Remembering Prof. Carlo Fonseka's crusade for science and humanity

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A third-person account of Sri Lanka's greatest science communicator

In the annals of Sri Lankan intellectual history, certain figures transcend their disciplinary boundaries to become national treasures. Prof. Carlo Fonseka, who passed away in September 2019 at the age of eighty-six, was precisely such a figure. To his students, he was a magician of the lecture theatre. To the general public, he was the voice that decoded the mysteries of the world. To the nation, he was a man of conscience, a fearless critic of injustice, and intellectual dishonesty. But above all, to those who understood his life's mission, Prof. Fonseka was Sri Lanka's most accomplished science communicator, a man who dedicated decades to imbibing scientific culture into the very fabric of Sri Lankan society.

The science communication deficit and Prof. Carlo's response

In developing nations like Sri Lankans, the gap between scientific knowledge and public understanding remains dangerously wide. Pseudoscience, magical thinking, and anti-intellectualism thrive where scientific literacy is weak. Quack remedies flourish. Vaccine hesitancy spreads. Astrology and superstition influence major life decisions. Public policy suffers when citizens cannot distinguish evidence from assertion.

It was into this breach that Prof. Carlo Fonseka stepped with remarkable energy and purpose. Long before the advent of social media influencers or TED Talks, he understood that science communication was not a peripheral activity for academics but a central responsibility. He recognized that a professor of physiology who confined his teaching to the lecture hall was failing half his duty. The other half or the public half required taking science to the marketplace, the living room, and the village square.

His unique genius lay in articulating the most difficult physiological concepts in a manner any layman could understand. While many academics hide behind complexity to assert authority, Fonseka stripped away the mystery to reveal the miracle. He famously drew examples from everyday Sri Lankan life, the heat of a curry, the fatigue after a day's work, the beating of a village drum to explain the intricate electrical and chemical processes of the human body. He understood that science was not a separate school subject but a way of thinking critically about the world.



Broadcasting science: the radio and television revolution

Prof. Fonseka recognized the immense democratic power of the radio waves. In a country where literacy rates, while respectable, did not guarantee access to scientific literature, radio and television

offered direct access to millions of households. He became a pioneer in utilizing national radio and television to take science to the masses.

Through his legendary broadcasts, his distinct, reassuring voice entered thousands of Sri Lankan homes. He spoke Sinhala not as a translator translating English science but as a thinker who thought scientifically in Sinhala. This was no small achievement. The vocabulary of modern science was developed in European languages, and many academics struggle to render technical concepts in vernacular tongues without either distorting meaning or sounding awkward. Fonseka made it seem effortless. He found Sinhala words and analogies that carried the precise meaning while remaining accessible.

On television, he was a visual storyteller, breaking down medical anxieties and anatomical complexities with unparalleled ease. Whether he was debunking dangerous pseudoscience on prime-time TV or explaining the physiological basis of emotions over the radio, Prof. Fonseka treated the public as an intelligent partner in conversation, not a passive audience. He never talked down to his listeners. He assumed curiosity and rewarded it with clarity.

This approach to science communication was decades ahead of its time. Only now are the Western universities establishing formal programmes in public engagement with science. Only now are the funding agencies requiring researchers to demonstrate public outreach. Fonseka lived these principles long before they became fashionable.

Institutional commitment: transforming SLAAS and NSF

A science communicator working alone, however eloquent, has limited reach. Prof. Fonseka understood that embedding scientific culture in society required institutional infrastructure. His impact on the nation's scientific infrastructure was cemented through his active leadership and involvement in apex bodies like the Sri Lanka Association for the Advancement of Science (SLAAS) and the National Science Foundation (NSF).

At SLAAS and NSF, Carlo did not view science as an ivory-tower luxury but as a national utility. He weaponized these platforms to bridge the gap between policy, research, and the common man. Through these organizations, he conceptualized and drove massive public science popularization campaigns. He spearheaded workshops for teachers, recognizing that improving science education required not just curriculum reform but the retraining of educators themselves. He created fora where scientists were challenged to speak in the vernacular, holding their feet to the fire when they retreated into jargon.

He continuously pushed the State to invest in research that solved local, ground-level problems. Too much research in developing countries, he argued, was imitative and conducted not to answer pressing local questions but to secure publication in foreign journals. Fonseka demanded relevance. He transformed these formal institutions into vibrant hubs of public intellectualism where scientists, policymakers, journalists, and citizens could debate the role of science in national development.

The Ragama experiment: educating doctors as science communicators

Prof. Fonseka's role as an academic leader was also defined by his tenure as the Founder Dean of the Faculty of Medicine at the University of Kelaniya (Ragama). Taking over the newly nationalized North Colombo Medical College in 1991, he faced the Herculean task of building an institution from the ground up. He was not just an administrator; he was an architect of futures.

His leadership style was revolutionary. He famously declared that only the "best people" should be recruited. He fostered an environment where excellence was the only standard. But his vision for medical education extended far beyond conventional pedagogy. Understanding that medical education could crush the spirit with its relentless demands on memory and its constant exposure to suffering, he injected art into anatomy. He organized entertainment sessions featuring legends like Pandit W. D. Amaradeva, believing that a doctor needed a soul educated in beauty as



Figure 1: The Faculty of Medicine at the University of Kelaniya programme

much as a mind trained in science. This was not mere aesthetic indulgence. Fonseka understood that effective doctors must be effective communicators. A doctor who cannot explain a diagnosis to a frightened patient in simple, clear language has failed as surely as a doctor who makes the wrong diagnosis. The Ragama medical curriculum under Fonseka emphasized communication skills not as an afterthought but as a core competency.

His legacy is institutionalized in the traditions he set, such as the Carlo Fonseka Challenge Trophy for Physiology quizzes and the memorial debates held in his name, which continue to sharpen the critical thinking of future doctors. He wrote the anthem for the Ragama Medical Faculty, challenging students to be "doctors with a human touch." That anthem is not just a song; it is his mission statement, sung by every batch that walks through those hallowed portals.

Reason over ritual: science communication as cultural critique

In the later stages of his life, Prof. Fonseka's intellectual journey took a profound philosophical turn. While he grew to deeply appreciate and accept Buddhist philosophy, particularly its emphasis on experiential truth, cause and effect, and mindfulness, he remained fiercely opposed to the supernatural dogmas that clung to it.

He drew a sharp line between the sublime philosophy of the Buddha and the commercialized, ritualistic corruption of religion. He spoke out aggressively against the exploitation of the populace through the commercial use of deities, astrology, and fear-inducing rituals. To Carlo, true alignment with Buddhist philosophy meant utilizing the scientific spirit of inquiry (*Ehipassiko*) to reject myths. He continuously challenged fire-walkers, miracle-healers, and superstitious charlatans, demonstrating that the laws of physiology and physics could never be bypassed by divine intervention.

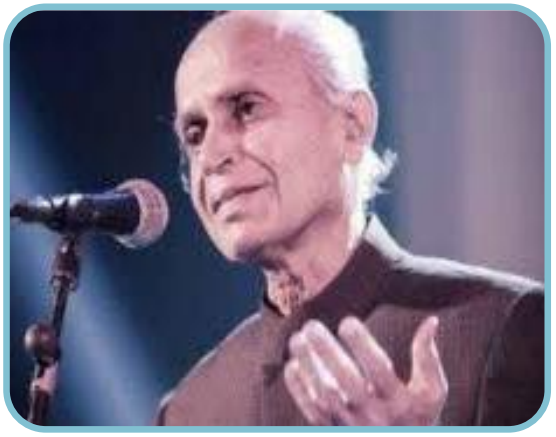
This aspect of his work placed science communication squarely in the domain of social justice. He understood that superstition and pseudoscience disproportionately harm the poor and the vulnerable, which lack the resources to distinguish legitimate treatment from exploitation. When a wealthy person falls for quackery, they lose money. When a poor person falls for quackery, they may lose their life savings, their health, or their life. Fonseka's debunking of miracle cures and astrological predictions was thus not intellectual snobbery but a form of consumer protection for the most vulnerable.

The political dimension: science communication and social justice

His political commitment was inseparable from his science communication mission. He understood that scientific literacy without social justice was incomplete. A population that understands germ theory but cannot access clean water remains vulnerable. A populace that comprehends nutrition but cannot afford adequate food remains malnourished. Fonseka's socialism was not an add-on to his science but an extension of it, recognition that the benefits of scientific progress must be distributed equitably.

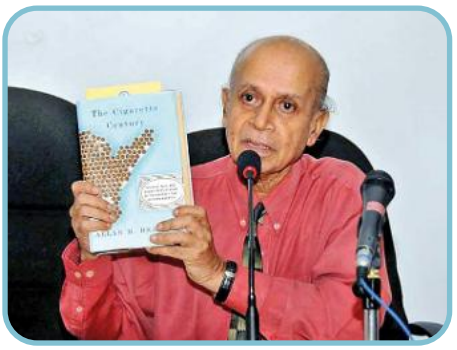
Even in death, he made his most powerful political and scientific

statement. In an act of ultimate selflessness and defiance of vanity, he donated his mortal remains to the Anatomy Department of the Ragama Medical Faculty. It was the final lecture of a lifelong teacher: a lesson in utility, humility, and the scientific ethos that the body is merely a vessel for learning. For a science communicator, no message could be more powerful. He practiced what he preached to the very end.



The whole human: science and the humanities in dialogue

For all his public ferocity, the private Carlo Fonseka was a figure of deep warmth and eccentric charm. He was a composer and lyricist who produced albums like *Carlochita Gee* and *Raththaran Duwe*, proving that the left brain and right brain could coexist beautifully. He devoted his life to a tripartite mission: the upliftment of medical education, demystifying society through science communication, and enriching arts and culture as a master lyric writer. This integration of science and art was central to his philosophy of science communication. He understood that people are not moved by data alone. Stories, metaphors, music, and poetry reach parts of the human mind that equations cannot touch. His own example, a rigorous physiologist who wrote song lyrics, demonstrated that scientific and artistic sensibilities are not opposed but complementary. The best science communicator, he showed, is not the one with the most citations but the one who can make the complex beautiful and the beautiful intelligible.



Those who had the privilege of associating with him closely, as colleagues through SLAAS, as friends, and as mentors, experienced his profound human qualities on many occasions. His humility was absolute, his generosity quiet, and his capacity to listen to a dissenting view was a masterclass in grace. Former students and colleagues alike recall him not with the fear usually reserved for deans and titans, but with deep, abiding love. He was a mentor who remembered names, who checked on students who had lost parents, and who gave away books from his personal library with handwritten notes of encouragement.

Lessons for contemporary science communication

What can today's science communicators learn from Prof. Carlo Fonseka? Several principles stand out.

First, science communication must be vernacular. It is not enough to translate English science into local languages. One must think scientifically in the local language, developing analogies and explanations that arise from local experience.

Second, science communication



Figure 2: Delivering the keynote address at the NSF Science Research Projects Competition Awards Ceremony in 2012, inspiring young researchers, teachers and the next generation of science enthusiasts.

must be institutional. Individual efforts, however brilliant, cannot sustain a scientific culture. Fonseka's work through SLAAS, NSF, and the Ragama Medical Faculty created structures that outlast him.





Third, science communication must be combative. Pseudoscience and superstition are not harmless eccentricities. They cause real harm, and challenging them requires courage and persistence.

Fourth, science communication must be artistic. The most effective communicators understand that beauty, narrative, and emotion are not distractions from scientific truth but vehicles for it.

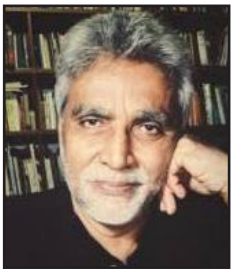
Fifth, science communication must be political. Scientific literacy without social justice leaves structural injustices intact. The science communicator must also be an advocate for equitable access to the benefits of science.

Conclusion: the eternal pulse

Sri Lanka has lost a titan, but the physiological and intellectual system he helped nurture is still strong. The "Carlo Fonseka Oration" delivered annually by distinguished scientists ensures that his name remains synonymous with intellectual rigor. His students, now leading physicians, teach his methods. His writings remain blueprints for rational thought. Prof. Carlo Fonseka was the rarest of beings: a man who could quote Shakespeare, explain the Krebs cycle, deliver a valuable speech, a political meeting, and then donate his body so that others might learn. In a world increasingly divided between the sciences and the humanities, he was the missing link. He proved that you could be a man of science and a lover of art, a stern critic and a gentle healer.



For those who continue the work of science communication in Sri Lanka and beyond, Prof. Fonseka remains not merely an inspiration but a standard. The question each science communicator must ask is not whether they agree with his every position but whether they match his commitment, his clarity, his courage, and his compassion. He is gone, but as he himself once quoted about his own mentor: "*He still lives with us. He is not dead*" for to live in the hearts of those who truly love, and revere is "*not to die.*"



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