

**Reverend Monsignor Professor Dr. Obiora Ike**

Director

Catholic Institute for Development Justice Peace and Caritas, Enugu

Professor of Social Ethics, Godfrey Okoye University, Enugu

President, Club of Rome, Nigeria Chapter

Member, Africa Studies Association, Los Angeles

Fellow, New York Academy of Sciences

Visiting Professor, African Studies and Ethics, Wolfgang Goethe University, Frankfurt/Main, Germany

**GLOBALISATION AND AFRICA**

**THE CHALLENGES OF CRITICAL INQUIRY  
FOR THE UNIVERSITY GENERAL STUDIES  
PROGRAM  
NEED FOR PARADIGM CHANGE**

Presented as Guest of Honour at the University of Nigeria, Nsukka 50 years General Studies Program Public Event towards Global Competitiveness and Paradigm Change

Venue - Princess Alexander Auditorium, UNN, Nsukka

25<sup>th</sup> May, 2011

The Vice Chancellor,  
Deans of Faculties,  
Distinguished Professors and Lecturers,  
Respected Colleagues,  
Lions and Lionesses  
Distinguished Ladies and Gentlemen

Permit me to express my profound gratitude to the organizers of this event at both the Faculty and department levels and the many actors of the General Studies Program in the last decades for the great services this academic discipline has offered to the thousands of students of this university. The event of today marks a landmark occasion to celebrate the achievements and continuity of the GS Programmes and its outstanding contributions and the unique role of the University of Nigeria to promote learning and character formation. This ambition has continued in my humble estimation, under the energetic and visionary leadership of the Vice Chancellor, Professor Bartho Okolo.

Those of us who studied at Nsukka and are friends of this university as close associates, know of the enormous mental, spiritual, physical and material resources with determined commitment, which the present leadership has made for the transformation process of this institution by a re-awakening from nihilism and the lacuna of a deficient understanding of development for nearly two decades, to the remarkable knowledge driven preponderance of the past few years and the relocation of the human person from the rear to the centre of events.

The achievements, both tangible, but especially intangible, already recorded by both the predecessor, Prof Chinedu Nebo and the incumbent leadership, speak eloquently for itself. The key point to stress is that development is centred on the human person. The world has moved on and only people of drive, vision, discipline and determination can stand and cope with the growing competitiveness of the globalised universe. A university as the name implies, is a micro universe, which implies all that the universe can cogitate. It is a centre of thinking, of reflection and of general knowledge. This explains why the General Studies Program is critical both to enquiry and to the exposure of students to knowledge generation in the speculative, human and natural sciences. It offers them the discipline of philosophy which is key to wisdom as well as Development Leadership upon which transformational initiatives begins.

The General Studies Program promotes human capital resources development which is needed to reverse the tide of a negative understanding of development that sees in infrastructure and externals, the key to a better society. History tells us that this ideology has been proven to be false. The proper and correct model is **FIRST THE HUMAN PERSON, HIS DIGNITY AND RIGHTS, THEN THE REST.**

The organizers are aware that I have been away for this reason to the Vatican, attending and participating in the last days in Rome at the events of the 50th anniversary of the epoch making Encyclical Letter *Mater et Magistra* (1961 – 2011) of Pope John XXIII on the Social Reconstruction of Society in the modern world, founded on enduring values. That encyclical letter was unique for it identified key elements necessary for a sound and humane society in the modern world. They include: the central role of the human person in history; the family as the first social organ older than the State and therefore the model even for the State, because the family is older than the State: the role of the State as the servant of Order for the Common Good since the only reason for the existence of the State is to guarantee the *Bonum Conum* founded on the ingredients of justice, equity, truth, prudence and fundamental respect for its citizens under God; a new globalisation of ethical values founded on the principles of solidarity, respect for human rights and human life and values; the acceptance of the universal and intrinsic bond of humanity as one family; the promotion of inclusion, not exclusion in the social, economic, political and other spheres of human endeavour; self reliance as the sure path to authentic independence for developing nations; technological development, especially in agriculture that provides basic needs for food and water and guarantees justice to the large populations of human society.

I flew straight from the airport to this event, because I understand it as one of such attempts by the authorities towards re-inventing the Africa of our dreams through the services of the university, promoting, training young minds who curious and inquisitive in research for the progress of the human family and the nation, thus my acceptance to participate fully and to humbly present the guest lecture.

I have chosen as topic for this presentation **GLOBALISATION AND AFRICA- THE CHALLENGES OF CRITICAL INQUIRY FOR THE UNIVERSITY GENERAL STUDIES PROGRAM – NEED FOR A PARADIGM CHANGE.**

Globalisation, as we all are aware, has become the new buzzword of the last few years. It is widely used even if it is not clearly defined. Despite the very different meanings attached to the term and even more divergent evaluations of its likely impacts, it is clear nevertheless that we are in an unprecedented and accelerated process of transition to a new period in world history. Business connections, communications networks, the Internet and sms services, advertising programs, music, cellular phones, soap operas, financial and banking transactions, including the DAX, Nasdaq, Index, etc, the Fast Food phenomenon such as Mr Biggs, Mcdonalds, Television entertainment and forms of technologies, all these and others correspond to the signs of the new times in our global village. Time and Space have been humbled and with the stretch of a click from a remote village anywhere, events could be triggered off which have consequences for the larger society.

Globalisation has led in our own times to communities, cultures, nations and commodities fast becoming united in ways and through means which had hitherto been thought of as impossible. This coming together of the various groups takes place, not only through economic mergers, political integration, trade agreements and the like, but also through the use of recent technological discoveries. In the African setting, many have pondered over the overall effects of this phenomenon on the peoples and cultures of the continent. Globalisation can be likened to a fourth wave in the process of outside influences on Africa, namely the Slave Trade, Colonialism, Neo-colonialism.

Concerning the situation of Africa therefore, we have a general understanding that there is a degree of social inequality which we do not want and which is indeed harmful, both to the victims, the teeming poor in our nations, but also to the human and structural perpetrators of this poverty. This is why there is need to take another look at Africa, both by the West and the East. Indeed, it is the interest of the rest of the world do invest and develop content in Africa and its peoples, 80 percent of whom are below the age of 30 years. This interest does not underrate in any way what Africans must be doing for themselves since the best help is self help. Leadership therefore becomes ever more important on this agenda for changing the negative image of the continent, whether through the media or by those other levels that emerged as centers of social, academic, cultural and political branding in he West.

The begging questions would seem to be – What are the best contexts which truly represent the needs of the continent beyond a merely economic perspective? Wherein lies the future for African nations, its

youth, its academia and its job seeking work force? Can we truly achieve self-determination and what roles can African development leadership play? Does the rest of the world have an obligation towards Nigerian and the African peoples based not merely on charity but also on the principles of Justice? What roles does the university play towards educating, sensitizing, inventing and preparing the youth who must become the architects of this future by their discipline of life, belief in hard work which yields results, dexterity and sense of loyalty to the common cause, the practice of virtue which is the basis for the cultivated mind and the principled character, value based lifestyles with determination that success belongs to those who make efforts, the practice of patience, learning founded on industry and the hard way (knowing that nothing cheap is enduring) and the sense of curiosity which philosophy essentially is?

In this reflection, I use the term globalization to refer to the phenomenon of increasing integration of nation states, through economic exchanges, political configurations, technological advances and cultural influences. The structures and impact of globalization are also considered in its overall influence on the African peoples and the youth particularly. A Ugandan political scientist, Yash Tandon wrote what many termed provocative, but he expresses the views of many people on the continent of Africa, and this is my point of departure Africa in an age of globalization, what is our future? Tandon states that

*“anybody with any degree of intellectual integrity would see that globalization of Africa on the integration of Africa into the global economy from the days of slavery to the contemporary period of capital led integration has, on balance of costs and benefits, been a disaster for Africa, both in human terms and in terms of the damage to Africa’s natural environment. There is scarcely anybody in Africa who would talk of the last years since the first African country gained independence, in language flattering either to colonialism or to governments that have taken over power since political independence. World Bank and IMF officials who may be even genuinely concerned about Africa, but see wrong only in the policies of African governments choose to forget that their fingers have written the various documents on which those policies from import substitution to now export orientation were based, It is also a measure of their intellectual dishonesty or ideological brainwashing that they cannot see the connection between globalisation and Africa’s poverty’.* (Yash Tandon, Globalisation – Africa’s Options, ISGN, Monograph No 2, March 1999, Quezon City, Philippines, International South Group Network, p. 9).

Permit me to make the point about globalization and its effects by sharing this famous fable and story told by our ancestors and transmitted over generations through oral historiography and found in our mythology, especially amongst the Igbo people. This is part of what constitutes Igbology or Igbo Studies.

*“In the olden days, all the animals lived as brothers and sisters and cared for each other. Mutual respect and peaceful coexistence was uppermost as each assisted the other and received same in return when in need. Parties and celebrations were constantly held among the animals to boost relationships, networks and friendship. Loneliness and poverty were unknown.*

*Once upon a time, Almighty God, the unseen creator and Father of all beings invited all the animals to a fest in heaven. There was great excitement among them. To ensure that all attended the feast, King Lion convened a meeting at his house to discuss the modalities of the trip and to make sure that the animals without wings and feathers were assisted to fly to heaven where God lived. A decision was reached by unanimity that all the birds would donate some of their feathers to the four-legged animals and reptiles so that they too could fly and attend God’s party in heaven. However, the mythologically tricky Tortoise (Mbe) suggested that it was important at such an event for the animals to have titles also added to their names. This suggestion was agreed upon, thus, each animal took a new title. The Tortoise also announced his new title to be ALL OF YOU = UNU NILE.*

*After safe arrival in the Kingdom of heaven by all the animals, God welcomed them and they were entertained by the heavenly choir of saints and angels. This thrilling was blissful and the animals felt very much at home. Thereafter, God almighty said the grace before meals and presented heavenly kola nuts, drinks and assorted food items for the animals to eat. There was abundance of everything for the hungry and thirsty animals, already salivating and anxiously waiting to descend upon the food and consume it.*

*Just after the prayers, the cunning Tortoise asked for permission from King Lion and almighty God to speak. He informed the audience that it was part of cultured beings to make an introduction of their names and backgrounds before sharing whatever was set before them. All agreed and started introducing themselves by name and titles, one by one – the Lion, Elephant, Rabbit, Dog, Hyena, Goat, Chimpanzee, Ostrich, Cow, Snake, Monkey, Pigeon, Fowl, Dove, Caterpillar, Butterfly, Antelope, ...It*

*was a long list of who is who amongst those present. At last, the Tortoise also introduced itself with the title ALL OF YOU.*

*Dinner was then declared open for all, but the Tortoise intervened again and asked God almighty - Please for whom is all this food? He received the response; FOR ALL OF YOU. The Tortoise then claimed that since his title and name was ALL OF YOU, the food and drinks belonged to him primarily, whilst others could only eat at his convenience and mercy. This behaviour and claim angered all the animals who immediately took leave and returned back to earth, having been denied access to a meal cooked and prepared for all. The birds which had given their feathers to the Tortoise, alias All of You, took them off in anger as they returned to mother earth. Tortoise, without wing or feathers, enjoyed the meal and drinks alone and let himself fall back to earth, having obtained information that his wife shall bring out all the soft things in the house for him to fall upon. Tortoise narrowly escaped death and its body and shells were shattered and broken to pieces. It took a mysterious witch doctor and medicine man from the famous Igbo land to sew the broken shells together and restore the Tortoise to better health.*

*This explains why the Tortoise has broken and serrated shells, moves alone in the entire animal world without friends and is punished with the longest life span on earth to suffer why greed and eating alone is vice and bad eating”.*

This story somehow in a very simple manner explains in part, the phenomenon of globalization even into our own times. What was meant for all has been hijacked by a few. There would be enough for each person on earth if the ethical principles of justice, fairness, solidarity, respect, co-existence, live and let live were practiced.

## CURIOSITY AND PASSION FOR CRITICAL ENQUIRY-THE CHALLENGE FOR THE UNIVERSITY GENERAL STUDIES PROGRAM

The human race is transgressive by nature: biologically aggressive, emotionally violent and morally immoral. It is also intellectually inquisitive. “*All men possess by nature, a craving for knowledge.*” Aristotle posits at the beginning of the *metaphysics* (982, b12), and the philosophers, scientists, and poets who have agreed with this dictum throughout the centuries are legion.

St. Thomas Aquinas, for example, described *admiration*, the action of marveling or wondering, as ignorant man's desire to understand phenomena not understood: "*It is in this that admiration originates, which leads us to philosophy.*" Somewhat later, the desire to know why and how was judged to be an appetite not only innate and universal but also to be a singular passion which distinguishes man from beasts, and which is naturally powerful, one of the strongest and most lasting appetites implanted in us, as insatiate as it is insatiable. Not even Gray Panthers, such as yours truly, are, or perhaps should be, exempted from the itch.

In *Ulysses*, the Victorian poet, Lord Alfred Tennyson, has a restless, never-tiring wanderer describe himself as a gray spirit yearning in desire

*To follow knowledge like a sinking star, Beyond the utmost bound of human thought. And in our own time, the novelist, Graham Swift, in Waterland, encourages children to be curious at all costs, admonishing them that people die when curiosity goes."*

Worse still, curiosity is not just the driving force behind all scientific and scholarly endeavours: we not only naturally desire knowledge; we also restlessly desire it, crave it, and yearn for it. In other words, the human race desires knowledge, continues to desire it, and is, in fact, doomed to desire for ever more. The reason is, perhaps, obvious: we know that we know hardly anything. In 1981, for example, when NASA's planned to send a satellite into space to intercept Halley's comet, which was expected to return in 1986, science was "*sacrificed on the altar of (governmental) parsimony.*" The American columnist, George F. Will, in arguing that the Halley's Comet intercept programme should be saved wrote:

*We know next to nothing about virtually anything or everything. It is not necessary to know the origin of the universe; it is necessary to want to know. Civilization depends not on any particular knowledge, but on the disposition to crave knowledge.*

However, things have not always been as uncontroversial as that, and human inquisitiveness has not always been regarded as healthy. In fact, there were times in which curiosity seems to have been a word only "*the damned used in hell.*" Only too often the lives of daring, rebellious sinners appeared to be case histories of recklessly inquisitive researchers: Icarus and Phaeton, who both flew too near the sun, Prometheus, the cunning TITAN who knew too much for his own good. Ulysses, Dr.

Faustus, Frankenstein, and Dr. Jekyll, to whom no knowledge was illicit, not to forget our first parents, Adam and Eve; their list is long indeed.

It is probably no exaggeration to say that curiosity, in its signification of the desire to know, eagerness to learn, was not regarded as a virtue worth cultivating and striving for until well into the second half of the sixteenth century. By then, the early voyages of discovery had been completed, in their wake effecting a rehabilitation of the transgressive urge that had first initiated them. The inclination to traveling reverberates through countless travel accounts, factual and fictional, before and after. In order to become literate in the world, professional observers (like Tom Brown and Ned Ward) assert, one has to undergo the physical pains of traveling through it.

The perhaps most celebrated of all these voyagers, the mendacious soothsayer Gulliver is goaded on by indomitable wanderlust. After his return from Lilliput, Gulliver spent but two months with his family: “*My insatiable Desire of seeing foreign Countries would suffer me to continue no longer*” (I, viii, II). In the countries Gulliver visits, he always shows himself eager to see the curiosities (III, II, I); he lets his curiosity prevail over others (III, VII, Vi), and he feels contempt for people who do not appear “**to be curious in any part of Knowledge**” (III, IV, I). In short, he is condemned by Nature and Fortune to an active and restless Life (II, I, 1). As *homo curiosus*, Gulliver passes beyond the frontiers of uncharted intellectual and moral territory.

So did, two hundred years earlier (1516), another unreliable narrator, Raphael Hythlodæus, who boldly lied about an ostensibly ideal state that existed nowhere. Unlike Gulliver, however, who will want to justify his wanderlust with advantageous offers designed to improve the family fortune, Raphael is indifferent to money. He leaves his patrimony to his brothers, and being eager to see the world, he joins Amerigo Vespucci and becomes his constant companion. In Raphael, curiosity, the “Lust of the Mind” as Thomas Hobbes was to call it in the *Leviathan* (1651), is even stronger than the fear of death. “*Being more anxious to travel than about the grave,*” he is in the habit of pointing out that, “*from all places it is the same distance to heaven.*”

What many of these travelers brought off in fact, philosophers (and scientists) accomplished in mind. I do not know of a better example to illustrate their yearning for knowledge, their passion for enlightenment, than the two books of *The Proficiency and Advancement of Learning* (1605) by the English Lord Chancellor, Francis Bacon. In fact, I take

legitimizing human inquisitiveness for good to be one of Bacon's lasting achievements.

In coming to this point, I intend to look at two chapters of not more than some twelve pages from the first book of the *Advancement of Learning*. The chapters may be entitled, "*Defence of Learning against Divines*" (I, I, 1 – 3), and "*Divine Proofs of the Dignity of Learning*" (I, vi, 1 – 16), in which Bacon anticipates, and summarizes a host of contemporary arguments against human curiosity, and which may be divided into four groups:

*First, the theological argument;*  
*Second, the moral argument;*  
*Third, the antirationalist argument;*  
*Fourth, the psychological argument.*

The theological argument is of course rooted in the biblical account according to which God forbade Adam to eat from the Tree of Knowledge (Genesis 2:16-17). The divine commandment implied that the Creator had decreed a sphere of the Creation for Himself, which was closed to man's quest and which human inquisitiveness was not allowed to invade. This interpretation of the 'Fall' was kept alive by countless voices well into the eighteenth century. On Adam and Eve falling asleep before the *Fall in Paradise Lost*, Milton has his narrator burst into this *makarismos*:

*Sleep on Blest pair;*  
*And O yet happiest if ye seek*  
*No happier state, and know to know no more.*

Since the demarcation line between the two areas, between *Natura Naturans* (the Creator) and *Natura Naturata* (the Creation) was nowhere clearly drawn, however, the investigation of Nature could only too easily result in the lasting temptation of God, amounting to no less than the perpetuation of original sin. In the investigation of Nature, original sin appeared to be repeating itself. On the other hand, it was necessary for the Creator too, to distance himself from his creature:

*If God should always utter and reveal his mysteries, by ordinary course of art; he was no God, or if man was made acquainted with the secrets of his providence, by the gift of Nature, they might claim the chief prerogative of high divinity.*

The second argument which Bacon found it necessary to rebut was a moral one. Rather than being concerned with the temptation of God by the pursuit of forbidden knowledge, this argument professes to be perturbed about the moral constitution of the individual: *Scientia inflat*, knowledge puffed up (1 Corinthians 8:1) (I, 1,2), as St. Paul had warned in his letter to the Corinthians; a warning that gained wide acceptance by the fact that St. Augustine and other Fathers of the Church subscribed to it. In the *Confessions*, St. Augustine reduced the whole variety of human sin to an *ur*-triad of vices, or passions, consisting of concupiscence, pride and curiosity: “*Haec .. tria genera vitiorum, id est voluptas carnis et superbia et curiositas, omnia peccata concludunt.*” The more they are, the worse they are.

The third argument against the human urge to know is perhaps the most dangerous of all. Around the turn of the century, nobody who loved his life would like to be branded an atheist. In Bacon’s account, experience has demonstrated that learned men have been inclined to atheism, and that the contemplation of second causes doth derogate from our dependence upon God, who is the first cause (I, I, 2). In order to understand this, we do well to recall St. Augustine’s dictum that the pursuit of natural knowledge, *scientia* or knowledge of the natural world was vain. The only knowledge that counted was *Sapientia*, the knowledge afforded by metaphysics and theology, the science of the eternal. According to Augustine, anybody wishing to be redeemed on the day of judgment had to be concerned, first and foremost, about his spiritual education rather than the secrets of the heavens. He was told to educate himself, not to study the laws of the universe: “*Curiosity in knowing things (is) not necessary.*”

Whoever chose not to heed this advice, aiming his inquisitiveness at second causes rather than at the first cause, satisfied his contemporaries of his indifference towards God. The result of such disorientation was only too obvious: “*By seeking to become too wise in the secret works of God,*” an anonymous writer maintained in 1580“, and referring that to the course of natural causes. *We fall into securities, from securities into incredulities, from incredulities into atheism, from atheism into open blasphemies.*” In other words, the more dedicated the scientist becomes to the investigation of the creation, the farther removed he is likely to be from his Creator.

The last issue Bacon had to wrestle with was a psychological objection: “*He that increaseth knowledge increaseth anxiety*” (I, i, 2). The rationale of this view is the conviction, widely spread throughout the century, that

one of the most prominent features of curiosity is its characteristic “instability” (*Unverweilen*), a striking “nowhereness” (*Aufenthaltslosigkeit*), as it were, a feature which was attributed to the fact that curiosity originates in the lust of the eyes. As a consequence, curiosity is incapable of penetrating the surface of things since it is habitually unstable, perpetually in motion, even restless. Being at home everywhere and nowhere at the same time, curiosity seems only interested in the act of seeing itself. Not surprisingly, then, the results curiosity produces, incalculable and unpredictable as they are, cause anxiety, anguish and pain. To put it differently, curiosity engineers a collision of ignorance and fear.

It is necessary to bear all these tirades against mankind’s quest for knowledge in mind if one wants to appreciate the formidable obstacles the Lord Chancellor was up against in his defence of learning. Around the turn of the century, few proclaimed man’s natural right of inquisitiveness.

In his argumentation, Bacon attempted no less than the proof that it is *necessary* to want to know. He therefore turned all the traditional objections on their heads, the moral and psychological reservations in the same way as the religious cant. Establishing his celebrated separation of religion and science, Bacon distinguishes between the pursuit of natural knowledge and that of divine knowledge.

Man’s first offence, he insists, was the pursuit of the wrong kind of knowledge – divine rather than natural. God has revealed himself to Man, Bacons continues, by means of two books: first, through the written word, “*the book of God’s word*,” and second, through “*the book of God’s works*,” *the book of nature* (I, i, 3). Even if he wanted to, it is impossible for the scientists to offend God by the study of Nature. Try as he may, it is impossible for the scientist to transcend the bounds set to him from the very beginning. The study of Nature itself, however, is as infinite as the created universe: “Nothing parcel of the world is denied to man’s inquiry and invention,” and there is no danger at all in the proportion or quantity of knowledge, how large so ever” (I, i, 3).

If this argument amounts to the legitimation of the thirst for knowledge by defining what it is not (the temptation of God), the “Divine proofs of the Dignity of Learning” (I, vi, 1-6) state what it is. Here, in the grand mission of the “cosmic hide – and – seek”, Bacon describes the Creation as its Creators invitation to Man to play a game with Him, the objective of the game being to find out the rules according to which the game is being played:

*Solomon the king, although he excelled in the glory of treasure and magnificent buildings, of shipping and navigation, of service and attendance, of fame and renown; yet, he maketh no claim to any of those glories, but only to the glory of inquisition of truth; for so he saith expressly, “The glory of God is to conceal a thing, but the glory of the king is to find it out”; as if, according to the innocent play of children, the Divine Majesty took delight to hide his works, to the end, to have them found out; and as if kings could not obtain a greater honour than to be God’s playfellows in that game (I, vi, 11).*

By making Man the partner of God, Bacon puts the relationship between God and Man on an entirely new basis. Not only does he emancipate Man in his pursuit of natural knowledge from any restrictions of philosophy and religion; not only does he endow Man with the privilege of natural knowledge; he also presses for Man’s mandate to unravel the secrets of the Creation: Man cannot obtain a greater honour than to be God’s playfellow in that game. According to Bacon, one interpreter explains, “science is a salvational means, a means for the salvation.” And what caps this all is, of course, Bacon’s insistence that research affords continual joy to the discoverer, all knowledge (being) “an impression of pleasure in itself” (I, I, 3). In other words, happiness is not only a fuzzy sweater; happiness is discovery, discovery is happiness, “gladness akin to rapture,” as Mary Shelley was to describe it in *Frankenstein*, or, in more modern, and less elegant parlance, “Erkenntnis macht Lust, Lernen ist sexy.”

Our modern seems to have taken this idea that the secret of happiness is curiosity so much for granted that many have found it difficult to envisage even a future state without the delights of discovery, of one sort or another. The most arresting illustration of this thought that I know is a dramatic monologue by Edith Nesbit (1858 – 1924), entitled “The Things that Matter,” in which the impersonated character, an elderly woman surveying her life and thinking about “what lots of things ((she) knows,” at the end of the poem burst into a prayer:

*O God you made me like to know,  
You kept the things straight in my head,  
Please if you can make it so,  
Let me know something when I am dead.*

Knowledge, then, does not increase human anxiety, rightly understood and properly conducted, science is (conducive to) the therapy of human disquietude.

For Bacon, reading in the book of Nature was not tantamount to indulging in solitary pleasures”: “If we should rest only in the contemplation of the (great and wonderful works of God) as they offer themselves to our senses, we should do (an) injury unto the majesty of God,” knowledge not being “as a courtesan, for pleasure and vanity only; but as a spouse, for generation, fruit, and comfort” (I, v, 11). The objective of the scientific investigation of Nature is not the accumulation of knowledge for knowledge’s sake; the telos of research is utilitarian, operational, at heart, “for the use and benefit of man” (I, v, 11) as well as for “the relief of man’s estate.” It is easy to see that a programme like this was bound to lead into a new methodology of the experiment in order to exploit Man’s mandate for natural research.

I would not wish to claim Francis Bacon to have been the first English philosopher of science who insisted on the legitimacy of human curiosity. Yet, even Bacon is *not* the first in *all* respects to have proclaimed and propagated the justness of Man’s “inquisitive appetite” (I, v, 11), he is the first, to the best of my knowledge, to have collected all the various strands of the argument, theological and moral, antirationalist and psychological, pressing for the “searching and restless spirit” of Man (I, v 11), from his sixteenth century predecessors and to have presented them in a synopsis which is as grand and coherent as it is eloquent and powerful.

Any lover of paradoxes is likely to relish a paradox emerging in Bacon’s defence of curiosity when seen in historical retrospective. According to his biographer, Archbishop Tenison, Bacon when beginning his studies at Trinity college, Cambridge, fell into “early dislike of the physiologies of *Aristotle*,” in those days, “in effect, the Pope in philosophy,” and there are a good many references to the degenerate learning (reigning) amongst the schoolmen” and their dictator Aristotle (I, iv, 5) throughout Bacon’s writings. However, the two philosophers are far less apart than Bacon liked to think. Like Aristotle, Bacon believed in the vigour of *thaumazein*, “wonder,” as the beginning of all philosophical questioning. In the *Advancement*, he even quoted this remark – “for all knowledge and wonder (which is the seed of knowledge)” (I, i, 3) – without acknowledging its provenance of course. Thus, Bacon’s (modern) defence of theoretical curiosity is defence with ancient arguments; it is an attempt to counter Aristotle with Aristotle.

Yet, even though Bacon's (modern) man of science, goaded on by the indomitable lust of the mind to discover, to explore, and to conquer Columbus-like uncharted intellectual territory everywhere, is partly Aristotelian in origin and character, the heroic topic Bacon employs in his encomium of the scientist as discoverer, conqueror, and benefactor point to a different model, the '*laudes Epicuri* in Lucretius' *De rerum natura*. In his praise of Epicurus for delivering mankind from superstition, Lucretius anticipates all the elements, the themes, motifs and metaphors, which were to become familiar in Bacon:

*When human life lay groveling in all men's sight, crushed to the earth under the dead weight of superstition whose grim features lowered menacingly upon mortals from the four quarters of the sky, a man of Greece was first to raise mortal eyes in defiance, first to stand erect and brave the challenges. Fables of the gods did not crush him, nor the lightning flash and the growling menace of the sky. Rather, they quickened his manhood, so that he, first of all men, longed to smash the constraining locks of nature's doors. The vital vigour of his mind prevailed. He ventured far out beyond the flaming ramparts of the world and voyaged in mind throughout infinity. Returning victorious, he proclaimed to us what can be and what cannot: how a limit is fixed to the power of every thing and an immovable frontier post. Therefore superstition in its turn lies crushed beneath his feet, and we by his triumph are lifted level with the skies.*

Here, the scientist is celebrated as a hero, both of mind and action, not merely a well-thinker but also a well-doer, as adventurous to pierce through vast immensity – “beyond the flaming ramparts of the world” and “beyond the pillars of Hercules” – as willing “to contribute (his knowledge) to the use and benefit of man” (I, v, 11). In this respect, Bacon's legitimation of curiosity, which is at the heart of his plea for “a renovation of all other knowledge” (I, vi, 15), may be seen not only as an attempt to counter Aristotle with Aristotle, but also as an undertaking to overcome Aristotle with Lucretius. No matter what truth was likely to be in the final analysis, Bacon enthused, quoting from the poem of the Second Book of *De rerum natura*: “It is a pleasure incomparable, for the mind of man to be settled, landed and fortified in the certainty of truth; and from thence to descry and behold the errors, perturbations, labours and wanderings up and down of other men” (I, viii, 5). Bacon's plea for a new science, its motivation, purpose and objectives, is a plea with ancient arguments. If he rejects tradition, he also resists breaking with it.

Allow me to conclude with a few remarks on what I take to be the significance of all this. I have promised you a paper on “Globalisation and Africa – the need for critical enquiry for the Universities and the Paradigm Change needed taking examples in Early Modern Science,”

The paradigm change did not occur *inside* the universities; it occurred *outside*, where *General studies* took place. It is not even an exaggeration to say that at times it occurred *against* them, conservative, immobile and inert as they were. And no surprise this is. Throughout the seventeenth century, eighty, perhaps ninety percent of university students were not prospective scientists; they trained for the priesthood.

As a result, the paradigm change in early modern science was not effected by institutions but by individuals, daring, challenging thinkers, such as the Lord Chancellor Bacon, who conceived of the scientist as an explorer who kicks against the pricks of prevailing customs, conventions and norms, and who always ventures beyond. Bacon was the first to propound this view with which we would be happy to chime in today. In the modern imagination, it is the institutions, the Universities that are vanguards of research, ‘hotbeds’ of scholarship and science, teaching and research being the two pillars on which they are built. But at the beginning of the modern age, it was not the universities that were conducive to the change that set scholarship and science on their way. In fact, it easily took the institutions another one hundred years, if not more, at least in England, before they began to develop an ambition to go beyond, finally content to satisfy their students’ urge to know.

Perhaps, you have expected a university professor to say all these. Allow me, therefore, to conclude on a note of warning. Modern fascination with discovery and invention notwithstanding, ever since Satan excited our first parents’ minds “with more desire to know,” making them aspire to be “equal with gods”, the human race could, or perhaps even should, have been aware that trying to figure things out may lead to blindness and that the desire to understand may result in destroying not only what we seek to comprehend but also our selves.

If we want to learn from the examples of the literature, Mary Shelley’s prophetic *Frankenstein* and Lord Byron’s tragedy *Cain* (1821) are cases in point. In *Frankenstein*, the desire to discover the hidden principle of life, a discovery which would put him on a par with his Creator – engenders a ‘monstrous’ proliferation of death(s); Byron’s eponymous hero, whose most aggressive ardour is his boundless intellectual

aspiration – an intoxication which claims the right to universal knowledge – is led to the murder of Abel because, he privileges desire for knowledge over love. And only recently, to take an example from outside literature, the horrifying events in Japan have shown that the genie may be out of the bottle for good. While curiosity is no doubt the beginning, it is a drug, after all, and may really be the beginning of the end.

I THANK YOU FOR YOUR PATIENT AND RAPT ATTENTION