Available online at eruditio.worldacademy.org
Eruditio
e-Journal of the World Academy of Art & Science
Volume 1 Issue 2 - February-March 2013

Limits to Rationality & the Boundaries of Perception*

Garry Jacobs
Chairman of the Board of Trustees, World Academy of Art and Science;
Vice President, The Mother's Service Society

Abstract

Rationalization masquerades as rationality in human affairs. Rational discourse is displaced by social conformity in academia. Mind's habitual mode of functioning leads to error in the name of rational thinking – among them, its tendency to divide and subdivide reality in an endless fragmentation of knowledge, to confound description with explanation, to view reality in terms of irreconcilable polar opposites, to mistake symbolic abstraction for the reality it represents, and to draw conclusions predetermined by its own premises. The apparently insoluble problems confronting humanity today are the result of mind's divisive, piecemeal functioning. Solution to those problems lie in formulating a perception of society and the world as an integral whole. That is only possible by an action of the whole mind, which is the basis of the insights and intuitions that are the source of our greatest human initiatives, scientific discoveries and artistic creativity. This is a call to transcend the limits imposed by mind's characteristic functioning as a basis for formulating comprehensive solutions to the pressing challenges facing humanity today.

The World Academy of Art & Science is dedicated to promoting leadership in thought that leads to action − thought based on the uniquely human faculty of rationality. The capacity for rational thought is a unique and extraordinary human endowment. It has been the source of our greatest discoveries and inventions, our science, metaphysics, literature and art. More than any other human faculty, it is this which distinguishes us from other living species. Yet all too often the logic we associate with this most precious gift has been associated with the most horrendous of consequences.

Seven decades ago many brilliant minds were engaged in a feverish race to apply scientific knowledge to enhance the technology for mechanized warfare in the genuine belief that their cause was just and necessary to usher in a peaceful prosperous world for all human beings. Serious doubts have been raised as to whether Japan's surrender really resulted from the dropping of the Atom Bomb, but the untold cost of human suffering that resulted from it is beyond question.[1] Far from abolishing war, the world soon discovered that the weapons fashioned to end all war presented a far greater threat than the massive destruction of the two world wars. Some of the distinguished founders of the World Academy partook directly in this effort. All of them were witness to both the terrible consequences of its application and to the ominous threat it posed to the future of humankind. The mass annihilation of human

* This article is based on a presentation at the Conference on "Humanities and the Contemporary World" organized by the Montenegrin Academy of Sciences and Arts and co-organized by the World Academy of Art & Science in June 2012 as part of an on-going WAAS program on this subject.

beings by atomic bombs in 1945 later gave rise to the implacable 'logic' of mutually assured destruction. More than 70,000 larger, more deadly nuclear weapons were produced, armed and made ready for launch at a moment's notice. Two decades after the end of the Cold War, the same implacable logic still prevails. Nuclear weapons remain an ever-present threat to humanity and the capacity to wield them continues to proliferate.

Obviously there are limits to human rationality, in practice if not in theory. Indeed, when we take a disinterested view of the world around us, it is evident that rationality is the exception rather than the norm in human affairs − even among the most informed, educated and idealistic. Among the most revered founding fathers of America who declared in 1776 that all men are created equal were many slave owners. Their 'rationality' did not demand abolition of slavery. It only required a narrower definition of what was meant by 'men'. Slavery was only abolished constitutionally 90 years after the signing of the Declaration of Independence. It took another century for the principle to be more fully realized in law and fact.

The Enlightenment which gave birth to modern science also gave birth to the idealistic principles on which modern civilization is purportedly based. Following the debacle of two world wars, in 1945 the victorious allies founded a system of international institutions based on the highest ideals of freedom and democracy. Yet in the name of freedom and democracy, they adopted a UN Charter that accorded inordinate authority and arbitrary veto power to a few victorious nation-states. While power still rules internationally, money controls the purse strings of national power politics. Plutocracy governs in the name of democracy. The law of the jungle still prevails in the name of reason and justice. The difference is that we now have high sounding terms and principles to explain the process of governance, giving a rational gloss to power politics and social processes.

We live in a modern world governed by 'scientific knowledge' in which banks lend money to families to buy houses far more costly than they can afford, then suddenly tighten credit resulting in falling housing prices and rush to evict the borrowers from those houses that are no longer equal in value to the loans, leaving millions of Americans homeless and millions of homes vacant. One would have thought that a single Great Depression should be sufficient to teach us all we need to know about the dangers of financial speculation and how to ensure a stable, safe banking system. Alas, rationality does not seem to come naturally even to our species.

"Our economics represents the logic of social power and vested interests clothed in the garb of intellectual theory...It is time to face up to the self-evident fact that the emperors of social theory are not wearing clothes. All rational human beings who remained silent for so long are complicit in the charade and the folly."

Rationality is too often mistaken for its namesake rationalization. We rightly pride ourselves on the wonders of modern science and technology that have eliminated diseases, increased food supply, extended our life span and made life more comfortable and convenient than ever before. Yet daily events are dramatic testimony to the fact that much of what passes

as knowledge is nothing more than speculative theory or mental dogma. More than 200 years ago Adam Smith laid the foundations for a science of economy that would promote the material welfare of all human beings. Yet in the name of efficient market theory, investment bankers invent new financial instruments to destabilize the world economy. Two Nobel Prizes have been awarded for computer trading models at the root of the collapse of global financial markets. For decades we have listened to the pseudo-scientific debate between Keynesians and monetarists, and the expert witness of central bankers and chief economists spinning ingenious tales of markets, money and free enterprise. Our economics represents the logic of social power and vested interests clothed in the garb of intellectual theory. We have become slaves to the money and technology we invented for our advancement. It is time to face up to the self-evident fact that the emperors of social theory are not wearing clothes. All rational human beings who remained silent for so long are complicit in the charade and the folly.

1. The Sociology of Knowledge

As rational humans we readily recognize the errors and folly so prevalent in the world around us yet and with equal readiness condone it among ourselves. Rationality provides us with the ability to analyze and critique the fallacies in other people's logic, while reinforcing a sense of our own righteousness. But the real problem is not 'them'. They merely utilize the power of rationality within their own framework to affirm one side or one aspect of the truth, mistaking the part for the whole. In response others exercise the rational mind's remarkable capacity for exclusive concentration to justify an opposing point of view. Indeed the power of rationality can be applied to defend any viewpoint with an implacable logic that is internally consistent but divorced from the real world. That is one of the limits of rationality too often overlooked in the furious debate between freedom and equality, efficiency and equity, liberalism and fundamentalism, and many other intellectual dichotomies.

For this reason, it is not sufficient that we impartially examine and rationally arrive at the right view. It is equally important that we acknowledge and recognize the truth in contrary viewpoints and seek a higher perspective in which both are reconciled. We need to be constantly reminded of the limits of rationality as an instrument of knowledge. These limits are both theoretical and practical. Practically, rationality is too often applied as an instrument to justify whatever viewpoint suits our temperament, personal advantage, or professional perspective. Science, research and data are excellent camouflage for personal preference. This explains why contrary theories can co-exist for decades without any diminution in their passion of conviction.

"We remain primarily social creatures comfortable in conforming and belong to the mainstream, rather than thinking rational individuals willing to risk ostracism or ridicule for challenging conventional wisdom."

At a more fundamental level the problem arises because human beings are still evolving in consciousness. Mental man is still a work in progress. We are not yet fully mental. We tend to value the acceptance, support and popularity of other people more than we value pure rational thought. We hesitate to express views that are contrary to what is commonly accepted. That is as true today in the world of science as it was at the time of Copernicus and Galileo.

As Physicist Lee Smolin documents in his remarkable study on the sociology of science, we remain primarily social creatures comfortable in conforming and belong to the mainstream, rather than thinking rational individuals willing to risk ostracism or ridicule for challenging conventional wisdom.[2] Few have the intellectual courage to do so, fewer the courage to endorse an unorthodox view when it is expressed. New ideas are usually entertained only when they are projected by those who already enjoin status and respect within the scientific community, as former WAAS President Carl-Göran Hedén once explained it. This is a truth of the sociology of knowledge. All rational human beings who unthinkingly accept established knowledge or remain silent in the face of blatant inconsistencies are complicit in the charade and the folly that too often pass for rationality.

"The greatest discoveries of science confirm that apparent contradictions are merely contrary expressions of a higher law or deeper principle."

2. Limits to Mentality

As every scientist knows, it is essential to recognize and keep constantly in mind the limitations of the instruments we utilize in the search for knowledge. Numbers are a mental instrument that can easily deceive. Therefore, the science of statistics has devised numerous tests to determine the significance of numerical results. Radiocarbon dating is a valuable tool for estimating the age of organic material, but only for materials up to about 60,000 years old. That wisdom applies to the instrumentation of rationality as well. Human beings are highly prone to apply the term rational to that which violates fundamental principles it claims to uphold.

At a deeper level we need also to remain ever conscious of the inherent limits to mentality itself. No matter how great our dedication to disinterested, impartial objective knowledge, the very nature of mind imposes severe constraints. Its penchant for exclusive concentration on one side of the truth has already been noted. Equally prevalent is the tendency to view reality in terms of stark oppositions and irreconcilable contradictions. Yet the greatest discoveries of science confirm that apparent contradictions are merely contrary expressions of a higher law or deeper principle. Thus, Newton's laws of motion reconciled the apparent contradiction between rest and uniform motion. Einstein discovered the intimate relationship between the disparate phenomenon of gravity and acceleration, Space and Time.

"The entire structure of academia is a product of mind's reductionist tendency to subdivide reality into smaller and smaller parts and then mistake the sum of those parts for the whole."

This tendency to view reality in terms of polar opposites permeates all fields of our quest for knowledge. In spite of the well-documented fact that Japan has suffered for the past two decades from the consequences of deflationary stagnation, established dogma regarding the destructive aspects of currency inflation prevents rational discussion about the positive role

of rising prices in economic and social development. A 1979 study by Brookings Institution found that the majority of working and middle class Americans were actually benefitting from the price rise of the late 1970s, yet economic doctrine so successfully vilified inflation that it became a principal reason for President Carter's failure to get re-elected.[3] Inflation cannot be properly understood by any narrow economic doctrine. We must go to first principles to understand its role in the evolution of society, most particularly in facilitating a shift of value and power from physical and monetary capital to human capital, from the value of money to the value of man. The underlying source of inflation in expanding societies is the rising self-respect and aspirations of the disenfranchised who no longer consent to work for subsistence level wages. Economics divorced from sociology and psychology can never comprehend it. The entire structure of academia is a product of mind's reductionist tendency to subdivide reality into smaller and smaller parts and then mistake the sum of those parts for the whole. Financial markets have become divorced from the real economy they are intended to support. Economy has become divorced from the society it is intended to serve.

Mind seeks to compensate for its piecemeal approach to knowledge by combining and aggregating the parts it has analyzed into a semblance of the whole. As Aristotle noted 2400 years ago, "The whole is greater than the sum of its parts." The science of Medicine is divided into about 15 major branches and more than fifty subdisciplines specialized with ever-expanding knowledge and capacity to treat literally thousands of disorders. But knowledge of disease is not synonymous with knowledge of health. Disease is of the part, health is a property of the whole. Disease may arise from a localized disturbance or disharmony of a part or subsystem but health is the result of the balanced functioning of the whole. Disease may occur for many reasons, but health is always comprehensive. It includes and integrates physical, social, psychological and environmental factors in a manner that elude medical science. Diseases occur at the level of the part, health is a property of the whole which constitutes another level of reality. Has any system of medicine yet been developed that is founded on principles of the health of the whole? It has been said that the ancient Indian system of Ayurveda, which literally means knowledge of life, has as its aim to treat the whole health of the person rather than the disease of the part.

So too, we cannot understand the behavior of Homo economicus without also fully understanding the political, social, psychological and environmental dimensions of human life. Even if we could successfully combine our knowledge of all these components, it would not provide an adequate picture. There is no such thing as Homo economicus or Homo politicus. Our time and interest may be subdivided among different subjects and activities, but it is always the whole person who participates in each of them. Each of us plays multiple roles in life – as child, parent, spouse, co-worker, customer, etc., − but these are only partial, external expressions of a greater whole which constitutes the human personality. Without knowledge of that whole, our knowledge of some or all of its parts will always remain incomplete and inadequate. Therefore, a comprehensive knowledge of any dimension of social behavior would have to be founded on a more fundamental understanding of the relationship between the society and its individual members and the process by which they interact to achieve social objectives and promote the development of society.[4] The social sciences are various expressions of a more fundamental science of society, whose governing principles express variously in different fields.

3. Characteristics of Mind

Mind is science's ultimate instrument of knowledge. No matter how great our dedication to disinterested, impartial, objective knowledge, the very nature of mind presents serious pitfalls and imposes severe constraints. Yet rarely does science reflect on the inherent limitations of rationality arising from the fundamental characteristics of mind.

Mind constructs representations of reality in order to understand it by reflection and then becomes a prisoner of its own constructs. Mind's tendency to separate itself from the field of study, to objectify and abstract reality until it is divorced from the real world it seeks to understand is illustrated by the widening gap between financial markets and the real economy, the economy and human welfare.

The natural philosophers of the Enlightenment in search for an objective standard of knowledge to counter the received wisdom of church doctrine naturally turned to the study of external Nature, since the physical world was the only field in which reliable measurement by an agreed upon standard was readily possible for impartial disinterested observation. Over time the very notion of objectivity acquired an additional and very different connotation. The study of physically observable objects was taken to be synonymous with the impartial, disinterested pursuit of knowledge and the study of non-material phenomena was relegated to the category of subjective speculation and superstition. One great casualty of this linguistic confusion has been to discredit subjective investigation of mental and psychological processes.

So compelling has been the rationality of this logical imperative that today we bend over backwards to reduce the most immaterial of phenomena to purely material 'scientific' terms. We seek to explain the pursuit of truth, love, freedom and science itself as the result of hormonal secretions and nervous excitations. We reduce the most lofty ideals and highest experiences of humanity to the level of mud pies and plum puddings. But these most subtle intangible realities are by far the most powerful and lasting. A single intangible object without mass or dimensions – the idea of freedom – has stirred the human heart throughout history to surmount overwhelming force and technological superiority. Three inspiring ideals spurred the revolution that transformed France and swept the continent. The pursuit of indefinable Truth has spurred man's insatiable quest for knowledge from the infinitesimal to the infinite. The more subtle, the more powerful.

The primary characteristic of Mind is that it seeks to know reality by dividing it up into smaller parts and then regarding each part as if it were an independent whole in itself, then further subdividing these smaller wholes into more parts, ad infinitum. This capacity of mind is responsible for many remarkable achievements of modern science. It has enabled us to classify the elements and their constituent parts; to categorize myriad life forms on earth by phylum, genus and species; to evolve an ever-expanding range of scientific disciplines and sub-disciplines, medical and engineering specialties, etc.

But the very capacity of mind to reduce reality to its constituent elements is also responsible for its tendency to lose sight of the whole and the difficulty it encounters in piecing the parts together to constitute a complete and organic view of reality. As already noted, this tendency has reached its acme in the field of economics where increasing specialization has resulted in a near total divorce between scientific theory and real world reality. The very search

for immutable, universal laws of economics akin to the laws of Newtonian Physics is an abstraction from reality. Economics is the result of conscious human behavior which evolves over time, rather than of inconscient material processes or mechanical social processes.

Mind's tendency to separate itself, objectify and abstract reality until it is divorced from the real world it seeks to understand is illustrated by the widening gap between financial markets and the real economy, the economy and human welfare. The decades-old debate between neo-Keynesianism and neo-liberalism neglects the fact that neither presents a comprehensive and coherent view of economy as a subset and integral component of a wider social reality which encompasses political, social, technological, cultural, ecological and psychological factors. Neither theory can explain how a single individual named Steve Jobs could found a fledgling enterprise in his garage with $5000 and build it into a Fortune 500 company in less than a decade, while launching a technological and economic revolution that is still unfolding and making Apple Computers the most valuable corporation in the entire world. Without knowledge of the social dynamics that drive development and the catalytic role of dynamic individuals in that process, any economic theory is stillborn.

"It is impossible to imagine a valid theory of economics that ignores the power of human aspiration, creativity and imagination on one side or human welfare, social security and ecological sustainability on the other."

The logic of Efficient Market Theory fails to impress when we consider it from the perspective of the welfare of society rather than the profit of a speculator. It is difficult to appreciate the efficiency of speculative activities that recently destroyed more than $20 trillion in assets and plunged the global economy into crisis. Divide and conquer may have been an effective military strategy in the age of Julius Caesar, but it is a failed approach to effective knowledge in the 21st century. It is impossible to imagine a valid theory of economics that ignores the power of human aspiration, creativity and imagination on one side or human welfare, social security and ecological sustainability on the other. Financial markets are social institutions established to serve a social purpose. Rationality requires that they be evaluated solely in terms of how well they fulfill that wider purpose.

The same tendency prevails in virtually every field of knowledge. The study of law is dominated by positivist theory that regards the legislature as the creator of law. Law is studied in isolation from the political processes and the distribution of power in society which determine what laws are made and how they are enforced. It is even further divorced from the underlying social processes that determine what the society aspires for and demands. In Lasswell's terms legal process is divorced from power process and social process. But the French Revolution, Women's suffrage, the American Civil Rights Movement, and environmental law were not born in a legislature. They were born in the hearts and minds of the citizenry, on streets, in meeting rooms and in the media. The study of law abstracted from politics and society creates a conceptual world that only distantly resembles the real world it is intended to comprehend. Lasswell fully recognized the complexity of factors that contribute to the cre-

ation, application and interpretation of law and the inadequacy of logic as the sole instrument for comprehending these processes. He observed the 'self-destroying characteristics of logic' when too rigorously applied and argued that logic incapacitates rather than qualifies the mind to be a fit instrument for reality adjustment.[5]

4. Symbolic Knowledge

Mind works with symbols and easily mistakes symbol for reality. In order to act on reality, it assigns names to various objects and phenomena, and often mistakes its name or description for an explanation. Economists have captured the genii of human greed with the scientific sounding term 'irrational exuberance'. But no matter what we call it, financial speculation and the insider trading on which it thrives is a sub-discipline of gambling, not of an economic science concerned with social productivity and human welfare.

In spite of the rapid accumulation of information, the boundaries of human ignorance seem to expand as rapidly as those of our knowledge. Just because we have discovered drugs to suppress or stimulate human emotion, are we really any closer to understanding the nature of love, faith, goodwill, idealism and the insatiable urge for knowledge on which science itself is based?

A multiplication of new sciences with new terms helps impart a sense of security in the face of increasing uncertainty. Complexity and chaos are concepts that have helped us transcend the linear fragmented thinking of traditional disciplines, but essentially these are only descriptive rather than explanatory terms. We apply the term 'emergent properties' to describe a system that displays characteristics unobservable and apparently non-existent in the pre-existent conditions. But in doing so we are simply assigning a term to describe it rather than to explain why or how it occurs. The description may be helpful, but mind too readily mistakes it for something far more profound.

5. Scientific Creativity

At the furthest boundaries of science we encounter a remarkable phenomenon. Many of the greatest discoveries of modern science are the result of processes which we do not understand. Our minds are turned outward to the comprehension of the world around us, but we fail to comprehend the modes of its own inner workings. Many great scientists have acknowledged the intuitive processes by which they arrived at fresh insights into reality, yet the process of intuitive discovery itself lies outside the mainstream of modern science. We devote nearly all our attention and resources to validate intuitive knowledge with experimental data rather than to understand how to augment the creative process itself. In spite of Popper's warnings, all too often we mistake the process of data collection, analysis and experimentation for the essence of scientific thinking. We invest ever greater sums in building more powerful accelerators, devoting less and less time and thought to understanding the nature of rationality and mind which remain, in spite of all our technological achievements, humanity's principal instruments of knowledge and the greatest mystery of our times.

Science was born in the West during a period when theology dominated both our knowledge of the spiritual worlds and our understanding of the physical universe around us. Its achievements over the past five centuries are stupendous, mindboggling. So compelling are

its results that vast sections of humanity have embraced science with the same ardor and blind faith that were once reserved for religion. In fact, most of the achievements credited to science are more the result of technological advances than of science as a discipline. The great inventions of the 19th century were the work of thinkers, technicians, inventors and engineers rather than true scientists. Like many other great inventors, James Watt never attended school regularly. He started his own instrument making company at the age of 18 and fashioned his first successful steam engine two decades later. Steve Jobs and Bill Gates were both college drop-outs. This does not depreciate their remarkable practical achievements or those of their more educated scientific technologists such as Watson and Crick, but it reflects the fact that the marriage of science and technology is a 20th century phenomenon. The technological revolution of the 19th and 20th centuries resulted as much from the rapid spread of democracy, universalization of education, expansion of commerce and the growth of media for dissemination of information as from the scientific theories of the times.

"Science has become the religion of the modern era."

The capacity to generate remarkable devices certainly demonstrates the practical power of applied science, but it does not logically prove that its fundamental suppositions are correct. Ptolemy's theory of epicycles was sufficient to predict the motion of planets and eclipses with 99.9% accuracy. The Julian calendar worked remarkably well for 1500 years and was accurate up to 4 decimal places, although it was based on the false proposition of a geocentric universe. That minute inaccuracy was the result of a fundamental theoretical flaw. The fact that the motion of the planets turned out to be altogether opposite to visual evidence was an ultimate confirmation that the data of the senses is an inadequate basis for true knowledge. Technological achievement is not in itself a proof of theoretical validity. Kepler's first theory of the solar system based on Platonic solids was consistent with the orbits of the six planets known at the time, but was based on fallacious theory.

In practice, science has become the religion of the modern era. By a strange alchemy, it has acquired many of the same characteristics that it rose in revolt to surmount – infallibility of doctrine, disdain for the dissenter, and pride of social status. The general public may be innocently misinformed about the efficacy and infallibility of science, but scientists cannot afford the same luxury. Humility is the ultimate path to truth.

6. Action of the Whole Mind

Mind utilizes several faculties in its pursuit of knowledge – observation, memory, discrimination, perception, judgment, reason, will and imagination – working individually and in concert with one another. Thus observation stimulates recollection of memories, comparison and discrimination between facts, analysis and judgments regarding cause and result, inference and imagination about possible consequences, and so forth. If there is a whole that is greater than the sum of the parts, reason compels us to conclude that the mind itself must be something greater than the sum of its component faculties. Is it possible that the reductionist tendency of mind to break things down into component parts applies also to the exercise of its own faculties?

If the human mind is capable of knowledge that combines, integrates, reconciles and transcends the separate and disparate partial knowledge generated by its component func-

tions, then it must be by an action of the whole mind that in some way combines, integrates, reconciles and transcends the workings of all these individual faculties. This action would explain the sudden insights and intuitions that are the source of the original ideas, perception of hitherto unsuspected relationships and reconciling principles, which like lightning bolts periodically illuminate the frontiers of knowledge.

This suggests the possibility of overcoming the limits imposed by the mind's tendency to divide and aggregate, abstract knowledge from life, mistake symbols for reality, analyze and judge based on implicit assumptions, and other characteristic actions of the mental faculties. It suggests that we may all possess the higher mental capacity for insight, intuition or integral perception, but that we are prone to neglect it in our normal exercise of mind's separate faculties. Mind's capacity for knowledge may be self-limited by its habitual tendency to reduce things to individual operations and concentrate on one thing at a time to the exclusion of the rest. If that is the case, recognizing the need to exercise it comprehensively by an all-inclusive concentration, rather than by an exclusive concentration that emphasizes its piecemeal action, would be an important step toward overcoming the limitations of its present functioning.

7. An Integral Approach to Global Challenges

Momentous consequences follow from these conclusions. Those who give serious thought to the persistent problems facing humanity are usually baffled and prone to frustration, cynicism, anger, resentment or hostility in the face of the blind recalcitrance of people who refuse to see or accept self-evident truth. We tend to attribute their resistance to unbridled selfishness, lust for power, arrogant exercise of power or extreme ill-will. Since none of these attributes are amenable to rational discourse, we are condemned to irreconcilable and perpetual conflict. But what if they arise not merely out of bad will but out of bad thinking that leads to wrong will and failed or destructive actions? What if all the major problems confronting humanity today arise from the action of characteristic, habitual tendencies of the human mind? What if the greatest human achievements of the past resulted from a mode of mental functioning that overcomes and transcends the limits of this normal functioning? If that is the case, then the possibility arises of solving humanity's pressing problems and also consciously fostering the creation of greater opportunities by a conscious initiative to overcome the limitations in the way we exercise our mental faculties. Then the most essential and effective means to address global challenges would be to seek for a way to call into action that higher integrated action of the whole mind.

As a trans-disciplinary global Academy integrating the sciences, arts and humanities, WAAS is uniquely qualified to formulate a higher intellectual standard, project a new norm for rational discourse, pioneer a deeper inquiry into the boundaries of perception and the limits to rationality, and seek ways to harness the unchartered potentials of the human mind to address global social issues. This is indeed a challenging endeavor that would move the Academy from the intellectual mainstream to the frontiers of knowledge where the future of humanity is unfolding.

Author Contact Information
Email: garryj29@gmail.com

Notes

1. Ward Wilson, *Five Myths About Nuclear Weapons* (Boston : Houghton Mifflin Harcourt, 2013)
2. Lee Smolin, *The Trouble with Physics* (New York: Penguin, 2006), 267.
3. Garry Jacobs, "Inflation: Symptom of Social Growth" *MSS Research* http://www.mssresearch.org/?q=Inflation_Symptom_of_Social_Growth
4. Harlan Cleveland et al., *The Genetic Code for Social Development* (Minneapolis: The World Academy of Art & Science, 1999) http://worldacademy.org/Human_Choice
5. Harold D. Lasswell, *Psychopathology and Politics* (Chicago : University of Chicago Press, 1977), 31-32.