

Prof. Malo: I Will Keep Prodding-Future of Physics is Future of the World



Many years ago in Maseno, in the odd hours of the night, a baby boy was born under a tree. A medical doctor at Maseno Missionary Hospital had given a report that there was no chance of survival for both the mother and the child, but Mother Nature had other plans. One Dr. Joseph Barnes who had arrived from the United Kingdom ensured successful birth of the new-born and safety of the mother despite the complications encountered. The parents named the child after the doctor and their desire was for their new born to become a medical doctor, but the middle child in a family of fourteen had other plans. This is the life of one Prof. Joseph Otieno Malo.

Son of Japuonj ~ meaning Son of a Teacher, as he is fondly called, Prof. Joseph Otieno Malo is the son of former Maseno School headmaster, Mr. Shadrack Owiti Malo, the first African teacher in the School. Eminent personalities like Jaramogi Oginga Oginga, Prof. David Wasawo, Prof. Simeon Ominde and Prof. Bethuel Ogot have passed through the hands of Mr. Shadrack Malo. Shadrack is renowned for his published books which include: *Dhudi mag Central Nyanza*, *Sigend Luo Maduogo Chuny*, *Dholuo Without Tears* and *Luo Kitgi gi Timbegi (Jaluo)*.

The Professor nostalgically remembers his strict father's parenting. Being no different than an exploring, conniving young man, Malo, would often sneak out of school to watch Indian films in Kisumu while a student at Kisumu Union, presently Kisumu Boys, in the late fifties. Regardless of his non-academic indulgence, Malo would still do his examinations and emerge top in his class. However, the strictness of his father occasioned a transfer to a boarding school at Ambira Intermediate School in 1957, where Malo would be required to report to the headmaster every morning and evening.

After an excellent score in the Kenya Africa Preliminary Examinations (KAPE). Malo was admitted to Friends Secondary School Kamusinga, a school he had not known of its existence. He had applied to go to Alliance High School, however, the Principal of Alliance High School, Carey Francis, who was a good

friend of his father refused to admit him saying that he was not the submissive type of Alliance High School. This was because of his frequent intellectual discourse he had with Mr. Francis when he visited their home. However, the don has never regretted going to Kamusinga.

Malo deliberately chose not to study Biology, even after receiving a Yale University Medical Biology scholarship through his father's friend, Dr. Wilson Gordon. He knew he did not want to work with sick people and that is why he did not choose to study Biology. He was destined for greater things, he thought. With a great interest in Space Physics, the professor had envisioned his future differently.

His special interest made him to be among the first Kenyans to go to Russia for studies where his then role model, Yuri Gagarin- the first man in space, was from. Though his father, Mr. Malo senior, was apprehensive, his son confidently told him that he needed to be given an opportunity to study what he loved because he would be the one who would work after studying.

Malo completed his Masters at the University of Moscow in 1968. And In 1969, the University of Nairobi appointed him a special assistant position in Physics. This was because there were no vacant positions in the University, hence the special assistant. In July of the same year, Malo received a Wien International Fellowship to commence his PhD studies in Theoretical Physics at Brandeis University, the first Jewish University in the U.S.A.

While studying for his Phd, Prof. Malo attended International Center for Theoretical Physics in Trieste Italy seminar (ICTP), from where he was invited to Uppsala University. Here, he first met his wife-to-be, Inger Margarita Andersson, a Swedish Political Science and Literature student at University of Uppsala.

The high-level teaching in Russia enabled him to complete his PhD studies in just two years, 1971. Malo returned to Kenya through Sweden where he visited his fiancée.

Upon his return in Nairobi in March 1972, Malo was appointed a lecturer. Two years later, he was promoted to Senior Lecturer and became a full professor in 1980.

At the University of Nairobi, Prof. Malo established Theoretical Physics, where the only focus was previously Earth sciences. He explains that Physics is categorized into two: Experimental and Theoretical Physics. In his interest in Plasma Physics, the Physics Professor adds that the universe is made of plasma particles that are charged. These include electrons and protons. Among Theoretical Physics courses that he teaches include Mathematical Physics, Quantum Mechanics and Astrophysics. Other sub-categories of Physics include Space, Nuclear, Atomic, Geophysics (Earth Science) and Solid state.

Prof. Malo has held esteemed appointed positions, including the Chairman of Lake Basin Development Authority, an appointment by former President Moi. He was also the Chairman of Kenya Power Company, presently Kengen, the Chairman Tana and Athi Rivers Development, now Tana River Development Authority, the Chairman of Kenya National Academy of Sciences ,as well the Chairman, Department of Physics, UoN from 1974 to 1984. Prof. Malo has also been the Director and Board member of Kenya Nuclear Electricity Board (KNEB). The Professor has worked as a consultant at United Nations Educational, Scientific and Cultural Organization (UNESCO) where he established the Africa

Network for Scientific and Technological Institutions (ANSTI) in 1980, to improve facilities so as to provide opportunities to train science and technology disciplines and to provide research grants.

His association in professional bodies span from local to international where he is a fellow of African Academy of Sciences, Member of Institute of Physics (UK), Member of Physical Society (New York), Fellow of Kenya National Academy of Sciences and was general editor of Africa Journal of Science and Technology started under ANSTI.

In July 1972, Inger relocated to Kenya after completing her undergraduate studies. Mrs. Inger Malo obtained an employment opportunity as a librarian, at the University of Nairobi, where she worked until her demise in June 2010. Blessed with two children, son (Arne Shadrack born in August 1972) and daughter (Lois May born October 1977) both of them studied in Kenya up to O-Level, Arne at St. Mary's School and Lois at Loreto Convent Msongari thereafter St. Austin Academy, before proceeding to University of Surrey, UK to study Economics. Arne proceeded to Geneva Switzerland to Study Hotel Management. They both now work in Stockholm, Sweden. Prof. Malo makes a yearly visit to spend time with his children and three grandchildren who are in Sweden. An ardent of annual family cruise ships on Baltic Sea, Prof. Malo cherishes the time he spends with his family. He enjoys the senior citizenship status and affordability of life for seniors in Sweden, something he wishes to be emulated in his country.

Sadness lingers on his face as he talks of his late wife. He says he has never met a kind woman as Inger. "It has been quite hard. Inger was the kindest and non-confrontational person I have ever known. I do not think I can ever meet someone like her." Mrs. Inger was a devout Christian with great passion for community service. She established Slum Outreach International Ministry, an orphanage situated in Kibera. The family has sustained Mrs. Inger's establishment by maintaining frequent donations and hiring someone to manage the facilities. "We have to carry on her dream and her name," says Prof. Malo.

At 75, Prof. Malo attests to the cliché age is but a number. He is presently doing research on Space Science and Plasma Physics as well as supervision of PhD students.

He emphasizes that the future of Physics is the future of the world and that Physics dictates where we are going. "Knowledge is all about this. You do not stop. Physics probes in areas that people do not want to go," he adds. "There is no subject area where you do not use Physics. The reason I say so is because Physics is what life is about. For example in Cell Biology, we know that the function of the cell is by the giant DNA molecule which has four nucleotide basis held together by hydrogen bond and is responsible for genetic code and all kinds of illness. Take a look at Geology, Meteorology, Chemistry, Biology and Engineering and tell me otherwise," he poses.

Despite age not deterring his determination, Prof. Malo's joints have been encapsulated with arthritis. This has set him to be constantly on medication and to bear the unendurable pain especially during the cold seasons. Nevertheless, this previous captain, soloist and football lover back in the days of Ambira Intermediate and Friends School Kamusinga, plays the guitar to soothe his soul. He is also fluent in the Russian language and once in a while engages with long-term Russian friends. He loves cooking, hence his weekend barbecue host for friends and family at his home. Prof. Malo is a member of Parklands

Sports Club and a golfer at Kenya Railways Golf Club. The don says he is proud of his children and grandchildren, who he taught and who all know how to play golf, a game mainly associated with the affluent.

“Lectures are good for me because they keep my mind involved,” says Prof. Malo. “I read new things and latest information which is what keeps me going. I am not stopping any time soon. I will keep on prodding as long as I am alive,” he enthusiastically adds.

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