go, we eagerly await the

arrival of free power.

Clarke's Second Law says: *"The only way to discover the limits of the possible is to go beyond, and into the impossible"*. We had occasion to discuss this when Arthur came to my hospital bedside to commiserate with me on my then most recent misadventure into experimental aeronautics. I thought this 'Law' was contradictory to the wisdom of Robert Browning who wrote: *"Ah, but a man's reach must exceed his grasp, or what's a heaven for?"* We agreed that the 'impossible' might well become 'possible' on another occasion, at another time, when experience and technology developed further. As indeed it did.

Arthur's irrepressible sense of humour is displayed in Clarke's Third Law: *"Any sufficiently advanced technology is indistinguishable from magic"*. Just imagine how your grandfather might react upon his first viewing on TV of a

cricket match being played, LIVE, on the other side of the world. Magic indeed. The Sinhala saying '*Godayata magic*' comes to mind.

In fact, there is Clarke's Fourth Law which is the least known, one where he 'takes the Mickey' out of the UN's inundation of the developing world with their teams of 'experts': "*For every expert, there is an equal and opposite expert*".

Arthur's romance with outer space did not diminish his appreciation for my personal devotion to 'inner space' -- the whole range of possibilities within our atmosphere. He was one of the very few people in Sri Lanka who could advise and comment -- really intelligently and usefully -- on the range of aircraft I was then building at my home. Ones he then observed in flight at Ratmalana Airport -- aircraft ranging from 'car-toppable' and amphibians to gyroplanes and helicopters. His clever excuse for not flying *with* me: "Many thanks, but I've already seen the movie!"

Science for Youth

The Arthur C. Clarke Centre for Modern Technologies was created in 1984 by President J.R. Jayewardene with just that objective of fostering in our youth a love for the range of modern technologies dear to Arthur. These ranged from space and telecommunications to astronomy and electronics. The distinguished and world renowned Sri Lankan biochemist Professor Cyril Ponnampereuma became its first Director.

One of the more interesting projects of the new Centre was its Science for Youth programme. Each year, about 30 top Advanced Level students from around the country would be brought together for a week, to spend a day each with senior scientists of the country and experience with them 'a day in the life of a scientist'. The idea was to show that science and technology can be rewarding careers, and can be a lot of fun too.

I was privileged to take the youngsters for what became known as 'Innovators Day'. Both Cyril and Arthur would join me during the day for an hour or two of chat, which included outings to Bolgoda Lake for lunch and an experience with yachting (my main sporting interest at the time) and also at our hangar at the airport where our range of experimental 'human-powered-vehicles' was available for them to ride. Many also took rides in the home-built aircraft we had evolved. Others tried their hands at flying 'un-usual' types of model aircraft -- flapping wings and gyroplanes -- under Sir Arthur's enthusiastic encouragement although, by then, he had become confined to a wheelchair.

The highlight of Innovators' Day was when students had the opportunity to talk with Sir Arthur himself. After they got over their initial shyness – helped by the several amusing scientific toys which he invariably pulled out of his bag on these occasions -- he was happy to answer any questions which they asked. While the Arthur C. Clarke Institute still functions, priorities have changed and Science for Youth is no longer one of their activities. And sadly, too, it has been a decade since that great scientific stimulator Prof Cyril Ponnampereuma passed away.

Men with toys

Arthur and I have also shared an interest in toys, now referred to as 'adult recreation material'. Arthur always had a couple of interesting gadgets (toys) on his table to amuse visitors (and himself!), and each was based on the application of scientific principles often overlooked or ignored by the scientific establishment. We had shared, in our youth, the marvellous construction toy 'Meccano', now replaced by Leggo, which also – in recent years -- includes a variety of electronic developments with which to make model cars and robots. In those days (perhaps 65 - 70 years ago) such toys, mostly hand-crafted, were made of wood, lead and steel...and some of aluminium which was then coming into vogue.

Modern material-moulding techniques have replaced those with a variety of plastic toys, and it has been such a joy to discuss with Arthur our personal experiences with the early model aeroplanes, ships and trains. Twisted rubber-power and steam engines, now replaced by electric motors and tiny diesel engines. Free-flight model aircraft which had to be built lovingly (of *gini-sapu*, bamboo, and tissue) over several months, now replaced by ready-to-fly plastic models and radio-control. Easily crashed, but which the shops were happy to replace with an even more expensive toy.

Sadly, the 'Do-It-Yourself' tradition never really emerged in Sri Lanka -- purchasing from a shop was easier! As a result, we have produced generations of engineers and technicians who are excellent on theory, but a bit weak when it comes to practical aspects of problem solving!

Arthur's ultra alert mind quickly grasped the significance of one of the earliest hand-held GPS (global positioning system) units I had purchased at a US air-show in the early 1980s, for easier navigation on my home-built aircraft. He quickly related its use for identifying a particular wreck at the Great Basses Reef, one where he and his fellow divers had discovered a sunken treasure of silver coins in the 1960s. He promptly chartered a vessel to take him out there with the GPS unit to help relocate it. That was in the

very early days of GPS. Curiously, long before our military had adopted GPS, local fishermen in Negombo were using it for navigating out at sea. If our armed forces *could* have banned GPS use in Sri Lanka, they *would* have, citing its possible – though highly improbable -- use to bomb VIPs!

Arthur's mastery of the television medium was demonstrated in the several popular series he hosted. One of them was *Arthur C. Clarke's World of Strange Powers*, where he investigated various phenomena that had long intrigued his mind. One such phenomenon which we often discussed was 'Crop-Circles' -- strange geometric and exotic designs which were imposed on maturing wheat fields in Britain, and best appreciated from low-flying aircraft or balloons. Some contended that the designs came from outer space. Others felt that they were surreptitiously man-made, and many attempts were made to 'catch' the perpetrators in action.

Mechanising buffaloes

It was also natural that other great scientists around the world should discourse with Arthur. One such luminary was the renowned inventor and designer Buckminster Fuller, who lectured to us at Harvard. 'Bucky' as Sir Arthur referred to him (I would never dare!) was one of those invaluable visiting lecturers whose presence, and interactive lectures, made Harvard a unique experience. It was during such a session that I had opportunity to intrigue the agri-business class with my presentation of the case-history (and 8mm movie) relating to the agro-machinery company which we had developed to produce a world-renowned small tractor for the rice farmer in the tropics. Knowing that his friend Arthur C Clarke was living in Sri Lanka, Bucky took a particular interest in my presentation.

At the conclusion of my slide-and-movie presentation, I was proudly acknowledging the clapping of my colleagues, when Bucky asked one of the most challenging questions I have ever faced. "Ray," and then there was a pause. "Ray, did your tractor mechanise tropical agriculture, or did it mechanise the buffalo?"

My pride was truly shattered! He was, of course, quite right. For, indeed, even the conventional four-wheeled tractor as used in the US had only mechanised the horse. The rest of that class lapsed into an unconcerned discussion relating to then emerging theories of 'Lateral Thinking': 'Why indeed does a farmer plough his field?' and 'What does he really achieve by doing it?' And so on.

That discussion – motivated entirely by that outstanding lecturer’s close acquaintance with Arthur and the island of Lanka where he lived -- changed the whole purpose and direction of *my* life. But that’s another story!

* * * * *

About the author: Dr Ray Wijewardene studied at Cambridge and Harvard universities, qualifying as an aeronautical engineer. His interest in tropical agriculture led to the invention of the two-wheeled ‘Landmaster’ tractor in the 1960s, and to his later experiments with conservation farming. He had been Chairman of both the Sri Lanka Inventors’ Commission and the Tea Research Board, and in 2002, succeeded Sir Arthur Clarke as Chancellor of the University of Moratuwa, Sri Lanka’s premier technological campus.

Ray was an Olympic Games (Mexico, 1968) yachtsman and an Asian Games (Bangkok, 1970) Silver Medallist. He continued his hobby of building and flying unusual aircraft all over the country, until private flying was banned a decade ago under the guise of ‘national security’.

This essay was written in March 2005 to be part of a series of articles celebrating Sir Arthur C Clarke, who was completing a half century of association with Sri Lanka that year. A compact version of this essay was published in Lanka Monthly Digest (LMD) magazine in May 2005.

<http://lmd.lk/archives/2005/May/cov2.htm>

The author acknowledges editorial support from Nalaka Gunawardene.