



EXPERIENCING ALEXANDRIA
THE CITY AS TEXT AND CONTEXT

Ismail Serageldin

NOTE

Dr. Ismail Serageldin is an architect but he is also a lover of literature and as Wole Soyinka described him...“he is truly possessed ofa ‘Renaissance mind’. There is a quality in his writing and interplay of ideas that combines a connoisseur’s palate with the artist’s palette.”¹

This is one of the most recent literary pieces written by Dr.Serageldin. The feedback from his close friends who read the article was very rewarding. It was described as ‘inspiring’, ‘amazing’, ‘thoughtful’, ‘passionate’, ‘profound’, ‘moving’, ‘heartfelt’....

Dr. Serageldin and many of his colleagues felt it was worth recording and adding relevant pictures.

Accordingly, the Bibliotheca Alexandrina is making available the recording and the full text for many to enjoy.

¹ Ismail Serageldin. The modernity of Shakespeare. foreword by Wole Soyinka

THE CITY AS IMAGES AND TEXT

Thinking and writing are quintessentially solitary endeavors. In that plenitude of solitude that the learned mind can bring, where one reflects on things that people living unexamined lives pass by with unseeing eyes: I reflect on the city. The city and how we see it, how we experience it and how we relate to it.

We look at the city as whole. Or do we? We recall individual parts of the city, for the experiential reality is that you are in one part of the city at a time, and the different parts of the city vary enormously in character and disposition. At each of these parts, we invariably have this sense of place, this sense of unique three dimensional space, populated by people who bring it to life. There may be crowds or a few couples, or some old people at a café with children playing nearby. People are doing something. Their activities provide not only character, but also pace. Languorous, brisk, or restful – that pace of activity also provides the fourth dimension of time.

Yet many architects are determined to look only at the three dimensions of the buildings. The volume and the facade, the void and the solid, the esthetics of the composition, the experience of going through the spaces one after another; for architecture is not just to be looked at but must be experienced. But architects have the professional curiosity to admire the craft of putting a building together and are sometimes impatient with the crowds that impede the admiration of the building and somehow should get out of the way.

Photographers however, usually are interested in people. They take close-ups of expressions or compositions of peoples in particular spaces to capture that sense of place. A frozen moment that lives on forever by the power of the lens. Here, the buildings are the backdrop for the people, they are the context.

Images of the city that we carry in our minds and memories are either the result of our own experiences or the magic of the photographer, whether still or video. Iconic buildings and structures or natural compositions and unique spaces have come to define cities. Unique natural compositions include most famously Sugarloaf in Rio de Janeiro. For structures and buildings think only of

the Eiffel Tower, the Empire State Building, The Golden Gate Bridge, the Sydney Opera House, the Guggenheim Museum or the Bibliotheca Alexandrina. Other iconic buildings can actually symbolize both the march of time and an entire civilization. Think of the Pyramids or the Acropolis. But most buildings relate to cities.

Unique spaces also identify particular cities. From the busy souks of Marrakesh to the Champs Elysees in Paris, to the Mall in Washington DC, space used and abused by people defines the city and its stereotyped character as much as its iconic buildings.

Sometimes we have the joy of watching a city entire: either through the marvel of technology and aerial photography or by the gift of nature that allows us a promontory from which to view the urban complex: Think of the geometry of Paris from the air, or the view of an Italian hill town.

But the city is more than that. It is evoked in our mind just by the mention of its name, evoked as a jumble of images seen in a multifaceted composition of broken mirrors. A collage of images that contrasts residential quarters with busy commerce. The quiet spaces and the busy, nervous and vibrant realities of a living organism. The

sounds, the smells, the noise, the din, the life... memories of lived experiences or vicariously experienced through myriad films. Who can distinguish between the partial images we have of New York or Paris or London, what is from lived experience and what is from the ambiance created by dozens if not hundreds of movies, television and magazine pictures, or induced from reading powerful writing in literary works or news reporting. How do we distinguish between what we created from the selective recall of our own experiences and what we created through our interactions with what authors and creative artists have produced? All of that is imbedded in our memory. That complex, partially integrated collective view is more akin to a text than a single image or a group of images. A text that describes a hall of mirrors, a complex interaction of images, memories and emotions, with the ambiguity of language and that becomes a whole that is more than the sum of its component images. But it is still a text that is created by these individual images, just as a sentence is created of individual letters and words. We carry that text, with its inconsistencies and its contradictions, its ambiguities and its changing composition in our minds.

That text, different for each of us, different for each city, also provides context for the way we experience the

city through our next contact with it. Daily existence or widely spaced visits, the text becomes context for the new. Then the text is amended by the incorporation of the new. Enriched, for the loom of the text is not just the three dimensions of space, it is also the fourth dimension of time: time lived, time experienced, time remembered, punctuated by memorable events or blurring into a background of colors and sounds.

But the text also involves the human interactions we have had in a city, and which we associate with that city. I do not mean the specific events that have marked our life and that we remember vividly with the location a mere backdrop for that event. I mean the diffuse mental links that lodge deep in our subconscious memory, to resurface when one or another of our senses is tickled in a particular way, evoking that city, remembered from times long past. The senses we associate with the experiences, the smells of the beach and of the suntan lotion on lithe young bodies; the sound of waves or the popular tunes that accompanied a dance, mixed with the whiff of perfume and the soft touch of a partner. The text becomes more and more complex. It is not a linear narrative; it is a jumble of images and

images within images, wrapped in a cat's cradle of complex interactions between emotions and senses.

That text, becoming context, shapes our attitude towards the new. Our willingness to accept a pleasant surprise, our regret at a beloved spot gone, our wistfulness for a context that is shaped by our memories and the images of the photographers.

THE IMAGINED CITY

Yet, some cities have an added dimension brought on by history and literature. Here it is the mental images we have created by reading the written works of authors or studying the history of the place. That imaginary city is real. Real because it once existed, even if only in the minds of those who wrote about it. That imaginary city is real for us, an integral part of the mystique of the place. Real in the sense that the symphony of space and time conjured up by the mention of a name is real, and is somehow woven by the mind's loom into the tapestry of physical space and concrete time that provides us with our text and context.

Alexandria is that kind of city par excellence. The imaginary Alexandria conjured up by its fabulous ancient history, its rich cosmopolitan past and the memories of our

childhood and our youth, growing up in Alexandria, or visiting it in summer or winter visits from Cairo. It is the eternal Alexandria that never dies, that contrasts with the reality of what is now a drab and ugly city after generations of depraved destruction of the glorious heritage of a city once known as the Pearl of the Mediterranean.

Alexandria had a symbiotic relation with her writers, for they immortalized her, while she fed their imagination and brought them fame. E. M. Forster's guide remains the best until today, though much of the city he describes has vanished. D. J. Enright and John Heath-Stubbs are among the less known writers in English, but their sojourn in Alexandria transformed their writing and being. Lawrence Durrell, who was not an Alexandrian, but was made famous by his *Quartet*, and in turn put Alexandria on the tourist map, causing umpteen tourists to come in search of Justine. Writing in Italian were Giuseppe Ungaretti and Fausta Cialente, in French was Filippo Tommaso Marinetti (a founder of Futurism in Europe), and in Greek, of course, are Stratis Tsirkas and Constantine Cavafy – one of the great figures of the Modernist movement. Egyptians writing in Arabic count among them Edward al Kharrat and Ibrahim Abdel Meguid, as well as Naguib Mahfouz, Nobel laureate, whose novel on Alexandria, *Miramar*,

marks the change in his style from realism to modernism . Whether in poetry or fiction, Alexandria shaped the vision and artistic imagination of those who lived in it.

That is no less true of the painters and artists who grew up in Alexandria, and whose first works were shaped by the Mediterranean shore, the sun and vibrant colors that inspired the images they created of their city.

But powerful as these images were, the text of Alexandria is driven more by history and cosmopolitanism than by any individual work. It is driven as much by the glory of the ancient past as by the vibrancy of the recent past. Recent by Egyptian standards, for I refer mostly to that period from the 1820s to the 1940s, when Alexandria was a great city by any standard.

ANCIENT LEGACIES

Ancient Alexandria was a project that succeeded beyond any imagination. It was intended to be the capital of the empire that Alexander the Great was forging. He was to bequeath his name to the city, and his successors in Egypt, the Ptolemies, were to build the city and turn it into the intellectual capital of the world.

Founded on the very spot where the new Library of Alexandria now stands, the ancient city of Alexandria was to straddle the ancient world like a colossus. Its golden age spanned the centuries between the glories of Athens and of Rome, and its legacy is just as enduring, if not more. Indeed, the two icons of Ancient Alexandria, the Legendary pharos, one of the seven wonders of the ancient world, and the Ancient Library of Alexandria, the first institution which truly aspired to encompass universal knowledge, remain alive in the hearts and minds of all cultured individuals, not just cultured Alexandrians.

I do not want to go into the history of ancient Alexandria, but it has become the stuff of legend. It was founded by Alexander, and was the stage for the eternal stories of Caesar, Anthony and Cleopatra, names of mythical grandeur that evoke various memories created by the talents of the greatest writers and artists of all time from Shakespeare to Hollywood. It was to be the theater for the dramatic acts of the burning of the Ancient Library and the murder of Hypatia, recently revived in several books and a film called *Agora* and in a powerful Arabic novel by Youssef Ziedan... altogether the centuries of grandeur and agony that marked the history of the rise and fall of ancient Alexandria make for more than a powerful chapter

in the evolving text that provides the context for those who would discover Alexandria today. And it is with shock that we discover how little resonance that text has with the contemporary city. Little remains. But that is the power of the myth of the imagined city.

To measure the importance of the Ancient Library, we could look at the decoration of the main hall at the National Academy of Sciences of the USA, arguably the largest and most important scientific society in the world. Built in 1923, the Hall celebrates the four precursor institutions of knowledge with medallions in the archways on its four sides. The first of these is the Ancient Library of Alexandria from the 3rd century BCE. The other three sides are taken up by medallions of the academies of Italy, the society dei Lincei, the Royal Society of Britain and the French Academy of Sciences, all three dating from the 17th century. Twenty centuries separate the Alexandrian and European institutions! To the whole world, not just to Egypt and the Mediterranean, the very name of the Bibliotheca Alexandrina conjures up the image of a glorious past, of a shared heritage for all of humanity.

The Ancient Library, initially part of a Temple to the Muses, gathered an incredible community of scholars,

which mapped the heavens, organized the calendar, established the foundations of science and pushed the boundaries of our knowledge. They opened up the cultures of the world and established a true dialogue of civilizations. Together these scholars promoted rationality, tolerance and understanding, and organized universal knowledge.

For over six centuries the ancient Library of Alexandria epitomized the zenith of learning. The last three centuries were a period of relative decline, punctuated by disasters that resulted in its total disappearance by the beginning of the fifth century CE. But the memory of the ancient Library of Alexandria lived on. It continued to inspire scholars and humanists everywhere. And in Alexandria, that dim memory of the ancient past was brought to vivid life by the rebirth of the Bibliotheca Alexandrina , the iconic building of contemporary Alexandria, almost on the same spot where the Ancient Library had once stood.

The text of Alexandria's historical narrative would then add another glorious chapter... The birth of Christianity in Africa, for it is from Alexandria that the ministry of St. Marc would spread. The early Christians would suffer the terrible persecution of the Romans, and despite that the early Church Fathers would go on to found the oldest

church and the oldest monasteries in the world. And after Constantine ended the persecutions, Christianity would flourish in Egypt and from there spread to all of Africa.

But the Ancient Library of Alexandria, which had dazzled the world for centuries, and made Alexandria the radiant city of knowledge, the beacon of science, was no more. The immensity of the loss humanity suffered by the destruction of the Ancient Library is beyond measure . It was the end of an era. The so-called “Dark Ages” had begun! The sun was setting on the erstwhile intellectual capital of the world.

Alexandria would live again in the Middle Ages, as a part of the great and golden age of Muslim civilization, whose legacy is still with us by the many Mosques of Sufis and scholars that punctuate the landscape of the modern city. Sidi Bishr and Sidi El Morsi Aboul Abbas are names that mark the contemporary city and hark back to earlier days. But the Muslim heritage and the entire Middle Ages do not live in the evolving text of the city, even if they live in the minds of many of its current inhabitants, and the great fort built on the orders of Sultan Qait Bey in 1477 stands guard where the great Pharos once stood, as countless mosques dot the urban landscape of

the “Turkish city” built in the last several centuries. The Muslim heritage of Alexandria is not sufficiently glorified by literature or art. And the march of history – which I maintain has shaped the city’s myths, its text and context – records that Alexandria ceded its primacy to other great cities, whose names were to remain synonymous with the grandeur of Muslim civilization: Damascus, Baghdad, Cairo, Cordoba, Isfahan, Samarkand, and Istanbul among many others.

A different Alexandria was to regain a place in popular consciousness and on the world stage again in the recent past.

COSMOPOLITANISM OF THE RECENT PAST

But if Alexandria was not at the center of learning and knowledge in the middle ages, it certainly was to revive and acquire an important position in the 19th century. As Egypt started its drive towards modernization under the dynamic leadership of Mohamed Ali Pasha, Alexandria became the most modern cosmopolitan city in Egypt, and it acquired that status thanks to countless foreign communities. It became the intellectual capital of Egypt for many decades, seeing the birth of cinema and theater,

of many newspapers and literary journals in many languages. It inspired artists and poets. It was that magical Alexandria that Cafavy and Ungaretti would call home, and about whom visiting artists from Ukrainka to Durrell would write eloquently.

This modern Alexandria, lasting from the 1820s to the 1940s, would define for many the quintessential cosmopolitan city. Communities of Greeks, Syrians, Italians, French, British, Armenians, Turks and Arabs co-existed, and all were considered Egyptians. Christians, Muslims and Jews intermingled. We would lunch together at the Syrian club and dine together in the Greek club. They had a multiplicity of newspapers and produced novels, plays and films in multiple languages. The mosaic of diverse cultures was overlain by social networks that criss-crossed many political movements and parties.

The foreigners of Alexandria organized themselves into communities, each one electing its own president, and providing for its members with schools, hospitals, clubs, houses of prayer, charity organizations and newspapers. This system led to the unique experiment of Alexandrian cosmopolitanism: under the unifying Egyptian flag there existed a microcosm of the world. People of all races

and denominations lived in one city, each speaking his language, celebrating his own feasts and observing his own rituals. Yet they all lived together as one people. Their identities did not dissolve in a melting pot, nor did they live in isolated self-imposed ghettos. They kept their languages and traditions, but shared the common spaces of the city and its activities. They intermarried, shared each other's feasts, and spoke each other's languages. Each was an Italian, Greek, Egyptian, Armenian or Jew, but all were Alexandrians. Alexandria was an exciting, vibrant place to be. It inspired artists of all types, and generated an important body of literature.

Today, that Alexandrian "cosmopolitanism" has been lost. For the city... it was to remain a chapter in the text of Alexandria's unique character. An image of the city as a stellar example of such tolerance and diversity, of the marriage of eastern and western cultures, that was celebrated in prose and poetry and shames us who have to cope with the intolerance and bigotry that pervades our societies today.

THE CENTRALIZED SOCIALIST STATE TRIUMPHANT

Yet that recent past is also part of the myth of Alexandria. For even I who am now in the autumn of my life, cannot remember any of it except through stories of parents and grandparents. Today over half the population is under 25 years of age, and have no memory of any of the formative events that serve as markers of my life where vivid memories start with the 1950s and Alexandria was then largely a place where the Cairenes came to spend their summers by the sea. True the beauty of the city is very much present in these memories of the 1950s and even into the early 1960s when Egypt would take a turn towards state-sponsored socialism, banning much of private initiative and centralizing all decisions in the hands of government, building a powerful centralized state, with its intrusive bureaucracy, backed by its repressive machinery. From there the long slide into ugliness and indifference would start.

Socialist Government-sponsored building was inevitably drab and ugly. It failed to honor the past or to allow the quirky individuality and variety that private endeavors created. It failed to provide the social justice or the significant improvements that the poor sought, as with its centralized bureaucracy the citizen was gradually

stripped of his or her role in the city. The city as agora, as space for freedom of expression was stifled. The city as construct of a social order and a vibrant living organism was asphyxiated by the bureaucracy, the inevitable growing bureaucracy with its alienation, its inefficiencies, its petty criminality and its negligence. True in Egypt the bureaucracy is as much the heir of the Egyptian scribe of five millennia ago, the scribe whose impressive statue sits in the Louvre, as it is the heir of the administrative apparatus of the modern state. But it is coupling the inheritances of these genealogical precedents with the centralizing tendencies of the socialist states of the 20th century, along with their ubiquitous police, repression and oppression that brought out the worst into what was a different kind of city. Yes it had enormous differences between wealthy and poor classes but it was partly redeemed by its creativity and diversity. The centralized state destroyed the national voices and the nationalist rhetoric drove out the ethnic diversity that made Alexandria special.

THE INVISIBLE CITY

Yet, beyond the imaginary city of dreams and lore, that informs and shapes the text that becomes our background and context for the images we confront; there is another amazing reality that we have to consider. There is another city, a real city that remains invisible to almost all of those who live in and visit the city of Alexandria that is covered by that text and context. Invisible to the inhabitants of the city of tourists, traders and citizens proud to call themselves Alexandrians, descendants of the innovators who made of Alexandria the capital of intellectual work in Egypt for much of the 19th century and even a little bit of the 20th. That invisible city is the city of the poor. The fifty plus slums that have emerged in the very fiber of the city in the last sixty years or so, as the population swelled, the port grew in importance and petrochemical industries flourished.

Many of the workers and their families, came from these slums and then retired at night to their homes. Mostly it is the poor who live and work on the fringes of the visible city who are the inhabitants of this invisible city. Invisible, by the inability of most inhabitants of the visible city to identify any features of that other, invisible city. They do

not know the main crossing points, the marker buildings or shops, they do not go there, and as a result, they know of its existence, and intellectually accept that it is there, but allow it to remain in some sort of a hazy background, where the features are not apparent. A creature lost in the fog of willing non-recognition.

The two cities live cheek by jowl, but almost never formally meet. The poor when they come into the City of books and trade, are there almost at a sufferance. Few wonder where they came from and where they go. If you asked someone “That person who cleans your windshield at the traffic light, or who tries to sell you a pack of paper handkerchiefs... have you ever wondered where they come from? Where they go to at the end of the day when they retire?” -- “Out there,” is the best most of us could do, with the tug of conscience imposed by the recognition of how unsatisfactory that answer is.

THE REAL ALEXANDRIA

It is difficult to think about these realities and hark back to the Alexandria that once was or that we would wish her to be. But as I stated at the outset, we all hold images of the city and read a text of the city as a collage of images,

an interplay of mirrors and windows in which we see ourselves and see others.

In fact, the mirrors and windows do more than define the city or the narrative text we take as context for the new. People in every society are captured and defined by these mirrors and windows fashioned by intellectuals, artists, the media and the politicians... They define the relationships between the society and the rest of the world, and also define the relationships between the different parts of the society in a single country. Even if they choose to turn away from looking at themselves in those mirrors that show them in an unflattering light, they cannot resist the windows, even – or maybe especially – those within our own society: those on the inside want to look out, while those on the outside want to look in. For all their transparency, windows both separate and attract ... For we truly want to see the options we refuse to pursue, or those that we were not allowed to pursue... we want to know what lies on the other side of the door we never opened.

The many links between the physical, the social, and the economic combine to create a powerful composite image of the city. It is always an incomplete image, blurred around the edges, with dark shadows that keep the mythical

protrusions apparent while unsavory reality lurks in the penumbra, barely visible in the shadows. In the hard light of reason, analysis and scholarship some of the obscurity is lifted, and all the injustice, destitution and latent anger can be observed as the veil of darkness and shadows is lifted. But that effort simply reminds us of additional dimensions of that which we call our city. It does not become itself the text, nor do these fleeting images replace the multi-faceted image we compose with our mirrors and our memories, any more than an occasional visit to the slums will suddenly make the invisible city visible and incorporate it into the texture of the mental text which provides us with our context for viewing the city we know and love.

The veil of the powerful shadows is seldom penetrated by the light of analysis because that analysis, consciously and sub-consciously, weaves into the texture of the images we see reflected in the mirrors we have created, and the evolving text and context of the city as we see it. But the illumination of insight comes like an occasional distant flash of lightening that shows, for an instant, what is behind these shadows. Such flashes of lightening occurred when the elections of 2010 gave the ruling party a monopoly in parliament, when the arrogance of the state policing apparatus and the concomitant alienation of the people

reached new heights, while our rulers remained insulated and cut off from the pulse of the city. The flashes of lightning occurred when hundreds of thousands of youth began to respond to the cyber-based call for solidarity with a young Alexandrian who died in Alexandria while in police custody; and again when the self-immolation of a young street vendor in Tunisia sparked the downfall of Tunisia's rulers and started the Arab Spring.

These flashes of insight showed us a difficult reality:

There is anger in our hearts
There is frustration in our lives,
There is violence in our streets,
Incompetence in our institutions
Hesitation in our decision-making
Corruption in our highest offices,
Aimlessness amongst our youth, and
Anxiety among our elders...

There is desolation for many of those who look to religion to bring peace and solace into their lives, as politicized religion, divisive and full of hate, edges out the compassion and caring at the heart of our beliefs.

But, above all, there was a rejection of a society who lived in fear, pervasive fear. Fear of authority, fear of

straying from the conventionally accepted, fear of the new, the untested, the unknown... But no more... for now the people were no longer afraid. They refused to be afraid and re-appropriated power from those who had so long wielded it.

The streets filled with people. People who had been banished from the *agora* of old, and there was no more *aeropagus* at which they could speak with freedom and impunity. The streets became the *agora*, and the people re-appropriated the space of freedom of the *areopagus* and their cries became a contemporary *areopagus* for a new order, a new form of expression.

And in an exalting moment, youthful demonstrators surrounded the Library of Alexandria with a human chain, and not a stone was thrown at it, while ten blocks away the Government House was totally destroyed. They wrapped the Library – their *agora*, their *areopagus* – in a large national flag. They painted it as the fourth pyramid on a spontaneous mural.

But change, real change does not come easily. Weeks would drag into months, months into years, and joyful participation in the political process gave way to disappointments and economic hardship. And the

unfolding reality in all of Egypt and in Alexandria, brings some to despair. But there is no despair in the bosoms of those who dare to dream.

ENVOI

The text and context of Alexandria is not frozen. New sentences are being added to that text every day. A whole new chapter is being written right now, not least by the rebirth of the Bibliotheca Alexandrina, the new Library of Alexandria and its daring gamble that it can revive cultural activity in Alexandria and reverse the decline that had set in over the last sixty years. The Egyptian Revolution of 2011 and its aftermath is writing a new chapter with its massive demonstrations of unprecedented people power, that brought the residents of the invisible city with the rest of Alexandria's citizens into a common enterprise. It showed that nothing is impossible if you believe in the beauty of your dreams.

But politics is but a single facet of the reality that makes a city. The physical reality of the city has been neglected in these years of turmoil coming on top of a half century of decline. The city is today a mere shadow of its former glorious self. But what was achieved time and again in its history can be achieved again. It is very much a call to

action for those who can read both text and context, those who can see the present, remember the past and imagine the future. Those who are not willing to accept the ravages that neglect, greed and corruption have wrought. Those who would recreate the city of learning of old, the city of tolerance and creativity of our grandfathers, those who would build on the momentum of people power to generate the space of freedom that creative talents require, those who would by their actions write a new chapter in that ever-changing text which becomes the context of the new.



ISMAIL SERAGELDIN, Director, Library of Alexandria, also chairs the Boards of Directors for each of the BA's affiliated research institutes and museums. He serves as Chair and Member of a number of advisory committees for academic, research, scientific and international institutions. He has held many international positions including as Vice President of the World Bank (1993–2000).

Dr. Serageldin has received many awards including: First recipient of Grameen Foundation (USA) Award for a lifetime commitment to combating poverty, (1999); Officer of the Order of Arts and Letters awarded by the government of France (2003); Pablo Neruda Medal of Honor, awarded by the Government of Chile (2004); The Bajaj Award for promoting Gandhian values outside India (2006); Order of the Rising Sun – Gold and Silver Star awarded by the Emperor of Japan (2008); Champion of Youth Award by the World Youth Congress, Quebec (2008); Knight of the French Legion of Honor awarded

by the President of France (2008); The Swaminathan Award for Environmental Protection (Chennai, India, 2010); Millennium Excellence Award for Lifetime Africa Achievement Prize, by the Excellence Awards Foundation, Ghana (2010); The Public Welfare Medal, by the National Academy of Sciences, Washington DC (2011); Commander of the Order of Arts & Letters awarded by the government of France (2011).

He has lectured widely all over the world including delivering the Mandela Lecture (Johannesberg, 2011), the Nexus Lecture (Netherlands, 2011), the Keynote Address to the First International Summit of the Book (Washington DC, 2012). He was distinguished professor at Wageningen University and at the College de France.

He has published over 60 books and monographs and over 200 papers on a variety of topics including biotechnology, rural development, sustainability, and the value of science to society. He holds a Bachelor of Science degree in engineering from Cairo University and Master's degree and a PhD from Harvard University and has received over 30 honorary doctorates.