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We are pleased to introduce ***Eruditio,*** the new electronic journal of the World Academy of Art & Science. The first issue of *Eruditio* is dedicated to the theme of Individuality as viewed from a multidisciplinary perspective applicable to global social issues. In February 2012 the Academy hosted a web-seminar on Individuality that generated important papers presented from multiple vantage points. Additional papers were presented at the conference on "Humanities and the Contemporary World" organized by the Montenegrin Academy of Sciences and Arts earlier this month. Issue 1 of *Eruditio* will consist of 16 papers released in four parts over the next two months. The first four papers are described below. Links are provided so that you can also access the individual papers online and add your comments.

**Issue 1 – Part 1: Individuality**

[Human Capital, its Self-Augmenting Growth and Individuality](#)
    *- by Ivo Šlaus*

[The Emerging Individual](#)
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[Abdus Salam (1926–1996) – more than a Nobel Laureate](#)
    *- by Olof Tandberg*

[Evolution of Individuality](#)
    *- by Ashok Natarajan*

**Ivo Šlaus'** paper reinvigorates a longstanding theme, which stresses the centrality of the individual, and in particular, individual capacity as a crucial component of an improved human prospect. This is a theme that was central to the work of former president of the Academy, Harold Lasswell, whose entire academic career was devoted to giving space and importance to the individual social participant in the global social process. Šlaus stresses the importance of human capacity as a resource to be appropriately used rather than irresponsibly discarded.

**Garry Jacobs** stresses in his article, The Emerging Individual, the importance of an evolutionary perspective for deepening our understanding of the relationship between human and social capital and the role of the individual in their development and the multiple processes through which they interact. Jacobs emphasizes the element of creative complexity and the exponential uniqueness of the individual in social process and progressive development.

**Olof Tandberg** in his short biographical sketch of the distinguished theoretical physicist, Abdul Salam, provides a particularized focus on a unique and complex individual and his immense achievements as a scientist, and a human being with a developed social conscience and deep sense of social responsibility. It is a fine example of an individual who made a difference.

**Ashok Natarajan** provides a sweeping insight drawn from the history of civilization. He underscores the importance of the intelligence and innovativeness of humanity, but also laments the loss of knowledge to future generations. He stresses the importance of diverse capabilities in enhancing the psychological position of the individual in history. The paper provides a good focus on the problem of human aspirations and the salience of the individual in this process. Drawing on a wide variety of sources, he focuses on the issues of social conformity and social difference. He then traces the development of social capacity for accomplishment through the stages of manners, behaviors, character, and individuality.

**Winston P. Nagan**
**Trustee**
**Chair, Program Committee**
**Editor-in-Chief, *Eruditio***

# Human Capital:
## Its Self-Augmenting Growth & Individuality
## A simple, Possibly Naïve Approach

**Ivo Šlaus**

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*Abstract:*

*Human and social capital are the true wealth of humankind, currently grossly underutilized. In this paper, interrelations of various forms of capital are presented and the historical development of human and social capital is traced. Evidence for self-augmentation of human capital and conditions affecting its development are given.*

## 1. Introduction

The 1990 *Human Development Report* clearly articulated the concept of *human development*.[1] The first chapter, "Defining and Measuring Human Development," has the forthright statement that **people are the real wealth of a nation.**

*Human development* is about freedom: human choice (opportunity freedom) and a participatory process (process freedom). Human development is a process of enlarging people's choices − long and healthy life, to be educated and to enjoy a decent standard of living, and political freedom, guaranteed human rights and self-respect — that which Adam Smith called the ability to mix with others without being "ashamed to appear in public."

Human beings are the result of biological & cultural (much faster) evolutions. *"Evolution on this planet is a history of the realization of ever more possibilities. Through new knowledge it has defined man's destiny & responsibility….It is as if man has been appointed the managing director of the biggest business of all – the business of evolution."* [2]

### 1.1 Laws of Nature and Laws of Society

In the classical tradition of Galileo, Newton and possibly until today, Laws of Nature are eternal truths, "thoughts of God", represented by mathematical equation. Kant considers them categories of human mind, but David Hume was critical. The 20th century shows that mathematically formulated laws extended to encompass social and political sciences. Models became a "sign of exactness" in economy and almost all Nobel prizes in economics were given for econometrics. However, criticism grew, e.g. Feyerabend, and in the 21st century the question "Are Laws of Nature still essential?" was raised. R. Rorty wrote "truth is made not found." A topical workshop on Laws of Nature is currently organized by Academia Europaea in Heidelberg and we will not discuss it here.

Rather we will just mention that physical science still endeavors to formulate The Theory of Everything which will encompass conservation laws and related symmetries, and obviously

contain the basis of quantum physics: The Uncertainty Principle. As far as we understand, physical laws have been immutable for 13.7 billion years, but possibly laws have evolved, as J.A. Wheeler suggested, possibly in an extremely short time span before the inflation. If there are multiverses, each universe has its own laws, and "our" is distinguished by being one in which life and human beings have evolved.

While the physical world – its basic laws and constants – did not change during 13.7 billion years, life and particularly society is evolving, rapidly in the last decades. It is very important to ask: should laws of society change? All laws? How should they change?

Law is a social organization of principles, rules and governance systems to manage relations among people and group of people. Laws evolve in response to ever rising demands of the people – expression of the development of human capital (Lasswell).

The concept of the *Rule of law* was popularized by British jurist Albert Dicey in 1885. *World Justice Project* – committed to advancing the Rule of Law – was initiated and it developed the RoL Index. Conditions include nine criteria among them: limited government power, security, absence of corruption and access to civil justice. And the "Law should be stable" *– is it possible and desirable in a rapidly changing world?*

In a 1959 gathering of 185 jurists, lawyers and law professors from 53 countries speaking as International Commission of Jurists formulated the Declaration of Delhi: **The Rule of Law implies certain rights and freedoms, implies independent judiciary and social, economic, political and cultural conditions conducive to human dignity.** This is fully in our classical tradition of Cicero ("We are all servants of the law, so we may be free"). However, since we were always fully aware that human beings formulate laws, we were always concerned that laws may be unjust, and therefore from Cicero, through Augustine, Th. Aquinas, the US founding fathers and Gandhi it was clearly claimed *"Unjust law is not a law!"* and law serves human beings (Bible).

Are there laws of society that have not simply "been made by human beings"? In a way, biological evolution through evolutionary advantages moulds "natural laws of human beings and human society". Studying human behavior and violence, scientists concluded that "Violence is not Law of Nature" and that Reciprocal Altruism is an evolutionary advantage generating the Golden Rule – the basic law of human society in all cultures and religions.[3, 4] But who is our neighbor? It is remarkable that more than 100 years ago Darwin realized that all human beings are our neighbors, and that is the essential meaning of the concept of the Global World.

## 2.  The Human Capital [5]

We define

**Capital** as usable, productive resources, all forms of assets and capabilities that can be harnessed for human development. A. Smith introduced several forms of capital: land, building, machinery and human abilities. We define: natural (including physical and biological), human (including social and cultural, of course including scientific etc – notably: ideas, individuality, values, etc), financial and all other human made capitals.

And

**Human Development** as a process of increasing human welfare, well-being and human capital, increasing human freedom and creativity.

***Anything becomes a resource (only) when its potential value is recognized by the human (mind).*** However, air is a resource regardless of whether humans are aware of it. But, pitchblende is a resource only when humans discover fission.

All social and political sciences are human based. Human beings are rational and irrational beings. Collective interactions among human beings produce sudden, unexpected behavior and outcomes and socio-economic-political development is characterized by instabilities and uncertainties – black swans. These uncertainties are much less understood than the Heisenberg Uncertainty Principle. This essential feature was understood by economists hundred years ago, but is being overlooked in search for some Newtonian type deterministic mathematical models. "Economics is not about goods and services, it is about human choice and action." (L. von Misses, 1949)

## 2.1 Individuality

Individuality is a product of human mental development, of social organizations, institutions and of a cultural sphere, imparting knowledge, skills and values, making available to each member the cumulative advances of the collective, and providing freedom and opportunity for unique individual characteristics to develop.

History proves the importance of individuals. It is interesting to ponder on Khrushchev's answer to the question "who made Sputnik?" His reply was "Soviet people" Was this just Soviet secrecy?

## 2.2 Development of Human Capital

Through individual-society-culture interaction human capital can be augmented, destroyed, misused and wasted. The constant interaction, exchange, mutual dependence and reinforcement between the individual and the collective give human capital the unique capacity for self-development and self-augmenting. This bootstrapping accounts for the evolutionary character of civilization, resulting particularly from organization, education and culture. It gives *rise to the unlimited capacity of human capital for development, the very basis for the progressive advance of civilization. Human capital evolved slowly in the past, but in recent centuries the pace of development has accelerated exponentially.*

Society now exhibits the apparent capacity to leapfrog in a single generation from riding llamas to flying in airplanes, from bullock carts to cell phones, from primitive agriculture to advanced ICT-based services.

The development of human capital over time is a function of human capital (which includes all forms of social capital, denoted here by $\Psi$), natural capital (e.g., ecosystem, air, water, denoted by $\Phi N$) and human-made capital (e.g., infrastructure, building, money - denoted by $\Phi hm$) and their evolution. Improving health care, education and employment augments human capital proportionally to the human capital ($\lambda\Psi$). Improving socio-economic and political conditions, stimulating creativity augment human capital even more

than proportionally ($\mu\Psi^a$). Socio-economic and political conditions can have beneficial and destructive effects: $\lambda$ and $\mu$ can be negative. In addition there are sudden changes, black swans, labeled P for those having positive and D for those having destructive effects. All scientific advances fall into category P, as well as social-political events such as the end of Cold War and nuclear disarmament. War, large income inequalities and violation of human rights destroy human capital.

$$d\Psi/dt = \lambda\Psi + \mu\Psi^a + P - D + \alpha(d\Phi N/dt)\Psi + \beta(d\Phi hm/dt)\Psi + \gamma(\Psi,\Phi N,\Phi hm)$$

*The term $\alpha(d\Phi N/dt)\Psi$ demonstrates that human capital decreases if natural capital decreases. The term $\beta(d\Phi hm/dt)\Psi$ shows that human capital decreases if human-made capital decreases, e.g., as a result of war. The complex interdependence of all capitals is the last term $\gamma(\Psi,\Phi N,\Phi hm)$. $\lambda$, $\mu$, P, D, $\alpha$, $\beta$ and $\gamma$ are time dependent.*

The self-augmenting character of human capital is shown by the growth of GDP/c in recent centuries. In spite of a 22-fold rise in world population over the last 1000 years, GDP/c has grown 13-fold. Since the advent of the Industrial Revolution, both population and GDP/c have increased six-fold, signifying a 36-fold rise in productive capacity in two centuries, challenging the very notion of scarcity and economic limits. (see Fig 1) This means that $\lambda$ and $\mu$ are positive, and effect of other terms cancel out (or are small, but that is not likely).

*Figure 1: Global population and per capita GDP 1000-2001 (in 1990 intl dollars)*
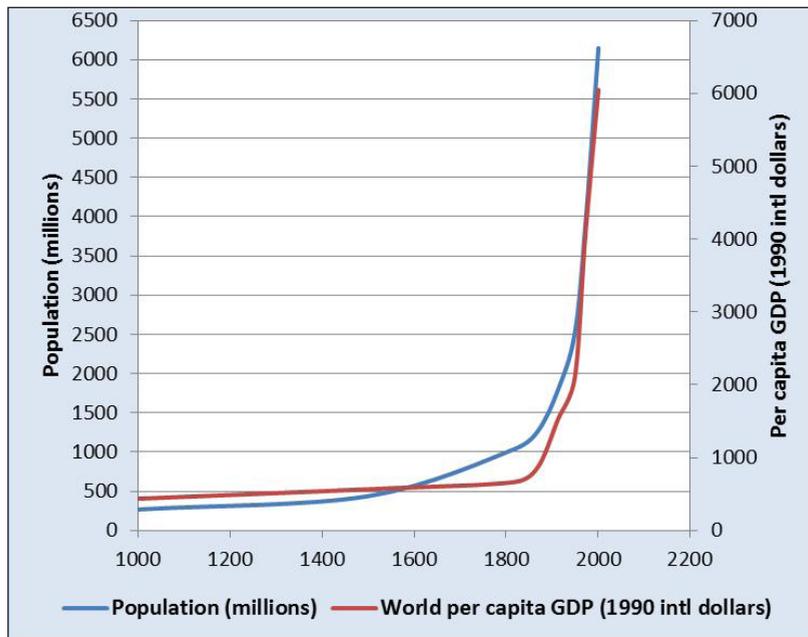


### 2.3  Human Security

The 1994 Human Development Report introduced and defined the concept of *human security* as "freedom from fear and freedom from want" and "safety from chronic threats such

as hunger, disease and repression as well as protection from sudden and harmful disruptions in the patterns of daily life—whether in homes, in jobs or in communities."[6] This concept of human security was a radical shift in thinking on peace and conflict prevention. In the final analysis, human security is a child who did not die, a disease that did not spread, a job that was not cut, an ethnic tension that did not explode in violence, a dissident who was not silenced. Human security is not a concern with weapons—it is a concern with human life and dignity. Human security demands attention to all risks to human development, not just situations of conflict and post-conflict and fragile states.

### 2.4 Inequalities

Large inequalities destroy human capital (e.g. see Fig 2).[7] When taking into account inequality Human development index decreases 27% for Arab States, 33% for Sub-Saharan Africa and 30% for South Asia. Interestingly, loss is largest is education (57%, 32% and 50% for Arab states, Sub-Saharan Africa and South Asia, respectively) and health (24%, 45%, 34%, respectively). In developed countries, total loss due to inequality is 10%, mainly (67%) in standard of living.

There is an efficient inequality range which is most conducive to economic growth.[8] However, the level of inequality that is optimal for economic growth may not be optimal for social stability and development of human capital. There is abundant evidence to support the view that lower levels of income inequality are essential for achieving optimal and sustainable development of human capital.

*Figure 2: Impact of income inequality on health and social problems*
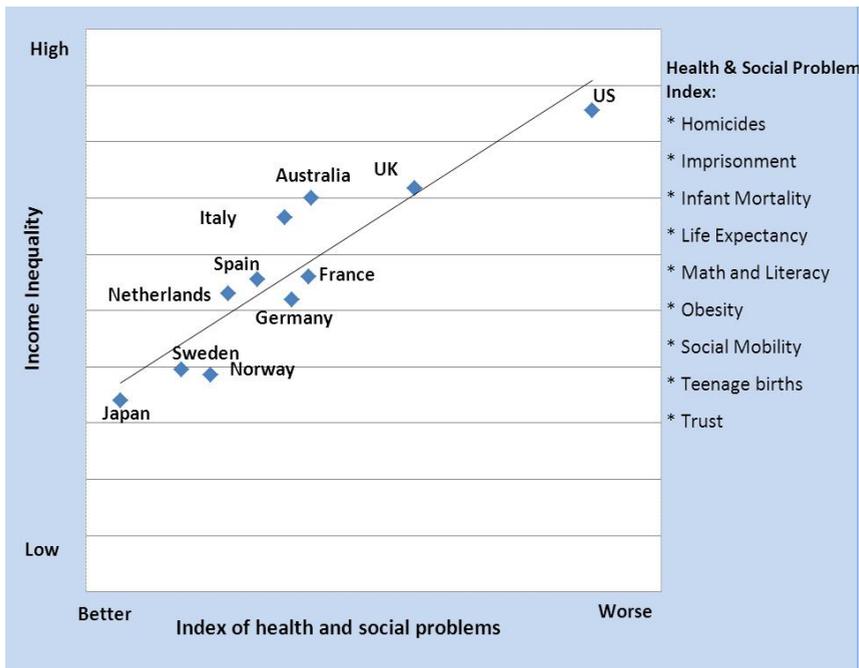
### 2.5  *Measuring Human Capital*

While financial capital, land, even labor and natural capital are measured or are attempted to be expressed through money, human and social capital seem to be above and beyond expression in terms of money. One of the major tasks ahead is to measure human and social capital, qualitatively and possibly quantitatively.

## 3.  Conclusion

Human beings dominate our planet. This prompted P. Crutzen to suggest the name Anthropocene for our epoch.[9] It was argued that Anthropocene Epoch started 10,000 years ago with the Agricultural Revolution.[10] If humans dominate, is the human capital increasing? Fig. 1 showed that human capital, or at least one aspect of human capital assessed through material wealth (GDP/c), seems to be increasing during the last 200 years. More significantly, progress in science and technology is remarkable generating a truly global, rapidly changing world with unexpected positive effects. There are important improvements in our political system: more democracies, more rule of law and many international laws regulating our commons. Is this the best of time, or the worst of time, since the 20th century witnessed two World Wars, Cold War and numerous "smaller wars" resulting in 100 million deaths. In addition, their own governments killed 200 million children, women and men.[11] Even worse – we are now at the brink of destroying our Earth. Ecological footprint is almost 50% larger than our Earth can tolerate, if no change in 2030 we will need two planet Earth to sustain us, and the study involving 2600 species showed 30% loss in biodiversity, catastrophic climate change is likely, we base our security on weapons and most of these weapons pose more threat and danger than security, we are unable to solve the financial crisis – Apocalypse Fairly Soon wrote P. Krugman in NYT commenting just on the euro crisis. [12, 13 14]

It seems that we are now reinforcing conditions to destroy and waste human capital. Absolutely sovereign states (in spite of the diffusion of political power through international structures, TNC, NGO and more and more networks realizing what Harlan Cleveland called "nobody in control", our political structure is based on sovereign states. About 200 of them are in gross disproportion to one global world and several thousand cultures we have to preserve and to our security system and are obsolete concepts that are becoming dangerous. Our economic and political systems are not adequate. Change is so rapid that they, not even present education or public opinion can keep pace with it. Major improvements are needed. We need much more democracy, not less, and any extremist and authoritarian regime is only making everything worse. Individuals should not be manipulated – otherwise human capital is wasted. Large inequalities are detrimental for everybody, not just for poor but also for rich. Consumerism - unnecessary needs forced upon us – are stimulated by a grossly distorted picture (GDP) and lead to large ecological footprint. But disciplines and austerity are inappropriate, barely cosmetic remedies as circles upon circles could not make the system of Ptolemy an appropriate representation of celestial motion – Copernican revolution was required. We do need ideas and free, active persons as creator of ideas demonstrating again the self-augmenting character of human capital.

The Club of Rome emphasizes mutual interdependence and addressing world problematique in such a fashion accepted by the now world famous Report to the Club "The

Limits to Growth". It underlined and actually attempted to provide hard evidence through scenarios, that by clinging to obsolete behavior, the world runs into serious problems. One could claim that similar to Silent Spring, WWF and IUCN endeavors, the Club underlined the importance of natural capital. It is very appropriate that the World Academy of Art and Science is starting its e-journal Eruditio with the theme of individuality and human capital – this unique capital capable of evolution and self-augmenting. As Harlan Cleveland wrote, "The only limits…are the limits to imagination and creativity" and as Aurelio Peccei argued, human capital is the most underutilized of all forms of capital**. The potentials of human capital can never be fully utilized. It is the key to the effective utilization of all other forms of capital.**

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# The Emerging Individual

**Garry Jacobs**
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*Abstract:*

*Humanity is in the process of evolving from collective uniformity to increasing individual variation and diversity. This movement has gained impetus from the growing recognition that the overall strength and sustainability of the collective is proportionate to the value it accords to each individual human being and the active support it lends for full development of each individual's unique, creative potentials. The relationship between the individual and the collective, microcosm and macrocosm of one integrated whole which we call Society, is a crucial determinant of social development. The collective initiates social change through the actions of pioneering individuals – thinkers, artists, inventors, explorers, entrepreneurs, innovators – who give expression to its unrealized aspirations, unformed conceptions and unexpressed initiatives. Formed individuals seek to fulfill higher aspirations, express new conceptions and initiate new actions which are eventually accepted, imitated, organized and assimilated into the subconscious of the collective.*

*As humanity evolved from its animal ancestors in pre-history, Society emerged as an amorphous mass struggling to consolidate itself into a single viable, integrated entity. Once it succeeded in molding itself into a unified entity, it refused to tolerate divergent behavior among its members which threatened to jeopardize that integrity. Even harmless attempts at variation were prohibited. Thus, gradually the collective emerged with a unified identity. Beyond this stage of assured survival of the social collective, society has evolved subconsciously, that is, its development has occurred not by a conscious, concerted, organized and coordinated effort but by sporadic, spontaneous and uncontrolled variation. Once survival, the main objective, was assured, other activities were allowed to emerge and spread within strict limits but without conscious direction by the collective. During this latter phase, the accumulated subconscious experience of society leads to the acquisition of collective knowledge, but it remains unnoticed or unformulated and is not made conscious or explicit by the collective until it becomes conscious knowledge and is given conscious expression by one or a few members of the collective. The pioneer, leader, entrepreneur, genius and all its other versions are various expressions of a common principle, the Individual who consciously embodies in himself all that the society has developed subconsciously.*

*The evolution of individuality remains incomplete. At the level of society, convention and conformity stifle individual freedom and creativity. The need today is for individuality of social action with the creative capacity to fashion more positive human relationships. It can be aided by mental individuals who give voice to ideas that will guide social development in the future, such as global financial management, full employment, new economic theory, the abolition of nuclear weapons, the end of competitive security paradigms, democratization of the UN and global action on the environment.*

Science searches for universal laws and general principles governing finite phenomenon. It seeks for commonalties, categories of similarities and repeating patterns behind apparent differences. In recent decades, the science of complexity has revealed that even complex

variations and irregularities often conform to rules of their own. However, science has yet to evolve a methodology and framework for conceptualizing uniqueness. Infinity does not conform to universal laws. Uniqueness is an expression of infinity in the finite.

Physical phenomena lend themselves most readily to this search for inviolate universal laws, though quantum theory has discovered at its very base that even the physical world is founded on uncertainty. But when it comes to society, the challenge is far greater, for social phenomena are both more complex and more subtle. Apart from being subject to the same physical laws that govern all matter, they are subject to social, political, economic, cultural and psychological forces that are more difficult to measure and corresponding principles or laws that, if they exist at all, are more difficult to decipher. No wonder that social sciences today lack a consistent body of principles universally accepted as applicable to all fields.

How then are we to attempt a study or serious discussion about individuality, which by its very nature represents that most complex phenomenon, known to human beings – our own uniqueness? One tempting approach is to deny the very existence of the individual and conclude as Peter Watson did at the end of his monumental study *Ideas: a History from Fire to Freud,* "There is no inner self. Looking 'in', we have found nothing – nothing stable anyway, nothing enduring, nothing we can all agree upon, nothing conclusive – *because there is nothing to find*."[1]

## First Law of Individuality

How then to proceed? Let us begin with what we do know with relative certainty about the phenomenon of individuality, for this itself is so astounding that it warrants serious contemplation. First of all, we know for a fact that throughout history, individuals have played a remarkable role in the development of civilization and the social evolution of the human race. However incomplete or distorted the historical record may be, however great our collective penchant or the tendency of biographers to glorify leaders and heroes, there is no question that the world would be a very different place today were it not for the fact that people like Buddha, Ashoka, Alexander, Socrates, Aristotle, Plato, Augustus, Jesus, Mohammed, Joan of Arc, Leonardo, Elizabeth I, Shakespeare, Luther, Newton, Washington, Jefferson, Catherine the Great, Napoleon, Darwin, Beethoven, Tesla, Marie Curie, Edison, Einstein, Ford, Susan B. Anthony, Jean Monet, Gandhi, Churchill, Mandela, Gorbachev, Aung San Suu Kyi, Ted Turner, Tim Berners Lee, Steve Jobs and countless others lived and acted when and as they did.

It is, for instance, difficult to imagine the course that the Indian independence movement would have taken had Mahatma Gandhi not returned to India and assumed leadership of the movement. India's independence was followed in quick succession by the liberation of more than forty-five other former colonies around the world, all but a few by peaceful transfer of power that mimicked the remarkable and unprecedented Indian achievement. We cannot say for sure whether, when, or how the Cold War would have ended were it not for Gorbachev's initiatives to dismantle the authoritarian state from the seat of its power or what would have been the fate of the 70,000 nuclear warheads, most of them armed and on active alert status at that time. No matter how limited the data or unreliable the facts, we are left with the irrefutable conclusion that a single man or woman – one single human being – has the power

to change the whole world. This constitutes the irrefutable fact or law number one in what we may very loosely term 'the science of individuality'.

And as a corollary to this principle, what is true on the macro scale of nations and the globe is also true at the micro level of the local community and at all the levels and fields in between. Thus, a century after the American Civil War abolished slavery in the USA, a middle-aged black woman named Rosa Parks launched without fanfare the American Civil Rights Movement in Montgomery, Alabama by refusing to move to the back of the bus. Her action stirred thousands of other blacks in the southern states to reject passive submission to unconstitutional discrimination and demand enforcement of rights that had been constitutionally guaranteed by the 13th Amendment in 1865. More remarkably, in doing so she was walking in the footsteps of another individual, Mahatma Gandhi, who had performed a similar feat decades before, 8000 miles away, who in turn credited for his inspiration a Jewish mystic in Palestine who lived 2000 years earlier.

The same story repeats at hundreds of levels in hundreds of fields. In another article in this issue, Olof Tandberg narrates the remarkable rise of Abdus Salam from an ancient Pakistani village to win the 1979 Nobel Prize in Physics.[2] Unsatisfied with such a modest achievement, he went on to found the International Center for Theoretical Physics and the Third World Academy of Science in Trieste, which have promoted the growth and development of science throughout the developing world. Those who ever saw the twinkling light of radiating goodness in Salam's eyes can only marvel at the mystery of individuality and its infinite human capacity for accomplishment.

This first law of individuality suggests a final consummation for humanity as a whole. Just imagine the wondrous creativity, superabundant prosperity, incessant marvels of discovery and endless delights of self-discovery in a world teeming with remarkable individuals. Emerging Individuality and highest human accomplishment proceed hand in hand.

## Social Conformity

One principle does not make a science. At the other end of the spectrum, we are forced to recognize that what we call individuality is more an exception than a rule in human affairs. While it may be true that every human being has a unique set of fingerprints, most human characteristics and behaviors readily lend themselves for analysis into recognizable types and categories. Like our animal ancestors, human beings seem to have much more in common than they do in difference. So much so that like most scientists before the birth of Complexity Science, we may be tempted to acknowledge only the similarities and disregard or explain away the differences as noisy or incomplete data. So, let us acknowledge as law number two that individuality is an exception, rather than a rule, even in those who appear to be most individualistic in their thought or behavior.

We need not rely solely on scanty anthropological evidence or even the historical written record in support of this principle, for even today we find that the similarities in thought, beliefs, values, manners, behaviors, skills, attitudes, opinion, sentiments, preference and even forms of creativity closely resemble one another. So too, when change occurs in any of these perceptible expressions of personality, it tends to occur over entire populations. We see that tendency today in the conflict between mental values of rationality and vital value of

conformity, which Lee Smolin describes in *The Trouble with Physics,* where he attributes the almost complete dominance of string theory in theoretical physics to a prevailing instinct for social conformity within the scientific community, rather than to rational choice. Similarly, the global contagion in financial markets that followed the subprime mortgage debacle in 2008, the shifting popularity of Republican US presidential nominees following each media report, the fact that the majority of Americans today actually believe that the USSR and USA fought against each other in World War II, and the current global consumer craze for the Apple i-Pad 3 are just a few indications of our strong penchant for collective conformity. Even Copernicus was at best an unwitting revolutionary who had no intention of challenging the authority of church or bible by putting forth his heliocentric theory of the universe. Martin Luther, who ranks among the most influential human beings of the past five centuries, blithely dismissed Copernicus as an "upstart astrologer", which reinforces the argument that individuality in one field does not necessarily extend to others.

## The Birth of Society

As a sociological phenomenon, the tendency to conformity and uniformity among human beings is readily understood. The formation of human communities demands it. The creation of society is another wonder of evolution that rivals that of the individual. The complexity of uniqueness in the one is matched by the complexity of multiplicity in the other. Society arises from an amorphous mass of instinctive human energies directed by a common awareness, organized by social structures and expressed through acquired skills and shared attitudes to produce the endless progression of advances ranging from the stone axe to the internet.

By a remarkable process that is yet to be fully fathomed, the undefined social organism organizes the raw energies of its unformed members into capacities for individual and collective accomplishment. At one end we see the early outlines forming a unified human community. At the other, we find growing signs of the emerging individual sprouting like a seed in the heart of every human being. The growth of society and the development of the individual are two expressions of a single process.

If this is indeed humanity's ultimate destiny, it has been far from apparent through the course of human history. Society is born by taming the raw energy of its individual members and subjecting it to rigorous constraints. The first necessity of every human collective is to secure itself from external threats, which necessitates compelling its members to fight and sacrifice themselves for the survival of the group. Second is the need to impose internal order by establishing a hierarchy of authority and compelling cooperation among its members through mechanisms that govern the distribution of decision-making and executive power. These structures need to be supported and extended to ensure conformity in every aspect of social life by means of common codes of conduct, customs, laws, shared beliefs and values. Failing these two conditions, no social group can achieve stability or long endure. No society tolerates dissent or variation in areas that may challenge the foundations of its authority or threaten its very survival.

The urge for social conformity extends beyond the necessities of survival. It arises from the native impulse for imitation within the subconscious collective desperately searching for greater knowledge and power. Conformity among members of early human communities was

inevitable in view of the dearth of knowledge, skill and technology that they possessed. Prior to the advent of agriculture about 10,000 years ago, the list of human inventions indicative of collective knowledge was indeed scanty – fire, pigments, spears, axes, glue, bow, flax cloth, flute, twisted rope, brick and pottery constitute a fairly comprehensive list. Study of the evolution of the stone axe over hundreds of thousands of years reveals very little variation and very slow development, suggesting that innovation was not a strong suit of early humanity. By comparison, we know that within fifty years of the invention of the printing press by Gutenberg, there were more than 2000 presses operating in 200 European cities and more than 20 million volumes had been published. By 1800, more than a billion books had been printed in Europe.[3] Something happened over the millennium to facilitate the rapid dissemination and proliferation of new ideas and new things. Society grows by imitating the new discoveries and fresh inventions of its most accomplished members. 'Spreads like wildfire' is a common phenomenon when it comes to new social innovations, especially those that have immediate and apparent practical utility, such as the steam engine, telegraph, light bulb, telephone, automobile, television, personal computer, Google's search engine, Facebook's social networking website, the iPod and iPhone.

Conformity and uniformity have been dominant characteristics of human communities throughout history. Thus, religious conversion may start slowly but once it commences it tends to continue until the new encompasses all or a large part of the entire society. The emergence of new beliefs based on the discoveries of science follows a similar pattern. Thus, we can almost count the number of people in the USA today who still reject the Darwinian theory of biological evolution – a larger number than one might expect, but well-defined by their conformity to an alternative belief system. Regardless of whether we examine the behavior of investors in the stock market, the confidence of the business community, attitudes toward deficit spending and tax cuts, scientific theories, social and cultural values, popular fashions or forms of entertainment, human beings still tend in most matters to move in groups and align themselves with the ideas and behaviors of their fellow members. If Individuality exists at all, it is certainly dwarfed in magnitude by commonality and conformity.

## Individual as Pioneer

If everyone imitates everyone else, how then can we account for the remarkable and unprecedented inventiveness of human society? Ironically, it is only through individual variation and rebellion against blind conformity that society advances. The very urge to impose uniform beliefs and behaviors on its members is a conservative tendency that stifles social vitality and progress. The rogue individual acts like a mutant gene to introduce new variations in human conduct, many of which are ultimately rejected as destructive or without value. But out of innumerable failures emerge the new ideas, inventions, discoveries and ways of life that drive social evolution.

The individual as pioneer, rebel, adventurer, discoverer, inventor, entrepreneur, social innovator, original thinker, creative artist, genius and saint continuously conceives and experiments afresh and spews forth on society an endless succession of new possibilities. The individual is the essential counterpart without whom no society can grow and develop. History recounts the thoughts and deeds of the most remarkable individuals whose impact becomes visible at the level of the nation or the world, but the same process occurs and

repeats itself at every level and in every field of society. Like the mountain peak which is supported by the entire mass of earth sitting beneath it, outstanding instances of individuality arise on the foundation of countless smaller and lesser expressions.

Warren Buffet displayed the characteristic American endowment for entrepreneurial individualism, when he began accumulating capital by delivering newspapers and selling used golf balls at the age of 10. Anna Hazare, a retired Indian soldier, revealed the enormous power of anonymous individuality in 2011 when he launched a nation-wide protest against corruption in India. India's Green Revolution was made possible by an individualistic spirit of innovation among peasant farmers who readily and rapidly adopted new hybrid varieties and cultivation methods for grain production.

Historically, the pioneer is usually confronted with condemnation, opposition or ridicule by a skeptical, suspicious or jealous social establishment reluctant to believe, accept or credit anyone with greater truth, knowledge or capacity. But, power attracts and the capacity for greater accomplishment is an irresistible attraction. Sooner or later, it leads others to imitate, reproduce and spread the pioneer's success throughout the community, until a time when the subconscious collective comes to recognize, admire and embrace the new, to organize and propagate it through public support or education, to convert innovation into established practice, to assimilate it as social institution and integrate it within its cultural values.

Historically, the individual and the collective are often juxtaposed as conflicting, contradictory forces engaged in perpetual battle – the individual's quest for freedom against the collective's imposition of social authority. This is a vast oversimplification. Most members of society crave for the security of conformity and thrive as anonymous members of the group. Every civilization that has survived and grown has done so by actively fostering and raising to leadership its most talented members.

The very nature of organization has an in-built tendency to become rigid, encrusted and resistant to change. There is indeed a recurring struggle of the collective to suppress and oppress, and of the individual to rebel, but these are best understood as imperfect tendencies of a still young, immature civilization struggling for the right formula. Wherever the collective succeeds too well in dominating its members, it declines and becomes decrepit. Wherever its members succeed too well in asserting their individual inclinations, society loses its strength and integrity, becomes weak and vulnerable to assimilation by more cohesive groups. Thus, the individual and the collective thrive best in a symbiotic relationship. The individual cannot survive without the support of the collective. The collective cannot grow, develop and evolve without the creative initiatives of its most conscious members. Orio Giarini explores the inherent tension between these apparently irreconcilable urges for certainty and freedom, conformity and individuality in his essay and dialogue "Secretariat of the Soul and Certainty".

## The Evolution of Individuality

Is individuality evolving? Historians denote several periods in the past that were characterized by an increasing tendency toward individualistic ideas and behaviors. Ancient Greece during the time of Plato, Aristotle and Socrates marked the emergence of mentality in the individual, when society came to accept and even actively encouraged differences of viewpoint and perspective as an essential ingredient for collective progress. This period

involved a turning inward, a shift from emphasis on the gods to emphasis on man himself, his own psychology, moral sense, conscience, intuition and individuality.[4] Within a very short period, principles of freedom, democratic governance, equality, the doctrine that any man can discover the truth for himself, the emphasis on individual character and ethical choice, the soul and individual salvation became predominant both in idea and practice. Oxford historian Isaiah Berlin denotes this birth of Greek individualism as one of the three great turning points in Western political theory.[5]

The Renaissance is a second obvious period in which the quest for individual expression rose to the fore, a topic explored by Augusto Forti in "*A History of the Individual in European Culture*". The revival of classical scholarship in the late middle ages after 1050 led to the rediscovery and extension of the principle of free mental inquiry so characteristic of Ancient Athens. Many factors supported this awakening – the spread of commerce and rise of a prosperous middle class, the growth of cities, the invention of the magnetic compass opening up oceanic navigation, the invention of the printing press which facilitated individual learning and the secularization of education, the impact of the Black Death which weakened feudalism and undermined the authority of the church, the shift from church dogma to individual faith and interpretations of the gospel, the idea of inner repentance, stress on individualized expression in various forms of art, the growing popularity of autobiography and notions of romantic love are among the prominent causes and characteristics of this period, which ranks among the most creative in human history. Here too, democracy bloomed among the small city-states of Italy, where aristocracy increasingly gave place to self-governing communities. Colin Morris ranks the discovery of the individual as one of the most important cultural developments of this period.[6]

The spread of education, democracy and scientific thought in subsequent centuries built on this creative out-flowering and established individuality as a more dominant, consistent theme. In "A Study of Individuality and Social Evolution in Literature", Janani Harish examines an early stage in the emergence of the modern individualized woman as depicted in English literature at the time of the French Revolution to illustrate the central role of the individual in the evolution of the society.

In *The Human Cycle*, Sri Aurobindo describes the Enlightenment as a quest to rediscover substantial truths of life, thought and action for both the individual and the collective, which had been obscured during the oppressive conventionalism of the early Middle Ages in Europe when literacy and education declined drastically, books were banned and burned, libraries shuttered and thoughtless adherence to established church dogma prevailed.[7] An age of Individualism, he argued, is a natural response to an age of deadening conventionalism in which social vitality is drained by rigid fixity of thought and behavior. A rationalistic, scientific, materialistic, utilitarian and individualistic age arose in an attempt to arrive at an objective and verifiable standard of truth and a quest for universal laws applicable to the governance of society.

What the European enlightenment achieved for the development of scientific thought among the elite, America achieved in the application of practical technology and social organization at all levels of society. The settling of America gave rise to new and unprecedented expressions of individuality and individualism. Millions fled to the New World in pursuit of freedom from poverty, the oppressive confinement of class and cultural

barriers, religious persecution and social discrimination. The pilgrims, founding fathers and pioneers that settled the American West left behind the security and stability of the Old World to discover and found a new one. They risked their lives in the quest for freedom. Abandoning the shelter of long established communities and cultural homogeneity, they explored, settled and developed a land in which even the most basic social support systems for protection, law and governance were lacking.

Independence of spirit and courage of self-reliance became essential for survival. Tolerance and respect for differences of thought, belief and behavior were imposed as a practical necessity. The vast open territory offered unprecedented opportunities for impoverished landless peasants to create prosperity for themselves and their descendants. Countless thousands arrived penniless and rose to middle class status in a matter of a few months. A sense of indomitable self-confidence and a can-do attitude were the natural product of their remarkable achievements. A scarcity of labor to farm a vast territory placed a premium value on the human being who often started off as a day laborer working on someone else's land or factory only to acquire his own farm or factory soon afterwards. Freedom became a fact of life first, a cherished constitutional right only afterwards. More than anything else, it is this characteristic faith and practical emphasis on the value, rights and potentials of the individual that have made America an icon and model which other peoples seek to emulate.

The psychological history of humanity recounts numerous periods in which individuality suddenly blossoms forth and then tends to recede from prominence. It also reveals a progressive trend. Each subsequent age of individualism has built on those that preceded it to establish firmer foundations in thought, principle, law and practice. Each has spread to encompass a wider geographic area and to spill over beyond finite boundaries in space and time. Intellectual and political freedom in Greece matured as economic, social and artistic freedom in Renaissance Europe did. Freedom of thought in Europe matured as freedom of religious tolerance, economic advancement, educational opportunity and social equality in America. Freedom and creativity for a small elite have gradually been extended until they permeate the entire society.

Winston Nagan's article "Individuality, Humanism and Human Rights" illustrates with reference to recent events in Tunisia the seminal role of the individual in making micro-level value demands on society that ultimately determine the social process, the formation of law and the recognition of human rights. Human rights are recognized because individuals demand them.

We live today in a period, which is in many ways a culmination and fulfillment of these earlier periods. For the first time the phenomenon of individuality is no longer confined to a nation or region. The aspiration for freedom and human rights has become universal in principle if not yet in practice. In recent decades, the principles and practice of democracy have spread around the world, education has moved toward universalization, human rights of every citizen are acknowledged, at least on paper. Never before has the single person possessed so much freedom of thought and action, equality of social status and treatment under law, protection and support from the community against various forms of discrimination and persecution.

## Social and Human Capital

The historical evolution of individuality offers essential insights into the process of social development. Society is an ocean of human energies in constant motion. The power of society for accomplishment depends on its capacity to direct and channel those energies to achieve its goals. Ideas, beliefs, values, aspirations and goals are the means it uses to give direction to those energies. In earlier times, the dominant direction may have been adherence to religious dogma, military conquest, expansion of empire or the discovery of new lands and untold wealth overseas. Usually, this urge was embodied in the thoughts and actions of a small ruling elite, such as the top three percent of European aristocracy that monopolized positions of political power, religious authority and military leadership in the 18th century. Today, it is embodied in the quest of people everywhere at all levels of the population for more education, greater economic opportunity, better healthcare, longer life, access to modern comforts and conveniences, higher social status, and assured security during years of retirement. The unprecedented significance of this percolation of aspiration down through all levels of society is what Harlan Cleveland so perceptively termed "the revolution of rising expectations". People everywhere are awake and aspiring. The first minimum condition for the emergence of individuality has become a near universal fact.

Social organization is the mechanism devised for conversion of this awakened energy into power for social accomplishment. In modern times that organization assumes myriad shapes and forms, as in the institutions of democracy, rule of law, codified human rights, universal education and professional training, scientific research and experimentation, industrial production, domestic and international markets, banking and financial markets, transport and tourism, communication, media, recreation, entertainment and countless others. Each new right granted or enforced, each additional member educated or skill imparted, each new inspiring idea, invention, discovery and social innovation generates greater confidence and releases fresh energy among members of the society. Each new organizational mechanism increases the speed, reach and efficiency of the social whole.

Markets and money have played a unique role in the development of social capital by awakening the aspirations and unleashing the energies of those who hitherto had little incentive to produce more than they could utilize for their own consumption. Market is a ubiquitous institution that enhances the productivity and opportunities available to every member of society. The opening of access to markets provided each producer with an incentive to maximize production so that it could be converted into a far wider range of products and services beyond his means to generate by self-production. In other words, *the market empowers and expands the opportunities of each member of society.* Each new entrant to the market multiplies the opportunities of other buyers and sellers, thereby exponentially enhancing the potential of the collective. Money acts as catalyst to vastly facilitate, accelerate and extend the reach of markets from the local to the global level. Each financial transaction increases trust, thereby multiplying the propensity to transact and generate wealth. So too, money facilitates the conversion of any form of social power into every other form, thereby increasing the strands of relationship and density of interactions that bind people and activities into a social whole.

Each new advance multiplies the social potential. Each new organizational link converts

more potential into usable social capital. Together, all these form the warp and weft of the social organization that constitutes the complex web of social relationships and interactions between people, places, activities, and institutions that account for the incredible productivity of contemporary life. The enormous size, scope and complexity of the Internet are only the most visible or easily conceivable forms in which this web manifests. Taken together in its totality and integrality, this constitutes an enormous source of power for accomplishment. It is the Social Capital on which all our collective activities are based. In "Economics of Dignity", Saša Popović & Ljudmila Popović stress the vital linkage between interpersonal relations and the development of human capital and show how the internet is opening up unprecedented opportunities for wealth generation through closer relationships between people.

As our brief historical narrative makes evident, political freedom and social equality are essential conditions for the full emergence of the individual and social progress. Periods characterized by high levels of individualism have been those of the greatest intellectual creativity and rapid economic expansion, in which dynamic, talented people enjoy the freedom to explore and express new ideas, acquire wealth and social status unimpeded by religious, social or cultural barriers. These periods have also been ones in which access to education has been most widely prevalent. Those societies whose social institutions most actively support the development of its individual members – its Human Capital – tend to become the most productive and creative ones. Thus, social capital and human capital go together. Social capital develops by the contribution of pioneering individuals. Individuality spreads and flourishes in circumstances where social capital is designed and attuned to accord greatest support for the full development and freedom of expression for human capital. Individuality grows and emerges out of this creative caldron at the intersection where social capital and human capital meet, harmonize, integrate with one another for the mutual development of one another and for the further evolution of the whole humanity.

Education plays a unique role in the development of human capital and the full potential of the individual. It is a social system devised to pass on to future generations in a concentrated and abridged form the essence of human experience as organized and codified knowledge. Once regarded primarily as a luxury for aristocrats, churchmen and law-makers, education has come to be regarded as an essential possession for success in modern society. Yet, all too often, the mechanical methods of rote memorization and training applied based on discipline and compulsion resemble forms of religious indoctrination developed a millennium earlier. Important new ideas about education and upbringing of children gained prominence at the turn of the 20th century but have yet to be adopted by the mainstream educational system.[8] The new movement was founded on the discovery that education should base itself on respect for the psychology of each individual child and have as its aim the free organic growth and fullest development of the child's innate intellectual, moral, aesthetic and practical capacities. Replacing mechanical methods and external pressure administered by the instructor with efforts to awaken the curiosity and release the energy of each student, the new education seeks to discover and bring forth the latent potential of each child for creative individuality. At its best, *education becomes society's most conscious and effective method for fostering the evolutionary emergence of individuality.*

## Individuality vs. Individualism

Before concluding, we need pause to more clearly define our terms. Every science depends on sound definitions; and a science of individuality, if it is to ever exist, is in desperate need of a sound linguistic basis. Thus, before the ambiguity of contemporary English completely obscures the intended meaning of this paper, let us try to arrive at some agreed upon terminology for further discussion.

We face a formidable linguistic hurdle in English because the word 'individual' is commonly applied to three quite distinct though related phenomenon. On one hand, the word 'individual' means single or separate, so it is employed with reference to a single member of any group as a synonym for one person. In earlier periods, the term 'man' was frequently used to denote any person, but this usage has declined with growing sensitivity regarding gender bias in language.

On the other hand, individuality is also used in a quite opposite sense to identify a single human being with striking or unique characteristics. The first use applies to all members of a group without discrimination, the second only to those who stand out as different. Therefore, to avoid confusion we propose to confine our usage of 'individual' to those who embody unusual or unique characteristics, and 'person' or 'human being' to a single member of the group.

But, our linguistic problems are not yet fully resolved, for we need also to contend with the ambiguity of the words 'individuality' and 'individualism', terms which are often confused or regarded as synonymous. 'Individualism' is used to denote a form of independence and self-reliance and a social theory that favors freedom of action for individuals over collective or state control. However, the term usually carries the connotation of self-centeredness of feeling or conduct, i.e. selfishness and egoism.

The term 'individuality' is used with reference to distinctive qualities or characteristics, a meaning much closer to what we apply to the term 'individual'; however, it also has overlapping connotations. This ambiguity is complicated by the fact that the process by which individuals differentiate themselves from the collective has been commonly associated in history with an increasing sense of separateness from others leading to exaggerated self-centeredness, selfishness and egoism.

Though language confuses, we maintain that a valid distinction does exist between the person capable of unique and original action and one who simply pursues his own self-interest without regard for its impact on the community. Indeed, nearly all the instances of individuality cited earlier are of persons who sublimated their own personal interests to make remarkable contributions to humanity as a whole, in most cases consciously and intentionally. Therefore, we need to apply both care and patience in examining the similarities and differences between these phenomena.

The essence and highest expression of individuality envisioned by this study are human expressions of creativity and uniqueness by which single human beings make an extraordinary contribution to the advancement of civilization. Our hypothesis is confirmed by eminent psychologists such as Jung, Maslow and Rogers who describe mature individuality as an advanced stage in the evolution of human personality, a development of consciousness

made possible in freedom by which an undifferentiated member of the collective develops a unique personality with distinguishing qualities and values and a marked sense of social responsibility as well as individual responsibility. It is a stage which few may reach but all possess in potential and can tend toward. This advanced stage in the development of individuality is variously referred to as self-realization, self-actualization or individuation, which is employed in the rest of this paper.

Our historical narrative has thus far failed to adequately distinguish between individuality as a subjective stage of psychological maturity and individualism as an objective stage of social evolution. Indeed, the two have been so inextricably interlinked that it may prove very difficult to do so. However, that does not mean the two are one and the same or inseparable. The essential core of individuality or individuation is the subjective psychological development of the person, which is greatly facilitated by supportive objective conditions of freedom and equality. The essence of Individualism is a social stage in which self-pursuit by each member takes precedence over conformity to the collective. Individuality is the meeting place between the objective and subjective dimensions, the social and the psychological, between inner growth and outer capacity for accomplishment. *Individuality is the point of self-expression of humanity's infinite spiritual potential in a finite world.*

Given that human social evolution has started off with a strong emphasis on the domination of the collective, it may well be that a strong assertion of the individual declaring his independence and even his utter disregard for the collective may well be regarded as a necessary and inevitable reaction, an immature stage in social evolution before a proper balance can be achieved between freedom for subjective individual development and expression and harmonious relationships between each and every member of a free society.

We may still be very far from achieving this balanced goal, but it is important to emphasize the difference in principle. Otherwise, there may be a tendency to decry and reject the development of individuality as inimical to social peace, justice and harmony. Indeed such a view point is markedly alive today. Self-aggrandizing egoism is not a new phenomenon, but it assumes more visible and vulgar manifestations today and the threat it poses to the future of humanity is more apparent and more serious than ever before. Yet, in rejecting the excesses of individualism, we must be careful not to reject the finest flower of human evolution, the mature individual. For the testimony of eminent psychologists suggests that a truly creative, harmonious society can only be achieved by encouraging and accelerating the process of individuation in all its members.

## Infinite Complexity

Benoît Mandelbrot discovered the complexity of finite forms (fractals) which demonstrate infinite repetitive patterns of self-similarity on any scale and can be described by complex quadratic polynomial equations. The human individual is an infinitesimal microcosm of society, which contains in potential all the acquired capacities of the society and displays repetitive patterns of self-similarity combined with expressions of uniqueness, which defy description and explanation. The individual is a finite form that conceals within itself infinite potential, which grows, develops and evolves along multiple dimensions without apparent end or limit. By will and aspiration, it develops in the quality and intensity of its

energy at the physical, vital-emotional, mental and spiritual levels. By ideas, ideals, values, opinions, attitudes and beliefs, it develops in the quality and intensity of the force with which it directs that energy toward different goals. By the organization of its external conduct, conscious opinions and beliefs, deeper values of character, expansive aspects of personality, it channels and converts the force of energy into mental, emotional and physical power for accomplishment. Through its skills and attitudes, it expresses that organized power in all its outer actions in relation to the world around it. In "Evolution of Individuality", Ashok Natarajan explores a few of these deeper dimensions of individual complexity.

Society is that world and it contains within it all the same dimensions and levels, multiplied in its complexity by the myriad individuals who constitute its members. Thus, we have an infinitely complex instrument of human personality relating to an infinitely complex field of social opportunities through myriad forms of mental, social and physical action. Through the interaction of countless individuals with the social collective, the collective directs its energy for survival and preservation of what it has achieved in the past. It seeks also to expand and multiply those achievements in space and time, to encompass larger areas, more people and new activities, as in the way education is presently being propagated and extended at all levels in an effort to saturate all members of society with this rich social endowment.

Simultaneously, society has an incessant urge to develop its structures at higher levels, as commerce, education and countless other activities are now being extended globally through the internet. Thus, Stanford University professor Sebastian Thrun recently resigned his job teaching artificial intelligence to 200 university students in order to establish a free, internet-based course on search engine design in which more than 500,000 students have enrolled globally.[9] Finally, society also seeks to continuously evolve and manifest higher levels of consciousness, as evidenced by the shift from the near-animal existence of hunter gatherers into the sedentary agrarian civilization 10,000 years ago, or in the expansion of world view from the village to the city, the city to the nation and the nation to the global community, or in the sense of global consciousness and human unity gradually emerging through the internet.

Thus, as society evolves, individuality appears in multiple grades, as Ivo Šlaus and I explored in an article entitled "Human Capital and Sustainability".[10] The physical individual is characterized by a pronounced capacity for self-reliance and physical independence of action, traits essential for survival of early immigrants to America and for their westward movement across the frontier. Vital-social attributes of individuality manifest as a sense of self-respect and a capacity to decide without reference to pressures for social conformity and a capacity to attempt in society what others have not hitherto attempted or succeeded in accomplishing, attributes common among inventors, entrepreneurs and social innovators who attempt what others have not so far dared to attempt. Mental characteristics of individuality emerge when scientists, artists and thinkers dare to depart from established ideas and beliefs, to espouse what others deny or ridicule. Spiritual attributes of individuality reveal in those who dare to imagine, aspire for, strive for and live by values and levels of perfection beyond those presently endorsed or admired by humanity.

## Multiplying Uniqueness

So far, the world knows of very few great individuals and countless anonymous followers.

There was a time in past centuries when anyone who could read or write was considered a scholar or even a genius. Knowledge was scarce, education was rare. In 1861, only a single PhD was awarded in the entire USA. A century later, some 30,000 new PhDs were awarded in a single year. Today, the number exceeds 50,000. Similarly, the number of talented musicians, painters, thinkers, jurists, scientists, and inventors was extremely limited in all countries in the past. Today, there are most talented and accomplished individuals in every major city than there were in entire countries a century ago. The demand for freedom and human rights, the universalization of education, the compelling attraction of urban life, the awakening of social aspirations globally, the rising spirit of entrepreneurship in all continents, the breaking down of class barriers, the increasing social mobility, the unprecedented spread of prosperity, the urgent quest for better health, the thirst of all for comforts and conveniences which until recently were considered the privilege of a few – are these not distant signs of a general awakening and the emergence of a greater human potential?

Could it be that through the cumulative development of social capital and cultural experience humanity is on its way to discovering the formula for an infinite multiplication of individual capacity and uniqueness? Perhaps that was what the French Utopian Socialist Charles Fourier (1772-1837) had in mind when he envisioned a future in which there would be 37 million poets equal to Homer, 37 million mathematicians equal to Newton, and 37 million dramatists equal to Molière. Was he an inverted dreamer or did he really see the future?

An overarching objective of this investigation is to determine whether a strategy can be devised by which we can consciously increase the range, incidence, varieties and degrees of creative individuality and more effectively harness its untold creative power for the betterment of all humankind.

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# Abdus Salam (1926–1996)
## More Than a Nobel Laureate

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*Abstract:*

*Mohammad Husain Abdus Salam was born in 1926 at Jhang, a farming village in Punjab, to parents of the Ahmadiyya-Moslem faith. At the age of 14, Abdus scored the highest marks ever given by the Matriculation Examiner in Punjab. In 1946, he received a scholarship for studies at Cambridge University, UK. As his English was limited, Salam got hold of an Oxford Dictionary and studied "proper English" A-Z. He was an extremely speedy reader with a remarkable memory.[*]*

*In two years' time, Abdus achieved a double First Class Honours in Mathematics and Physics. In 1951, he presented his thesis in the field of Quantum Electrodynamics, which was well received.*

*Back in Pakistan, Salam expressed the frustration and isolation he experienced due to lack of contacts with other scholars thus: "There must be possibilities for a scientist to remain in his own land, meet people working on the same subject, and learn new ideas. We must change the image of Science and Technology in our own countries!"*

*In order to "drain the brain drain", Abdus Salam founded two important scientific bodies:*

1) *An International Centre for Theoretical Physics (ICTP), established in 1968 to promote training and research in physical sciences in the developing nations. Abdus recalled his own isolation when trying to do scientific research in his home country: "A theoretical physicist must be able to talk, to discuss, to shout, if needed." ICTP attracted talented brains from the developing world. As science writer Behrman wrote, the pupils here do not devise ways to build better mousetraps but learn to think in terms of original solutions.*

2) *In 1983, Abdus Salam invited a group of eminent scientists to form an Academy of Sciences for the Developing World, TWAS, with the aim to recognize, support and promote excellence in scientific research in the developing countries. Today, the Academy has more than 1,000 members from 90 nations.*

*Abdus Salam was asked by the Islamabad government to become Pakistan's first Advisor on Science. In four years, Salam built Pakistan's scientific infrastructure. He became Director of SUPARCO (the Space and Upper Atmosphere Commission), developed theoretical physics and was responsible for Pakistan's National Research for Nuclear Energy and Weapons Program.*

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[*]40 years later, during a bus-ride in Italy, I asked him of the meaning of the word "coinage" He smiled and said:" I read once in a Dictionary that you coin words by putting them together and make a new term. Take "Pakistan" ˜- it is a coinage representing the different territories of the Republic – Punjab, Afghan Border States, Kashmir, Sind, and Baluchistan...

*Salam was invited by the Imperial College in London to set up a Department of Theoretical Physics. His unorthodox research paved the way for his getting the Nobel Prize in 1979 for "the theory of the unified weak and electromagnetic interaction between elementary particles." He turned the award into a fund in the memory of his parents in order to help the brightest and most deserving pre-university students from schools in the district of Jhang, Punjab, Pakistan.*

*Abdus Salam's credo that "Scientific thoughts are the common heritage of all Mankind" has survived even after his death in 1996.*

This essay starts with some reflections on a young man's photo. This is a "cabinet photo" which in British India was used as a supplement to a visiting card. It is dated 1940 and depicts a serious young man from the small Pakistani village town of Jhang in an agricultural district on the Indian subcontinent, established around 2,000 BC as a low-yielding agricultural area close to the fortress city of Lahore, which once defended Punjab from the wild Afghans and the looting Moguls. Lahore, with its beautiful Shalimar gardens, is the town which Ramjet Singh wanted to turn into a capital for his followers, the Sikhs, but failed. It was in Lahore that Mirza Ghulam became the prophet of the Muslim movement Ahmadiyya. In Lahore, the native army once rebelled against the European garrison and was brutally crushed by the British. Since then, the place has developed into a learned town with public libraries and research institutes and also has the oldest University in Pakistan. The violent riots against the Ahmadiyya Muslims hadn't come yet by 1940.

The boy in the cabinet photo is 14 years of age. His glasses laden face looks at you with an anticipating, thin smile. In colonial India, society was sharply divided by colour, class, caste, religion and profession. Each group vigorously defended their headwear which demarcated them from other social groups.

The black turban and the white dress are indicative of his being an Ahmadiyya Muslim and his knowledge of the Koran. His name is Mohammad Husain Abdus Salam.

Most probably, the photo would have been taken by a professional photographer in a Lahore studio. Salam's friend might have wanted to have the photos distributed for celebration purposes since at the age of 14 Salam scored the highest marks ever given by the Matriculation Examiner in Punjab. Abdus was the proud recipient of a full scholarship from the Government College. Equally proud was his father who was a pious farmer, teacher and educational officer in the Department of Education.

Abdus recalled during a meeting about a lecture given by his teacher in his remote country school at Jhang. The teacher started with the subject of gravity, "Now, we have all heard of gravity." Then he went on to say, "there is a force called electricity, but it doesn't live here, it lives in the capital town of Lahore, 100 miles to the East." The teacher had just heard of nuclear power and so he said, "It only exists in Europe." Abdus added, "This is how it was to be taught Natural Sciences in a developing country!"

Abdus' scholarship opened the doors to the Government College in Lahore. He started studying Urdu and English literature. But, Mathematics eventually became his major. Because of Abdus' strong interest in humanism his mentor suggested that he become a teacher of the English Language. However, Abdus held on to mathematics and wrote a paper on Shrinivas

Ramanujan (1887 – 1920), the outstanding Indian mathematician from Tamil Nadu, and his studies on elliptic functions and analytical theory of numbers.

Abdus Salam graduated with an M.A. in Mathematics. He completed a B.A. in Mathematics in 1944 and was looking for a job. His father urged him to apply for the Civil Services Examination for getting a job at the Indian Railway sector, "The Lifeline of the nation". Luckily, for the development of Theoretical Physics in the developing world perhaps, Abdus' application was turned down because he failed an optical test.

Two years later, Abdus Salam received a scholarship to Cambridge in the UK. Five scholarships to study abroad were available in 1946 at the Punjab Administration. Abdus adds: "If I had not gone that year, I would not have been able to go to Cambridge at all; the following year there was the partition of British India and the scholarships of 1947 simply disappeared". In 1947, Abdus received a ticket for one of the steamers filled with British families leaving before India became independent. For a non-experienced student, travelling from the country town of Jhang in British India to the University of Cambridge in the UK was a long journey in more than one sense. But Abdus remarked that he made friends on the way.

Once joining St John's College, one of the oldest colleges in Cambridge, Abdus went to the library in order to borrow a copy of the Concise Oxford Dictionary in order to learn "proper English" from A to Z.

His tutor, Fred Hoyle, perhaps one of the 20th century's greatest scientific gurus, advised the young Abdus to stay at St. John's and go into advanced laboratory research. But Abdus did not have the patience for long experiments in the laboratory.

Abdus' good grades, warm personality and popularity among fellow students rendered him the "Johnian" award, an award which Abdus valued highly. He received double First Class Honours in Mathematics and Physics as well as the Smith's prize for outstanding pre-doctoral contributions in Physics. Abdus was also asked to solve a seemingly unsolvable problem proposed by Hideki Yukawa, a Nobel laureate of 1949 from Kyoto Imperial University. The problem concerned Yukawa's prediction of the existence of mesons on the basis of theoretical work on nuclear forces. Salam found a solution which attracted the Nobel laureates Paul Dirac and Hans Albert Bethe. The doors to the Cavendish Laboratory were open to him.

Salam managed to renew his scholarship and began his doctorate studies at Cavendish. In 1951, he presented his thesis in theoretical physics in the field of Quantum Electrodynamics which was well received. In the same year, Abdus also received "the Adam Prize" - one of the oldest and most prestigious awards at Cambridge. The prize is named after the mathematician John C Adams who discovered the "blue" planet Neptune using mathematical calculations in 1846. Salam returned to Punjab in order to take up the position of chair of Mathematics at a university in Pakistan. When Salam proposed to update the curriculum in the university by offering courses in quantum mechanics, his suggestions were not accepted by the Vice-Chancellor. So, Abdus decided to give evening courses in Quantum Mechanics outside the framework of the regular curriculum. His new ideas were met with mixed feelings from the scientific community at the University. Salam's idea to establish a new research institute in Lahore was rejected. He accepted a fellowship from PAS (the Pakistan Academy of Sciences) in Islamabad in 1953, where he became one of the first academicians in Pakistan.

Abdus writes: "As a physicist in Pakistan I was completely isolated. It was very difficult to get scientific journals and keep in touch with my subject. I had to leave my country to remain a physicist. It is the lack of contacts with other physicists that is the biggest curse of being a scientist in a developing country. You simply do not have the funds, the opportunities, which those from richer countries enjoy as a matter of course. There are no communities of people thinking and working in the same field… There must be possibilities for scientists to remain in their own country, meet people working on the same subject, and learn new ideas. You must return to your own country with a mission to change the image of science and technology in your own country."

It is noteworthy that some 15 years later, Abdus Salam founded ICTP, the International Centre for Theoretical Physics in Trieste for young scientists from the developing world. After serious religious unrest in Punjab, the Pakistani President declared martial law in the region of Lahore in 1953. A series of vicious pogroms had taken place against the Ahmadiyya Muslim Jaamaat, to which the Salam family belonged. Orthodox Muslims did not consider the Ahmadiyyas to be "real" Muslims because they adopted parts from other religions and considered Jesus Christ to be one of their prophets. The Ahmadiyyas had also adopted the St. Thomas Christians' claim that Jesus Christ survived his crucifixion and had travelled to Kashmir where his tomb is located. To some orthodox Muslims these legends were evil information and dangerous blasphemy. Religious tension in northeast India had started again. The situation became tense in Punjab with persecution and oppression.

A law was passed by the Pakistani Parliament announcing that the Ahmadiyya Muslim Community was a Non-Muslim sect. The Salam family urged Abdus to leave. He left for England. In 1957, Abdus was invited to the Imperial College in London to set up a new Department of Theoretical Physics. His advanced methods of research were noticed not only by theoretical physicists. Leading researchers joined Abdus's department, including scientists such as Stephen Weinberg, Thom Kibble, Gerald Guaraní, C.R. Hagen and John Warred.

At the age of 33, Abdus became one of the youngest Fellows ever to be elected to become a member of the prestigious Royal Society, London. At this time, he received a fellowship in the University of Princeton, New Jersey, where he met Robert Oppenheimer, the Scientific Director of the Manhattan Project. They discussed the possibility of establishing a foundation for electrodynamics. At Princeton, Abdus Salam happened to meet Albert Einstein who asked him what kind of research he was doing. Abdus told him that he was working on the renormalization theory. Einstein answered he was not interested in that. After a few moments Einstein asked, "Have you studied my relativity theory?" Salam replied: "I am not interested in that."

In 1979, Abdus Salam received the Nobel Prize in Physics. He shared the Prize with colleagues Sheldon Glashow and Stephen Weinberg for their contribution to "the unified weak and electromagnetic interaction between elementary particles, including inter alia the prediction of the weak neutral current."

In his acceptance speech after receiving his Nobel Prize in Stockholm, Abdul Salam quoted from the Koran: "Thou serest not, in creation of the All-merciful, any imperfection. Return thy gaze, serest thou any fissure. Then return thy gaze, again and again. Thy gaze,

Comes back to thee dazzled." "This," said Abdus, "is the faith of all physicists; the deeper we seek, the more our wonder is excited, the more the dazzlement for our gaze."

Abdus Salam turned his Nobel award into a fund in the memory of his parents Mohammad and Hajjis Hussain to help the brightest and most deserving pre-university students from schools in the district of Jhang, Punjab.

Salam had a habit of quickly jotting down anything of interest – a good joke, a new formula or plain gossip. He scribbled down his thoughts on whatever was handy – a bit of paper, a receipt, a cab note, loose sheets from a notebook or the back of an old poster or an envelope. Abdus was invited by the Queen to Buckingham Palace. After the banquet and when all guests were gone, Abdus returned, rang the bell and said: "Could I please have my napkin from the banquet table? I have some notes written on it."

In 1980, Salam received an official invitation from Islamabad to become Pakistan's First Advisor on Science. He accepted. From 1981 – 1984, Abdus built Pakistan's scientific infrastructure. The Government appointed him to become director of SUPARCO (the Space and Upper Atmosphere Commission) and head of the TPG (Theoretical Physics Group). Abdus Salam was asked to develop Pakistan's nuclear energy and weapons programme. He linked this scientific activity to IAEA, the UN International Atomic Energy Agency Promoting Safe and Peaceful use of Atomic Energy in Vienna. Salam was awarded the IAEA Atoms for Peace medal.

Born into the Ahmadiyya Muslim Community, Abdus had integrated faith into his life and research. Abdus explains, "The Holy Quran enjoins us all to reflect on the verities of Allah's created laws of nature. However, our generation has been privileged to glimpse that part of His design is a bounty and a grace for which I render thanks with a humble heart."

## The ICTP and TWAS

It was noted by Italian scientists that some administration buildings were not used in the town of Trieste – an old seaport, founded by the Romans in 100 BC at the Adriatic Sea. This gave Abdus Salam the opportunity to create his idea, the International Centre for Theoretical Physics (ICTP). Abdus Salam negotiated with the Italian government and managed to lease the buildings for a symbolic sum. In 1968, the autonomous international Institute was established under the aegis of IAEA, UNESCO and the Italian Government.

The guidelines for ICTP promote training and research in the mathematical and physical sciences in developing nations. During the planning period, Abdus Salam underlined that he wanted to confront the issues of isolation and brain drain which continued to dim the prospects for excellence in science in the developing world. ICTP promotes science in the developing nations of the world and gives Associateship to young scientists, especially physicists.

Each year, ICTP hosts some 6,000 scientists. In cooperation with Italian science institutions, links have been built for a great number of associates, lecturers, students and university leaders.

The well known Science writer Daniel Behrman noted that the ICTP in Trieste had become a "World Rendezvous for Physicists". Behrman writes, "The pursuit of theoretical

physics cannot be justified in terms of its immediate applications. It is the most philosophical of sciences for it is connected with the study of the very nature of matter. As such, it attracts the most talented brains of the developing world, the Einsteins, the Fermis, the Niels Bohrs of tomorrow and the day after. They will not devise ways to build better mousetraps but they learn to think in terms of original solutions."

The Trieste centre attracted top scientists from all over the world. The main equipments - chalks and blackboards - produced more than 130 scientific papers a year in the field of elementary particles such as "High-energy physics, field theory, nuclear physics, solid state physics and plasma physics".

The gist of developing ICTP was Abdus' own experience of the isolation he suffered in Pakistan. "You can understand why I feel so grateful to Allah for giving me this opportunity in such a mysterious way that I was able to conduct research at a time when there was no visible means of doing so. When in Pakistan I was the only theoretical physicist in the country. The nearest colleague was in Bombay… You have no idea of what that can be like. A theoretical physicist has got to be able to talk, to discuss, to shout if needed."

Abdus was a strong believer that "...scientific thought is the common heritage of mankind". He added that "developing nations need to help themselves and invest in their own scientists to boost development and reduce the gap between the Global South and the Global North, thus contributing to a more peaceful world."

And so the concept of the Third World Academy of Sciences (TWAS) was conceived and in 1983, Abdus Salam invited a group of eminent scientists from all over the world to work out the guidelines for the Academy:

- To recognize, support and promote excellence in scientific research in the South.

- To provide promising scientists in the South with research facilities necessary for the advancement of their work.

- To facilitate contacts between individual scientists and institutions in the South.

- To encourage South-North cooperation between individuals and centers of scholarship.

- To promote scientific research on major problems of developing countries.

The Academy was officially opened in Trieste in 1985 by the Secretary General of the UN. (The name of the Academy was later change to the Academy of Sciences for the developing world).

In 2011, TWAS had close to 1,000 members from 90 nations. During a TWAS meeting in 1985, I happened to sit beside Abdus and asked him: "What does coinage mean?" He looked a bit surprised, but smiled and said: "Oh dear me – it means to put words together and coin a new word – like the word "Pakistan", and scribbled with his pen, "Look here: Punjab, Afghan border states, Kashmir, Sind and Baluchistan make Pakistan. You invent a new word by putting old words together. I know because I was born into that coinage!" Abdus smiled and we started to discuss the agenda for the day.

On another occasion, when we met in the Royal Swedish Academy of Sciences, Abdus Salam seemed to be in a tranquil mood. I asked him, "Do you have a credo, Abdus?" He looked at me and said, "My Credo? It is the same as yesterday and tomorrow. Scientific thought is the common heritage of mankind." Abdus asked about the founder of the Academy. I told him about the world-famous botanist Carl Linnaeus (1707-1778) who through his script "Systema Naturae" changed the world of Botany. When I said that Linnaeus' global classification of plants had philosophical and religious roots, Abdus became very interested. I showed him a reprint of the "Systema Naturae" and added that in the 1700s the relation between God-Nature-Man was a divine triangle for many of leading European scientists – among them Isaac Newton (1642 -1727). Latin was the language of Science and Linnaeus writes in the preface to Systema Naturae, "Creationis telluris est Gloria Dei ex opera Naturae per Hominem solum" which in English means "The Creation of Earth is the Glory of God, as seen from the works of Nature by Man alone." Linneus believed that the study of Nature reveals the Divine Order of God's Creation. It was his assignment to write "Systema Naturae", a classification of Nature which was to reveal the Order of the Universe. Linnaeus was firmly convinced that when he was wandering to classify flowers for his herbarium, the Creator was sitting on his shoulders. "Linnaeus' thoughts are my thoughts" Abdus smiled and gave me his Quran, saying, "This is for you and your friends."

In November 1996, Abdus Salam peacefully died in Oxford at the centre of his family at the age of 70. Abdus Salam was a member of The World Academy of Art and Science (WAAS).

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# Evolution of Individuality

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## *Abstract:*

*The concept of Individuality takes its rightful place at the far or highest end of a progression that begins externally, superficially with social conformity of manners and proceeds through successive stages of behavior, character and personality to elevate and internalize itself as the basis for knowledge, decision and action. As it proceeds, the person outgrows the need to conform to society and develops his own internal standards, ultimately arriving at a unique, original center of creative individuality. Human beings consist of physical, vital-emotional, mental and spiritual centers of consciousness. Each of the stages of personality development from manners to individuality has its own version in each of these centers. For example, Individuality can be physical, vital, mental or spiritual. So also about the other four concepts. Individualism and individuation are terms that denote the person in varying relationship with the collective society of which he is a part. Individualism may have an egoistic version, while individuation is non-egoistic and personal.*

*Man in his evolution originally identified with the tribe or small group from which he sprang. Tribes are linked by language to a wide social unit termed nationality. Culture is a deeper binding force, as Indian culture binds together 17 nationalities and English culture unites the English, Welsh, and Scots. The tribe develops in two directions: inwardly to develop the person, the individual, the egoistic, selfish person; outwardly to develop the nationality bound by language and culture. The Individual has the potential to overcome the predominant power of the nation-state and play a great role in determining the course of the 21st century, which may even come to be called the century of the Individual, as the 20th is called the century of the Common Man.*

*Man develops powers at the level of manners, behaviour, character, personality and Individuality. Powers of manners have a social function in relation to other people, which can readily change since its power does not arise from inner convictions. Behaviour draws its power from one's beliefs, which also can be changed by the individual if he chooses. Social success is determined by manners, while personal accomplishment in less weighty matters is determined by behaviour. Character is deeper still, not under one's control. It is expressed by the intensity of a person's temperament, known as swabhava in Indian culture, which is not under the person's conscious control. The Powers of character ultimately determine one's lasting accomplishment. Manners, behaviour, character are universally seen in all. Personality is a higher endowment, a subtle extension of character developed by a few. Power acquired by personality is transferable from one profession to another, while that of character is effective only in the profession or field in which it is acquired.*

*Individuality is not acquired either from one's profession or field of engagement. It is influenced by characteristics such as selfishness, self-giving, impersonality, the effects of*

*education, society and religion, as well as local habits, influences, biological and social needs. For example, early pioneers from Europe to America were compelled to be entirely self-reliant, since there was no supportive social infrastructure to nurture and protect. In a country of vast land and an atmosphere free from class structure and inherited authority, physical individuality developed with its characteristic "can do" attitude that has produced great wealth and still distinguishes the Americans even today from the emotionally secure family structure prevalent in Asia which nurtures dependence and the more class conscious conformity prevalent in Europe.*

The history of human civilization is set forth in the archeological and historical record. It reveals an unending progression of increasing power for accomplishment. But the process which has generated this power remains a mystery. The natural tendency has been to attribute the advances in civilization to ingenious inventions and great discoveries, but these are themselves the results of the process, as much as the cause. It is human beings who invent, discover and create. The secret of social progress lies in understanding the process by which that creative capacity develops, organizes and expresses as social power. The progressive evolution of individuality lies at the heart of this process.

From the time mankind mastered the use of fire about a million years ago until the dawn of agricultural revolution, the pace of progress was so slow that we can count with our fingers the number of innovations made in the long intervening period. Though man is an intelligent and innovative species, he was apparently very poor at transmitting his discoveries to his descendants. As society has progressed, it has perfected the capacity for transmitting the fund of acquired knowledge and capacities to its members. With successive developments of language, writing and printing, the pace of social progress quickened considerably, abridging millennia into centuries. Education is the organization by which society transmits the accumulated knowledge of its past experience to future generations, so that the youth of today can start from where previous generations left off, without needing to repeat past experiences and discoveries over and over again. In the last 200 years, the spread of formal education has abridged the process from centuries to decades. Now the Internet has exponentially increased the speed of knowledge transmission, compressing decades into years, years into months.

The development of Social and Human Capital has been the primary means for the remarkable evolution of civilization. The individual human being is the catalyst that unleashes their remarkable power for collective progress.

## Social and Human Capital

Social capital develops by organization. Organization links, relates and coordinates previously separate and independent activities over space and time. It creates an invisible web of relationships that enhances the reach, scope, productivity and power of people, places and activities by integrating them effectively within the larger social whole.

Language, writing, roads, markets, cities, money, navigation, printing, education and the Internet are major landmarks in the evolution of social organization. Each has multiplied the effectiveness of various social activities and exponentially enhanced the overall power of society for accomplishment. Language enhanced the capacity of individuals to relate to one another for self-defense, food gathering, reproduction, and raising off-spring, a basic

requirement for the formation of the family, village, tribe and larger social units. Markets provided subsistence farmers an incentive to produce more than they could themselves consume and to exchange the surplus for other desirable products. Cities enabled the division and diversification of human activities into specialized functions, thereby enhancing productivity, efficiency, and skill development, vastly enriching the range of goods and services, and creating central hubs linking and coordinating the activities of outlying rural areas with distant trading centers.

With each such advance, the cumulative power of society for accomplishment expanded in geometric progression. Thus, the introduction of Hindu numerals, double-entry bookkeeping and bills of exchange in Italy between the $12^{th}$ and $14^{th}$ centuries spurred a commercial revolution in trans-European trade and ushered in the Renaissance. An isolated $19^{th}$ century French village of subsistence farmers was transformed into a prosperous community within a few years after a road was laid linking the village with regional towns and overseas export markets for its wine. These are isolated incidents of a process repeated countless ways and times in space and time to enhance the capacity for relationship which is the source of the productive power of society. The number and complexity of the interactions between functions, activities, systems, ideas, cultural values, customs, laws, skills, instruments and technologies defy enumeration and measurement. Together, they constitute the intricately woven threads of the organized fabric of society.

The inherent power of this social organization is unquestionable – it is infinite power for human accomplishment. In earlier times, it formed the basis for the formation of urban centers, city-states, kingdoms and vast empires. It made possible extraordinary achievements – the pyramids, Taj Mahal, trans-oceanic trade, universities, inter-continental railways, universal primary education, scientific societies, newspapers, democracy, the Industrial Revolution and the Internet. The magnitude of that power can be illustrated in a single event. Fifty years ago, US President Kennedy announced the objective of landing a man on the moon and bringing him back within a decade, and 55,000 scientific, commercial and governmental organizations coordinated their activities to achieve it a year ahead of schedule.

The evolution of social organization has its counterpart in the evolution of the organization of human psychology giving rise to a complementary power in each member of society. This psychological organization constitutes the essence of Human Capital. The two forms of capital are mutually dependent. Social capital is the means and essential requirement for development of capabilities in society's individual members. Human capital is the means and essential requirement for the development of capabilities in the collective. Together, they constitute the warp and weft of the social evolutionary process.

As biological evolution occurs as the result of a complex interaction between genetic and environmental factors, so also, the evolution of each member of the collective involves a complex interaction between psychological and social factors. Social capital encompasses the cumulative experience, knowledge and accomplishments of the collective which constitute the social environment for the nurturing and development of individuality. Human capital is the source of the personal aspirations, values, characteristics, skills and other capacities latent as human potential. Through their interaction, what society has acquired socially, the individual acquires personally.

The progressive enhancement of the physical, social and mental capabilities of the individual is a landmark in the psychological history of humanity. As in society, each successive enhancement in knowledge, skill and values multiplies the overall effectiveness of the individual member and enhances the capacity of the collective. While the invention of writing and numeracy dates back millennia, the acquisition of these capacities by the average human being is a very recent attainment. While modern educational systems were established in most countries more than a century ago, until recent decades relatively few people felt the need to acquire more than a rudimentary education. Around 1950, only 5 percent of adults in economically advanced countries enrolled in higher educational programs.[1] When a hundred new high schools were opened in Tamil Nadu in the 1950s, most had to be converted into primary schools because there were too few parents willing to enroll their children.

The average citizen today knows far more about health and medicine than even a leading physician in 1800, which is one reason for the tremendous gains in life expectancy over the past two centuries. The knowledge, skill and managerial capabilities which are common endowments at all levels of society today far exceed what was prevalent among the ruling elite of European society in the past. Imagine trying to operate a modern factory with the staff employed by Henry Ford in 1910, to operate a nuclear submarine with the officers and men of a modern navy with the crews that sailed under Admiral Nelson in 1805, or conduct scientific research at a leading university today with the faculty of Cambridge at the time of Newton.

## Human Aspiration

While knowledge and skills are the most tangible, easily measurable components of human capital, the true source of its power lies in the aspirations, motives and values that govern human endeavor. It is humbling to realize that virtually everything we possess is a gift to us from society. Every idea, belief, value, invention, social organization – logic, language, numbers, ethics, all forms of art, systems, social institutions, culture, money, cell phones and computers – everything is part of the inheritance bequeathed to us by our collective ancestry and rightly belongs to us all. Everything, except perhaps, the human aspiration which is our very own. We are each born with it, grow by it and accomplish in the measure that spark of aspiration rises and seeks for accomplishment as knowledge, power, relationship, artistic creativity, enjoyment and in many other ways.

Aspiration is the essence of our humanity and our individuality. Aspiration generates the ever increasing demand for higher levels of comfort, convenience, knowledge, mastery and enjoyment. Two centuries ago, European women were regarded as the legal property of their husbands, considered unintelligent and incapable of a productive role in society or politics. Their attainment of equal rights and status in Western society has been driven by an aspiration and demand for self-development and self-expression suppressed through much of human history. While slavery was legally abolished in America in 1865, the movement that won for the blacks effective equality under law emerged only in the 1950s. Although the freedom movement in India was launched by Sri Aurobindo's call for complete independence in 1904, it took decades to awaken the demand for freedom in the hearts of the people. Once that aspiration had been released, no force on earth could contain it. Everywhere we find that the enormous progress of humanity of the past two centuries resulted from the awakening and assertion of this aspiration in people to whom it had been long denied.

Aspiration is the source of the *revolution of rising expectations* which Harlan Cleveland first perceived sixty years ago spreading through the newly liberated countries of Asia and releasing the surge of energy that has led to their resurgence over the past half century. It is also the source of what Jasjit Singh termed the *revolution in human affairs* – the growing tension between rising aspirations and rising levels of social inequality – which poses at once an increasing threat to social stability and an unparalleled opportunity for more rapid social progress. Human aspiration generates the ever increasing demand for greater freedom, rights, respect and equality; for higher levels of comfort, convenience, mastery and enjoyment. Society establishes the minimum standard to be acquired by all its members. The urge to excel comes from the awakened and aspiring individual.

## The Individual

The sheer power of human personality stands out in stark relief in its most developed form, the mature individual. Here we find almost baffling instances in which a single person has changed the course of history or led an evolutionary leap for humanity. The mental accomplishments of Socrates or Newton, the courageous leadership of Churchill and Gandhi, the inventiveness of Edison and Jobs, the inspired idealism of Jean Monet, Martin Luther King and Nelson Mandela give us a rare glimpse into the limitless power of psychological organization at its heights.

The individual is the pinnacle of this evolutionary psychological process. The individual represents the highest stage in the organization of human personality. The individual is also the catalyst for all the advances of the social collective. Creative pioneering individuals are the source of the new ideas, discoveries, inventions and organizations that enable society to enhance its power for defense, production, transport, communication, trade, education, governance, social welfare and entertainment.

The Internet is the most visible peak of the long evolutionary advance of civilization, visible at least in its expressions, though the structural foundations on which it is based include all the previous levels of language, mathematics, knowledge, organization and technology dating back millennia. The individual is the invisible peak of humanity's evolutionary advance – invisible because the psychological evolution of human consciousness is entirely a subtle, subjective process, visible only to the inward vision and manifest only in its most outward results. Countless research papers and books have been written tracing advances in technology and social organization through each minute stage of their development and charting their dissemination from their points of origin to the rest of humanity. Thus, evidence suggests the earliest written language dates back about 5000 years, paper was developed in China before the 2nd century BC, the Hindu numerals and decimal point appeared in India during the 9th century AD and spread to Europe via Arabia 300 years later, and so forth. But when it comes to the psychological evolution of humanity, we have neither fossil record nor artifact to delineate the path of our progress. We are compelled to rely on a more subjective and introspective form of evidence to discern its process, direction and future potential.

The development of Individuality is the key to human progress in the past, present and future. All the great discoveries and developments of the past have resulted from the creative, divergent, original inspirations and actions of individual members of the group who

dared to think and act differently than others, to discover, invent and innovate new ideas, tools, technologies, organizations and activities that have been subsequently adopted by the collective and incorporated into the mainstream of social existence.

The individual is the pioneer in humanity's evolutionary social advance. When society faces crisis and people don't know what to do, it looks to pioneering individuals for original ideas and innovative solutions. Yet, at the same time, the willingness and capacity of the social collective to respond positively and accept new ideas and ways of life depend ultimately on the extent to which the seeds of individuality have been born in each member of society. Thus, India's Green Revolution could never have been such a rapid and resounding success had it not been for the aspiration and self-confidence of millions of illiterate farmers who readily embraced new crops and new production methods to raise India's food production by 50% and achieve food self-sufficiency for the country within five years. The organization of society is the lock which must be opened for humanity to advance. The organization of personality is the key to that lock. The individual is the smith who must fashion that key.

Individuality is the seed from which human aspiration arises initially as a tiny spark, then evolves progressively in strength into a firm will for personal accomplishment and at its highest into a flame for the collective advancement of humanity. To comprehend the nature of that seed and the means by which it evolves, it is necessary to trace the process of its development from its most rudimentary origins in primitive man. Unlike trees which grow from inside out, adding layer upon layer to the core as years go by, human personality grows from outside in, from the most external and superficial physical capacities to the deepest and most profound psychological endowments. Manners and behavior are its most visible external expressions. Individuality represents its inmost core. The evolution of individuality is a complex social and psychological process that is as yet poorly understood. This paper examines one line of its development.

## Conformity and Differentiation

Historically, formation of the collective takes precedent over development of individuality. The survival and success of the group always mattered more than the success and happiness of any individual. Early human communities, like their animal ancestors, were characterized by a very high degree of conformity and imposed uniformity: conformity in terms of behavior, uniformity in terms of beliefs and values. There was a compelling necessity to impose authority and enforce obedience to ensure the survival and defense of the group against internal dissension and external threat. The imposition of authority limited the range of knowledge, skills, capacities and activities found in primitive communities; so also it constrained the specialization of knowledge and skill and individual variation in values, beliefs and behaviors. Sharing of a common language is essential for internal communications. Obedience to a chain of command is vital for coordinated action in the face of threats.

Over time, society begins to differentiate itself into specialized fields and functions, each requiring a specific set of knowledge and skills for its performance and providing greater latitude for individual variation and achievement. At the same time, it organizes the energies and movements of the community into well-defined acts, activities, systems, organizations,

and social institutions, which eventually mature into a distinguishing set of established beliefs and behaviors known as culture. Culture differentiates one group of human beings from another linguistically, religiously and socially as specialization of work differentiates one from another functionally and occupationally.

Differing environmental and social conditions lead to further variations between communities and the gradual emergence of larger social groupings – villages, townships, city states, kingdoms, nations and empires. Each stage of expansion increases the range of the collective pool of ideas, values, beliefs, attitudes, skills and behaviors, while imposing new standards of commonality and uniformity. Thus, today the entire world shares common standards for reckoning dates, time, measuring distance and facilitating exchange of currencies. We also maintain universally applicable measures for weight, temperature, pressure and voltage, and uniform protocols for cell phone and internet communications. Social capital consists of the rapidly growing body of infrastructure, technological and organizational capabilities, laws and regulation, knowledge and shared values which contribute to the progressive enhancement of society's power for communication, production, transportation, education, governance and so forth. Social capital generates *social power* for accomplishment.

As the social power of the collective develops, the capacity of each member of society develops in parallel. By a process of internalization, social capacities enhance the psychological capacities of the members of society. The interaction between them generates the dynamic field in which individuality is born. Several stages can be discerned in the psychological development of each person, which can be denoted as Manners, Behavior, Character, Personality and Individuality. In order to understand the significance of Individuality as a stage in human psychological development, it is necessary to first examine the earlier stages of which it is the ultimate result and the process governing transition from one stage to another.

## Manners

The first necessity for the formation of any social grouping is the development of authority to which all members of the group submit – the physical prowess of a military leader or feudal lord, the divine right of a monarch, the spiritual authority of a religious leader, or the administrative and political powers of an elected government. Social cohesion necessitates adherence by its members to a code of conduct. Members of society respond differently to the pressure for conformity. Some acquire only the minimum conduct demanded. Others seek to consciously mold their actions into a form that is acceptable and pleasing to others. Manners represent a superficial, stylized set of formal behaviors deemed appropriate among members of the society signifying their acceptance of a common social standard. Manners are a social arrangement that facilitates smooth interactions between different people, irrespective of what the person actually thinks or feels.

This most superficial form of social conduct so often taken for granted is laden with power, a power most evident in its absence when people refuse to display overt signs of their willingness to understand one another, cooperate and act in the common interests of all parties. The formal manners of diplomacy made possible an evolution of international

relations from the battle field to the conference table and ultimately the UN General Assembly. A breakdown in negotiations has often led to war. A breakdown in parliamentary protocol signals paralysis of the legislature. The absence of respect for lower classes was once the hallmark of European aristocracy. Intolerance with other religions and races was the basis for untouchability, anti-semitism, and apartheid. Modern school education is impossible in situations where students refuse to listen quietly to the instructor.

Imposition of standards of conduct by society is of limited power unless or until the members of society themselves come to endorse and internalize the standards of their own free will. The courtesy extended to listen to the views of one's opponent, no matter how far at variance with one's own, is the basis for parliamentary democratic proceedings. The willingness to listen quietly and patiently to new ideas and theories at variance with one's own was an essential condition for the founding of the Royal Society and the spread of scientific associations throughout Europe. The courtesy extended to customers is an essential characteristic of the modern marketplace. Sears rose from a regional mail order house into the largest retailer in the world after it introduced a policy that guaranteed customer satisfaction, regardless of the cost to the company. Respect for neighbors and fellow travellers irrespective of class, caste, religion and ethnic origin is a relatively recent characteristic essential for the harmonious functioning of modern society. Society no longer sanctions the physical abuse of wives by their husbands or children by parents or teachers. American whites can no longer demand that blacks ride in the back of the bus. Nor can upper caste Hindus refuse to work in establishments with other castes. Novelist Anthony Trollope depicts the cutthroat competition for patients between physicians, a conduct that would be deemed highly unprofessional and unrespectable by today's standards. In today's knowledge-based service economy where the human resource is prized as invaluable, the courtesy extended to employees has reversed the traditional atmosphere of confrontation with employers.

Modern society accomplishes so much today because average citizens follow the instructions of the police without compulsion, voluntarily obey the laws and rules established by government, declare their incomes and pay taxes, respect the rights of other citizens, drive in the correct lane, refrain from littering, dress appropriately, and so forth. Students listen quietly and do not disrupt the class. Scientists follow experimental procedures rigorously and report research findings factually. Shopkeepers are courteous and customers pay for what they carry from the store. There are, of course, ample exceptions to the norm, but wherever the exceptions are prevalent, the capacity of society for accomplishment is seriously impaired.

Manners are a superficial code of conduct without which even minimum transactions in society would be difficult, inefficient and far less frequent than otherwise. Imagine the chaos on modern city streets and highways without traffic rules or an international credit card system where few care to pay their bills on time. Though the attainment is rudimentary, it generates an enormous power for accomplishment by the collective. It may also provide an enormous advantage to individuals who acquire the expected manners in greater degree than others. Thus, members of parliament have become famed for their skills in oratory, even when they were otherwise known to be far from ideal in either their beliefs or their actions. Intellectuals have risen to international fame for their superior capacity to listen politely and respectfully to others. In some instances, actors have become popular political leaders simply because the public mistook their skill in impersonating famous leaders in film for their actual

real life personalities and achievements. We may take these stylized social capabilities as natural and normal, but one need only witness instances in their absence to realize how great a power they bestow on the collective.

The outer organization of society is made possible by a corresponding advancement in the psychological organization of its members. Whereas other animals are endowed with the full range of instinctive behaviors required for their survival, human beings are born helpless and need to learn virtually everything needed for their survival. Alertness, self-control, action according to set procedure, punctuality in time, orderliness of arrangement are endowments only acquired by long experience, intensive training or compulsion. Introduction of the first traffic signal in a small South Indian town 40 years ago necessitated deployment of a platoon of traffic policeman for more than a month to impose order on unruly motorists, pedestrians and cyclists until the discipline of obeying the sequence of lights was acquired by the public. Lack of adherence to traffic rules is still a major source of road accidents worldwide. While the USA has about 15 times more motor vehicles than India, total deaths on the road each year are twice as high in India.

## Behavior

Manners are viewed mainly in terms of the external compliance with established code of conduct and there is little interest in finding out whether the compliance is given willingly or out of coercion. A military general does not ask his soldiers whether they are willing to fight or agree with his battle plans. He simply demands their obedience. However, great military leaders know that winning the minds and hearts of their troops is a vital determinate of successful military campaigns. In his novel *War and Peace*, Leo Tolstoy attributes the success of the vastly outnumbered and ill-equipped Russian troops over Napoleon's 800,000 strong trained troops to the deep and passionate conviction that inspired the Russian troops.

Behavior denotes the stage of personality development in which a person's external conduct is fully in conformity with his or her conscious convictions and beliefs. The distinction between external conformity and genuine conscious belief and intention is of vital importance to human accomplishment. As every successful professional knows from personal experience, the effectiveness of action derives its power directly from the understanding and attitude with which it is carried out. Recruitment specialists look beyond academic or work qualifications to the energy, confidence and determination of the candidate to perform. A student of below average intelligence with real curiosity and interest can master any subject by serious application, whereas an above average student who lacks those characteristics may perform poorly.

Reliability is an essential value for the development of society. Therefore, the collective comes to value those who speak what they believe to be true, keep their promises, and maintain their commitments. In centuries before written contracts were common or enforceable, a businessman's most precious possession was his word and reputation. If he could not be relied upon to do as he says, his prospects for advancement were severely limited. Leaders look for reliable confidantes who will tell them only what they know to be true, a quality all too rare in the psychological history of humanity wherever false words may serve as a temporary expedient, convenient excuse or source of advantage.

Modern society relies more on education and social conditioning of behavior than on force to achieve conformity among its members. Most citizens share a wide range of convictions and beliefs that generate psychological power for accomplishment. Where high standards of behavior are lacking, the efficiency of modern institutions is undermined by corruption among government officials, cheating in educational institutions, fraudulent business practices, substandard products and materials, falsification of documents and perjury in court, violation of contracts and treaties. The institution of bank lending would be impossible were it not for the genuine intention of most borrowers to repay their loans. In developing countries such as India, where this commitment is lacking among many farmers, efforts to extend bank credit are severely retarded. The global credit card system includes tens of thousands of banks, several billion card holders and trillions of dollars of transactions annually, yet losses due to credit card fraud average less than one tenth of a percent in value terms because control systems and strict enforcement are supported by well-established norms of behavior among card holders determined to maintain their good credit ratings.

## Character

Still, behavior is largely conformity-based, outer-directed to meet social requirements, and outer-motivated to satisfy others. Character is a deeper level of personality formation in which values and beliefs become so firmly embedded as values that they are no longer under a person's conscious volition. A small community of Chettiars in South India has amassed enormous wealth because it is widely known that the younger generation will never rest until it has discharged any financial obligations left by their parents. Indian Sikhs and Nepalese Gurkhas earned a reputation as the best soldiers in the British Indian Army because of their unwavering courage under fire. The Protestant Ethic of hard work, American capacity for self-reliance and confidence in their ability to solve any problem, Japanese sense of honor, Indian deference to age, and German passion for physical perfection are deeply seated values that constitute the foundation for individual and national accomplishment. The English exhibited their character of stoical, courageous determination to resist the Nazi invasion after all the rest of Europe had surrendered. India's successful Green Revolution resulted from one politician's strong conviction in the ability of Indian farmers to achieve food self-sufficiency.

The internalization of social values gives rise to deeply seated character formation. Wherever people attain high levels of achievement, strong character formation is the basis. Character provides for stability, reliability and unwavering consistency.

## Personality

Until 500 years ago, large portions of land on this planet remained unchartered, but now the world's land surfaces have been mapped down to the smallest details. Still the depths of the oceans, which constitute seventy-one percent of the earth's surface, remain unexplored and beyond lies the infinite reaches of the universe. Manners, behavior and character can be likened to the known continents. Personality and Individuality are dimensions of limitless magnitude that defy measurement.

Character is the capacity for accomplishment in any field arising from deeply entrenched values and attitudes that express as consistency and persistence. Personality is the capacity

to extend accomplishment from one field to many. If character makes possible the efficient manager, specialist or skilled artisan, personality makes possible the dynamic entrepreneur, polymath and Renaissance man.

Who could have imagined fifty years ago or even thirty the vast new realm of cyberspace, the first truly global social organization that would emerge apparently out of nowhere in the mid-1990s and exponentially multiplying the total power of world society for collective action and accomplishment? Personality can be likened to the totality of social potential out of which all new ideas, discoveries and inventions emerge. Personality is such a creative dimension of human consciousness out of which ideas, artistic creations and new inventions emerge, like the i-Pod, i-Phone and i-Pad of recent times. While character is denoted by a structure with limits, personality is a borderless realm where human imagination combines afresh and recreates.

## Individuality

Still, there lies something beyond which is original, unique, and limitless. It is a vibrant source of human aspiration, unconditioned by social norms, expectations and established values. It is our true unique identity, yet at the same time fully in harmony with others and the world around us. Individuality surpasses education, training, family upbringing and social inheritance, etc. It has an impersonal and universal dimension which makes us conscious of our unity with other human beings. It is that which gives some people a spark of originality that emboldens them to face any difficult situation, and recognizes no ultimate boundaries or barriers to human accomplishment. The shift to individuality is like the shift from religion to spirituality, from many people following the inspiration of one saint to every member following his own unique inspiration.

Uniqueness shorn of ego and conditioning becomes universality. Acting from that center, Churchill confidently announced that Britain would never surrender to Nazi Germany after the whole rest of Europe had meekly succumbed. It was that which enabled President Roosevelt, who assumed office in 1932, during the worst banking panic in US history, to tell the American people "we have nothing to fear but fear itself" and then to request them to redeposit their lifelong savings in the banks, thereby stopping the panic by the strength of his spoken word. It was that which gave Gandhi the strength to confront the might of the British Empire with nothing but Satyagraha and non-violence as his weapons. It was that which reportedly made Napoleon exclaim on seeing Goethe enter the room for the first time, "At last, a man!"

Individuality is the essence of manners, behavior, character and personality; it is that which remains after everything else has been accounted for. As fallen leaves are converted into rich organic compost, compressed and concentrated to form coal and oil, then finally transformed into the sparkling crystal purity of diamonds under extreme pressure, individuality represents the distilled universal essence of human capacity shorn of the limitations of physicality, locality and specificity arising from the time, place and circumstances under which it was acquired.

Internet is the social counterpart of individuality which is psychological. The Internet offers an infinite playing field through which one individual can literally change the world.

Individuality is the infinite psychological endowment which alone is capable of tapping the unlimited creative potential of the Internet. If personality gives rise to the entrepreneur who can found an enterprise to tap social opportunities, the individual who relates to the world around him creates his own original field of work and constitutes a complete enterprise in himself.

"The more subtle an instrument, the more powerful" is a truism of life. Thus, the famous dictum that the word is more powerful than the sword. Ideas are a subtle formation with the power to change the world. Universal values, which are ideals of perfection, have literally transformed the world over the past few centuries, bringing a level of freedom, social equality and opportunity to the common man which is unprecedented in human history. As cultural values possess the concentrated power of society for accomplishment, Individuality represents the distilled essence of power in each human being for highest accomplishment both for himself and for humanity. Society is the infinite, the individual is the infinitesimal. With the right strategy the individual can tap at any point and release the infinite power of the society.

## References

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We were pleased to introduce *ERUDITIO,* the new electronic journal of the World Academy of Art & Science, to you in June this year. We indicated then that this first issue of *ERUDITIO* is dedicated to the theme of individuality viewed from a multidisciplinary focus with implications of social consequences and policy possibilities. The papers emerged from a web seminar of the Academy on "Individuality" as well as a conference on "Humanities and the Contemporary World" organized by the Montenegrin Academy of Sciences and Arts in June. Issue 1 will eventually contain approximately sixteen (16) papers, which will be released in four (4) parts. Links are provided so that you may also access the individual papers online.

**Issue 1 – Part 2: Individuality**

Study of Individuality and Social Evolution in Literature
  - *by Janani Harish*
A History of the Individual in European Culture
  - *by Augusto Forti*
Individuality, Humanism & Human Rights
  - *by Winston Nagan and Aitza Haddad*
Secretariat of the Soul and Certainty
  - *by Orio Giarini*

**Janani Harish** has made an important contribution to the understanding of individuality with a focus on literature. She points out that scientific objectivity in the description of the individual in social process may miss many crucial psychological and social elements of consciousness, which are central to a deeper understanding of the dynamics of social change or social conflict. Harish presents a powerful case for the role of the narrative (in this instance, literature) for a much deeper understanding of the role of the narrative and its influence on social dynamics for good or evil. Her illustration, drawn from the work of Jane Austen, conventionally considered somewhat apolitical, demonstrates that Austen's deft use of the narrative is brilliantly deployed to explore the interplay of individual personality and class conscious barriers. Austen demonstrates that the individuation of love provides a tool for generating a degree of permeability in otherwise rigid class barriers. She implicitly suggests that in a state whose class lines are rigid there is the prospect of violent resistance, as in the example of France. Harish establishes the point that creative consciousness is a powerful tool when deployed in the form of an effective narrative.

**Augusto Forti** provides an insightful "history" of the individual in the context of European culture. He cautions us that cross culturally there are great similarities in the conception of individuality. He suggests this to implicitly endorse the view that the emergence of individuality in Europe is not necessarily an exclusive parochial European idea. Forti notes that the political culture and structure of European history, dominated by Greek and Roman ideas, recognize individuality only for the upper class: the aristocracy of philosophers, tyrants, priests, etc. In this sense, individuality was a matter limited to privileged individuals. The rest of humanity had no rights and no individuality. Forti sees the emergence of the notion of individuality as coming at the end of the Middle Ages, but recognizes that it needed a long incubation to become more universalized. Forti notes that changing forms of economic and craft activity generated experimental activity and experimental research and stresses the implications of this perspective, which drove curiosity and the emergence of science. He notes that this period coincided with the idea that commoners enjoy status as individuals. This may be analogous to the shift from feudalism to mercantilism (from status to contract). Forti notes that we

do not have an adequate explanation for the appearance of the machine, but that the machine and the human commune generated a concentration of labour and eventually associations and guilds of free individuals emerged. He draws attention to the idea of ownership, of the enterprise, and the bourgeois as a new social actor, the capitalist and the entrepreneur. Forti also notes the role of law in the enhancement of individuality, reflected in the English experience of the Magna Carta. Notwithstanding, Forti's conclusion is that in the West the individual is the progeny of the Renaissance.

**Winston P. Nagan and Aitza Haddad** in their paper bring in the dimension of human rights activism to the discourse on individuality. Their paper commences with a reference to a 26-year-old vegetable vendor, Mohamed Bouazizi, who took a stand against the Tunisian dictator and whose example spread throughout the Middle East, in what is known as the Arab Spring. Their paper draws attention to the importance of the individual as a stakeholder and activist in the promotion and defence of human rights. Their paper reminds us that the modern culture of human rights emerges as a consequence of conflict and struggle. Their paper then examines the role of individual agency in deepening and broadening the idea of justice, drawing on references to the most modern philosophical and economic theories of justice and dignity. The paper then identifies the foundational values reflected in the culture of human rights and explores the advocacy aspects of the processes of decision making that are meant to defend and promote individual activism for the realization of the goal of human dignity.

**Orio Giarini** has provided an original and unsettling insight into individuality choosing for his title the notion of a secretariat of the soul and its assumed place in a domain of certitude. What he is in effect getting at, is that the way we perceive and understand phenomena has been seduced by a version of science that no longer is defensible. To a large extent scientific truth from a Newtonian perspective represents stability, stasis, and equilibrium. Giarini is struck by the implications of the insights of quantum physics in which instability appears to be the rule and stability, the exception. A powerful concept, which has emerged from this field, is the uncertainty principle. The idea here is that if you observe the mass of a particle, you cannot know its motion. If you can measure its motion, you cannot know its mass. Orio Giarini is interested in the broader implications of uncertainty in human relations and individuality, which he has applied in his other writings to an analysis of economic and social theory. Some of his views were anticipated in the US in an intellectual movement known as the "Revolt against Formalism." It was also reflected in an approach to law known as "Legal Realism." At the back of this movement was the idea that law, like life, mirrors its element of stability and instability. Indeed, Harold D. Lasswell, a former President of WAAS, once suggested in the context of the social sciences that instability is the rule and stability, the exception. These are the challenges that touch on society and individuality which Giarini's piece explores.

**Winston P. Nagan**
**Trustee**
**Chair, Program Committee**
**Editor-in-Chief,** *Eruditio*

# Study of Individuality & Social Evolution in Literature

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*Abstract:*

*Science unravels the universe and empowers man. Technology has made life easier and is continuing to make the inconceivable possible. Social studies chart the evolution of society along various lines, and steer it towards greater progress. Apart from development and enjoyment of the aesthetic sensibilities, can the arts directly contribute to our understanding of life and our capacity to promote the progress of society?*

*Literature is a creative art, but it doesn't merely entertain. It reflects life. It portrays the values and aspirations of people and society, even the political atmosphere, economic situation, and social attitudes of the times. One good idea from a book can inspire individuals to acts of greatness. Powerful words can and do spark off revolutions. Inspiring stories can initiate progressive social movements or spur worldwide debate and reform. Fiction is often the forerunner of technological innovation, challenging man to actualize what he dreams of. Literature reflects history, elevates the present, and creates the future.Great literature is true to life. Great writers are seers of life who reveal through words subtle truths regarding human character and the character of life.*

*Literature provides unique insight into the process of evolution that governs the advance of society, civilization and culture. It offers greater depth of penetration than either historical narrative or biography because it can portray the subjective psychological and social consciousness of the characters and the times with far greater depth and realism. Therefore it can be a powerful complement to objective analysis of external institutions and events.*

This paper analyzes Jane Austen's famous novel Pride & Prejudice to derive insights into the relationship between the development of society, the development of human personality, and the role of the evolved individual in process of social advancement. Although often regarded as a comic romance, on examination we discover that it offers profound insights into the process of social development at the time of the French Revolution when dramatic changes in social values, attitudes and behaviors in England made possible peaceful evolutionary change through intermarriage between the classes in place of the violent revolutionby mass exterminations that took place on the other side of the English Channel.

Ever since man began drawing on the walls of caves, he has been expressing himself in a myriad ways. His canvas has changed beyond recognition, from stone toparchment to today's liquid crystal display. The medium has evolved and diversified, from primitive line art to exquisite paintings, from crude hieroglyphs to flowing poetry and prose. Regardless of the form or the medium, man's need to express himself has produced treasures of great value, of which the world's literature is a precious part.

The aesthetic value of literature is long established and appreciated. This paper is an attempt to focus on another of its values – the profound and subtle knowledge of life, society and human nature which is embedded in great fiction. That knowledge is of immense relevance to humanity today as it gropes to consciously shape its own future. And most valuable of all is the insight literature offers into the most remarkable and powerful of all human creations, the individual, and the role of the individual in the evolution of society.

Literature is not just a reflection of an author's fertile imagination. It reflects life. It portrays the values and aspirations of people and society, even the political atmosphere, economic situation, and social attitudes of the times. It provides unique insight into the process of evolution that governs the advance of society, civilization and culture. It offers greater depth of penetration because it can portray the subjective psychological and social consciousness of the characters and the times with far greater depth and realism than history or biography. Therefore it can be a powerful complement to objective analysis of external institutions and events.

Victor Hugo's portrayal of the spirit of revolution among the common people in France during the 1830s in *Les Misérables* and Anthony Trollope's portrayal of 19th century English elections, corruption and parliamentary politics in his *Palliser Series* can be a powerful complement to objective analysis of external social institutions and historical events of the time. There are ideas we understand about slavery from Harriet Stowe's *Uncle Tom's Cabin* and its abolition from Margaret Mitchell's *Gone With the Wind* that are difficult for a research report to depict or explain. Anna Sewell's *Black Beauty*, called the Uncle Tom's Cabin of the Horse, that describes the travails of work horses, resulted in legislation protecting the animals and changed the mindset of people regarding traditional and fashionable practices that caused much suffering to animals. The lives of the factory workers at the time of the industrial revolution that changed the face of England and the world have been well researched and documented. But Charles Dickens' portrayal of *David Copperfield* adds realism, a personal perspective of the situation, insights which a mere historical or statistical description cannot provide. Apart from being a story of adventure and romance, Alexander Dumas' *The Three Musketeers* is a meticulous historical and social record that paints a vivid picture of the close ties between religion and politics in France, the concentration of political power accompanying the rise of absolute monarchy, the extreme detachment between the extravagance of the wealthy and the poverty of the common people that later turned to revolution, and the machinations in military governance and international relations in the 17th century. Dumas' description of the precarious war-like situation between countries precipitated simply by petty, personal reasons is a lesson for the 21st century as well. Coming to a book of recent times, American intellectual Gene Sharp's writings on democracy and nonviolent action have beenthe inspiration and guiding force for revolutions that have ushered in change in many countries, most recently in Tunisia and Egypt. If a man writing in Boston can influence people and initiate progressive changes in the far corners of Burma, Bosnia and Zimbabwe, the role of literature does deserve serious attention.

One good idea from a book can inspire individuals to acts of greatness. Powerful words can and do spark off revolutions. Inspiring stories can initiate progressive social movements or spur worldwide debate and reform. Fiction is often the forerunner of technological innovation. Literature reflects history, elevates the present, and creates the future.

This paper analyzes the famous novel *Pride & Prejudice* to derive insights into the relationship between the development of society, the development of human personality, and the role of the evolved individual in the process of social advancement. *Pride and Prejudice*, written by the eighteenth century English novelist Jane Austen, is a comic romance set in rural England at the time of the French Revolution. It is the story of the Bennet couple and their five young daughters, and their quest for love, marriage and fulfillment in life. As the story traces the falling and rising fortunes of the Bennet girls, we discern the emergence of individuality in society, and its impact on the larger movements in the land.

The Industrial revolution had begun at that time. Across the Channel, the French revolution was raging. America had recently won her independence. But in stark contrast to such epochal eventstaking place all around, Austen's novel is a meticulous description of the pleasant and fairly uneventful country life, with its balls, dinners, proposals and weddings, marriage being the undercurrent of the entire story.

Not just the story, the entire lives of women at that time revolved around marriage. It was every girl's aim. It was her family's wish. It was society's expectation of her. She was supposed to find fulfillment only through marriage.The 19th century British philosopher John Stuart Milldescribed the situation succinctly: "Women are so brought up, as not to be able to subsist in the mere physical sense, without a man to keep them… as not to be able to protect themselves… without some man… to protect them… as to have no vocation or useful office to fulfill in the world, remaining single; and what little they are taught deserving the name useful, is chiefly what… will not come into actual use, unless nor until they are married. A single woman therefore is felt both by herself and others as a kind of excrescence on the surface of society, having no use or function or office there... a married woman is presumed to be a useful member of society unless there is evidence to the contrary; a single woman must establish… an individual claim." So, no woman was single by choice.

The eldest of the Bennet girls is twenty three and feels all the pressure to find a husband. Her mother Mrs. Bennet is more anxious. An unmarried girl was left with little choice. She could take up employment as a governess, and resign herself to a life of hard work and relative deprivation. Or she could stay dependent on the charity of her wealthier relatives. In either case, she became an old maid, an object of pity and derision.So Mrs. Bennet spends her every waking moment planning, dreaming or talking about her daughters' marriages.

Into such a society and family comes Elizabeth, the second Bennet daughter. Elizabeth is anintelligent and strong twenty one year old girl. She ispleasant, good natured and naturally cheerful. Nothing worries her much, not even the thought of marriage. In fact, she is not thinking about it at all.Her elder sister has been waiting patiently for years for a marriage proposal. Her friend, not willing to wait, takes things into her hands and elicits an offer. Her younger sister turns her back on decorum and elopes with her lover. Elizabeth differs from everyone else. To her, marriage is an ideal union of two individuals who love and respect each other. It is not a ritual to be gone through to secure one's place in society.She will not marry because her sisters and friends do, everyone around expects her to, or because it is considered to be the woman's destiny. If she finds a man of strength and values, one she can love, and who reciprocates her feelings, she will marry him. If she does not meet such a man, she will cheerfully remain single, undeterred by any associated physical hardship or society's

unflattering comments. At a time when a woman derived her sense of self worth solely from being the wife of a man, Elizabeth does not need the prefix of Mrs. to her name for her psychological survival.

Her quiet village is stirred to life by the arrival of two wealthy young gentlemen. These gentlemen arouse interest among the villagers, their bachelor status combined with their substantial incomeslargely contributing to the general interest. One of the young men, Fitzwilliam Darcy belongs to an old, wealthy family of considerable standing. He has had a privileged upbringing, and moves in the highest social circles in the land. In the midst of the villagers notches below him in the social scale, he looks upon them as savages. He is many times wealthier than they are; he owns an estate the likes of which they might never have set their eyes on. So he believes he is their superior. He is affronted when they talk to him. He vehemently rebuffs every attempt they make to socialize with him. When his friend Bingley falls in love with the eldest Bennet girl, he dissuades Bingley from the pursuit, finds fault with the girland dismisses her younger sister, Elizabeth, as being just tolerable.

Almost all the neighborhood is in awe of Darcy's rank and wealth, even if his pride is repelling. The villagers are flattered by his presence. Elizabeth's friend justifies the pride, a young man with family and fortune has the right to think highly of himself, she argues. At a ball, Darcy makes disparaging comments about country balls to his host, who is pleased to be simply spoken to by Darcy. Darcy insults Elizabeth's cousin, who is gratified to be addressed by the gentleman. Ladies with titles and inheritances angle for him, swallowing their pride and often, even self respect. They anticipate his every move, flatter him, compete for his attention, and go to ridiculous lengths to secure him. But Elizabeth, the village girl with no elegance or sophistication, little dowry, inferior connections, and hence less than promising prospects in the marriage market is neither impressed by Darcy's position nor intimidated by his demeanor. When the most distinguished man in the assembly calls her tolerable to look at and refuses to dance with her, Elizabeth laughs. She is not crushed at being rejected by a man of such consequence. She is not disappointed to lose the opportunity. She is not offended by the insult, she is not angry. She just laughs. Great strength is required to simply hold an opinion opposed to all society's. But greater still is the strength that can laugh at an insult, especially one coming from a man everyone around worships. In neighboring France, proclamations were passed, prisons stormed, church abolished and a gruesome weapon made part of the popular culture by decimating the monarchy and aristocracy – all to question the superiority of the higher classes and to demand equality. Here, Elizabeth accomplishes the same by laughing. What an impassioned and determined populace struggles to accomplish seems to be possible even for a single clear, strongindividual.Darcy, who is accustomed to being revered, desiredand fawned on, suddenly finds himself shorn of that aura of superiority he had been swathed in.

Earlier, Darcy had summarily rejected the villagers, looked down on their manners and taste, and felt time spent in such society a punishment. But sometime during those weary balls and tedious dinners, Darcy notices a pair of fine eyes in the face of a pretty girl. Her manners lack sophistication, her spontaneity is disconcerting, her family is vulgar. She has relatives in trade, residing in localities Darcy will not set foot in, and she has no wealth or status. But Darcy is unable to take his eyes off the girl he recently wrote off as barely tolerable, Elizabeth Bennet. The thought of his own feelings is unpalatable to him, and he tries

to tear himself away from her. He argues with himself that he belongs to higher society, and cannot, should not stoop to Elizabeth's level. Her family connections will sully his name and pollute his hallowed estate. Deeply in conflict with himself, Darcy leaves Elizabeth and her village. But the spark of a feeling for a girl from a lower class is born in the heart of an aristocrat. This spark grows into a flame, now flickering, now steady, in the haughty landowner, and then in the lively village girl, and after many a confrontation and flare up, leaps outside and blazes all around, bringing down artificial social edifices without physical destruction and ushering in a new social order.

However, at present, alarmed at being drawn to a girl in an inferior situation, Darcy is in conflict with himself. He thinks he has subdued his shameful feelings by going away from her village, but the winds of change blowing in the land carry him to his aunt's estate, when Elizabeth is visiting her cousin in the same neighborhood.

Over tea and dinner, during walks in the park and at church, Darcy gets to admire those fine eyes again and again. She is no longer just tolerable. He sees there is more to her than just the fineness of her eyes. She may lack the elegance that often accompanies the high born, but her good nature more than makes up for her demeanor. Her values raise her higher than ladies of rank. Their fine silk and lace hardly embellish them like Elizabeth's cheerfulness does her. The strength of her character is more valuable to Darcy than wealth or property. The suavity of the city-bred, the sophistication of the wealthy, their knowledge of French and Latin and social etiquette pale in comparison with her keen intelligence and ready wit. Darcy makes up his mind. Her family is still odious to him, his friends will be shocked by the match, his family will disapprove. His fine name and estate are at risk of being sullied by contact with the lower ranks. But Darcy knows he wants to marry Elizabeth Bennet. Ladies whom he considered worthy of his attention, those of rank and wealth, now seem like empty shells or depthless shadows next to the girl he has chosen.

The French aristocrats swore by their superiority. They took their high birth as a license to assert themselves. They jealously guarded their rank, and prevented any contamination from the lower levels. Oblivious of the simmering discontent and resentment around, they maintained their haughty ways till everything was forcibly snatched from them. Lost in their self glory, they lost all their power, riches, chateaux and lives. Darcy, by choosing to recognize value in one socially below him, in learning to love a girl outside his rank, gives up his ego, and saves his head.Figuratively, this individual act saves the collective head of the aristocracy from the guillotine.

Darcy changes his mind and proposes to Elizabeth. Elizabeth's response makes him change his mind some more. Elizabeth has seen ladies indefatigably trying to secure Darcy. She has heard about the splendor of his estate. She sees the esteem in which he is held by friends and family, simply by virtue of his position. But she does not go, lemming-like, after Darcy. She sets her standards by a different scale. She is not a fortune hunter. Her ideas of fortune and misfortune differ. No sum of money can induce her to overlook his pride and rudeness. She cannot marry the man who, she incorrectly believes, has separated his friend from her sister, thus causing much grief to both sides. His detestable nature far outweighs the grandeur of his family and estate, in Elizabeth's eyes. Without pondering over his proposal for second, she turns him down, and never once looks back wistfully at the material and social advantages she has thrown away.

It was a time when a respectable lady could not make money. In some cases, she could not even inherit it from her father. With the notable exception of the queen of England, an English woman's property was turned over to her husband after marriage. She was not allowed to live alone, or be the head of a household. She could not have a career. "Single women have a dreadful propensity for being poor", Jane Austen said. She would know, being unmarried and dependent on her brothers herself. Therefore marriage was very often the ambition of women, and the objective for their education and training. Girls were taught to sing, dance and play musical instruments, to catch the eye of eligible bachelors. Painting and sewing could embellish their accomplishments and improve their chances in the marriage market. "Work" for a woman today may mean a variety of tasks, but in Austen's time, it was short for 'needlework'. Academic knowledge in girls was frowned on. John Gregory, an eighteenth century Scottish moralist, in his famous publication, "Father's Legacy to his Daughters" in 1761 asks ladies to refrain from exposing any learning they might have, this would hurt their chances of attracting a husband. Lord Byron himself once said that women should read "nothing but books of piety and cookery". Some knowledge of language and arithmetic that would enable them to be efficient housekeepers was all the academic knowledge that was deemed necessary for the girl, since it was the future of every fortunate girl to marry and keep house. Elizabeth does sing, dance and play the piano very well, but not to snare a husband. Nor does she employ any artifice or ruse for the purpose. Not all her work involves needle and thread, she spends considerable time reading and improving her mind. Far from hiding her knowledge, she enjoys an intelligent conversation, seeks opportunities to practice her keen wit and loves challenges. She does not worry about putting off a man with her sense or lively impertinence. Not that she is irreverent or rebellious for the sake of being so, but she will not follow the herd instinct and conform to mindless conventions. Marriage, unlike for most other girls, is not the all in all for her. And if it requires any compromise of her values, is not worth bothering with. And hence her prompt rejection of the proposal from the man she believes to be arrogant and unethical.

Half a century later, when Charlotte Bronte wrote Jane Eyre, many considered it shocking that a woman, a governess, who is the protagonist in the book, should narrate the story in first person, in such a strong voice. The Quarterly Review wrote that Jane Eyre exemplified the „tone of mind and thought which has overthrown authority and violated every code human and divine." The divine code, man said, was that a woman, even a fictitious one, should be mild and meek. Seen alongside this, Elizabeth's tone of voice, and of thought was without doubt a very strong one. In a society that encourages young women to exercise gamesmanship instead of honesty, and trade off value against land and fortune to secure a marriage, Elizabeth valuing character higher than all social and material wealth is a statement of her individuality. This at a time when, according to Mary Poovey, an American cultural historian and literary critic, women were encouraged "to practice propriety instead of displaying their intelligence, to practice self-denial instead of cultivating self-assertion, and to think of themselves collectively, in terms of universals of the sex, instead of contemplating individual autonomy, talents, and capacities or rights".

Darcy who had been under the impression that Elizabeth, like all other girls, was waiting to receive attention from him, is more than stunned. He did not know a girl would have any grounds for rejecting a man of rank and fortune. Hearing her charges about his pride, which

he feels is natural, and behavior that seems only befitting, he learns for the first time that a man is more than his high birth, there are values higher than income, rank that he takes for a resplendent armor is turning out to be an illusion. For a man who from childhood had been encouraged to be proud and selfish, to be abused and rejected is a hard blow. But Darcy does not react summarily in anger. He does not give vent to his shock, humiliation and disappointment through bitter words or thoughts. Out of sheer sincerity and psychological strength, he gives his feelings a proper direction, using them to transform himself into a good human being valued for what he is independent of his family name.

Instead of reiterating his stance, surrounding himself with those who bow to him and fortifying his ego, Darcy sheds his negative traits. As his pride, arrogance and resentment leave him, better things occupy the space, he becomes humble, courteous, a real gentleman. He and Elizabeth part after the unsuccessful proposal, but providence brings them together again. Elizabeth is on a holiday with her aunt and uncle when they unexpectedly run into Darcy.

Darcy is now all that Elizabeth could ask for. Elizabeth has long since been Darcy's ideal wife. But unexpected news reaches them, Elizabeth's youngest sister has eloped with George Wickham,the son of Darcy's former employee, a thorough rogue who has tried more than once to betray his patron.

Darcy is at a crossroads now. He has declared his love for a girl from a social stratum much below his, and let go all his class consciousness and the pride stemming from it. He looks beyond the superficial and discerns higher values such as goodness and strength, both in himself and Elizabeth. But now her family has stooped to new depths, its name has been dragged through the mud. By any standards, the family has fallen, and related itself to his arch enemy. Should Darcy safeguard his family honor so carefully nurtured for years, maybe even for centuries by others before him, and disassociate himself with the Bennet family? Elizabeth can go nowhere, meet no one without her sister's infamy being whispered about behind her back. Did he not know that his aunt would disapprove in very strong language? Would not his friends snigger, and ladies stick up their noses at Elizabeth? Could he survive if that halo of propriety and superiority that had been hisis gone?

Darcy takes the way forward. He does not pause to worry about public opinion or conformity with societal norms. He loves Elizabeth, and sets off in search of her sister. He traces the runaway couple in an area in London he would not normally set foot in. Finding that Wickham does not intend to marry Elizabeth's sister, Darcy coaxes him to change his mind, offering to settle his debts, get him a job, and set up his house for him. Wickham is in dire straits, and decides to accept the lucrative bargain. Darcy arranges the wedding and personally takes care of every detail. He attends the wedding and makes sure that Wickham keeps his commitments. He saves Elizabeth's sister, and consequently, her family from ruin.

That Darcy saves the sister and the Bennets is plain enough. But in fact, in saving them and assisting his employee's son, Darcy has also saved himself. Anobility that is rigid and conceited, that refuses to budge an inch is eventually brought down from its pedestal rudely. The French nobleman who looked disdainfully at his tenant farmer eventually had to make way for the peasant, and pay for his disdain with his head. The English historian G M Trevelyan said that if the French nobility had been capable of playing cricket with their peasants, their chateaux would never have been burnt. It is on the record that on that July day in 1789

when the Bastille was stormed, some 300 miles away in Hampshire, the Earl of Winchelsea was playing cricket, and bowled out before he could score a single run, by an untitled man, William Bullen. Whether it was playing cricket with a commoner that saved the Earl's chateaux or not, it was definitely embracing his employee at some level that saved Darcy's future. Wickham had been trying to get at Darcy, but Darcy instead stoops to Wickham's level for a while. He sets Wickham free of his debts, takes care of his basic needs, and lends him some respectability. He takes on the task he is not obliged to do, and ensures that Wickham is permanently indebted to him. By assisting Wickham along his career and providing occasional monetary support, Darcy obliges Wickham to not burn bridges behind him. A potential threat has been blunted, and a foe converted into a harmless, though perhaps unwilling ally.

Some nobleman might have been willing to overlook difference in statusearlier. An aristocrat had probably liked a commoner before. An earl might have wanted to marry a girl without title. A lord might have wished to be friendly with his dependents. But the unwritten rules of society forbade them. But when one strong, bold individual dares to break those invisible bonds and takes a step, others naturally follow. This movement, this inter class marriage, this mingling of the ranks, initiated by Darcy, and emulated by others, homogenized the highly stratified and class-conscious society. And that eventually saved the whole country the bloodbath that neighboring France experienced. One individual, acting out of his highest values, can and does play a pivotal role in making history. In England, a peaceful social evolutionreplaced violent revolution.

Unconscious of these undercurrents, Darcy comes back to Elizabeth's village. Elizabeth feels gratitude, respect and love for him now. Jealous ladies who would like to marry Darcy try to turn him against Elizabeth, but heremains strong in his resolve. Darcy's noble aunt, alarmed at the threat from the lower ranks, attempts to bully Elizabeth into submission. She asks Elizabeth to stay within her sphere. But Elizabeth does not give in, she is strong in her conviction that one's sphere is not defined by the land one owns. She has seen proof of Darcy's love for her, she has come to love him deeply, and no one else's sense of right and wrong can influence her thought. And so when Darcy renews his suit, she accepts him readily, bringing to a happy, harmonious conclusion the tale of *Pride and Prejudice*.

Darcy, the heir of a distinguished family in England marries Elizabeth, the girl from the lower gentry. In the process, he accepts links with the trading class in Elizabeth's aunt and uncle. He mollifies the conservative aristocracy that can still not come to terms with the changing scenario, by healing the breach with his aunt later. He accommodates the needs of the lower ranks that are aspiring to rise, by making Wickham his brother in law, and replacing the simmering hostility with a truce. By looking beyond class, title, wealth and rank, and truly loving Elizabeth, Darcy starts off a trend that is mirrored in numerous incidents throughout the country, and eventually ushers in a peaceful social evolution in England.

This cheerful love story depicts England's subtle response to the French Revolution, and the peaceful progressive evolution that was effectuated in England. More specifically, it depicts the role of formed individuals in bringing about radical social change. For the one thing Darcy and Elizabeth share is a willingness to transcend the prevailing values and behaviors of their time, to act out of deeper personal convictions which place them in conflict with the societies in which they live. Like her creator Jane Austen, Elizabeth Bennet is the

prototype of the modern woman, who has the courage, strength and individuality to reject the material and social security of a respectable marriage. Fitzwilliam Darcy is the pioneering aristocrat who breaks every established centuries old norm, voluntarily gives up his privileges even when it disturbs his sensitivities. Both are in search for something higher and truer, even at the risk of failure or ostracism. Elizabeth achieved that higher goal by social elevation through marriage. Darcy's psychological fulfillment matches Elizabeth's material rise. Their creator, Jane Austen accomplished two hundred years later, by gaining literary immortality.

To make a fire, all it takes is a spark. Not a steady flame, not even a shower of sparks, but just one single spark. Its size is of no consequence. The size of that which is to be lit is beside the point. One lone spark can grow to immense proportions and encompass all that it encounters. Similarly, one inspired individual, inspired by the right ideas and values, can set in motion and generate consequences that change a nation or reach around the world.Such an individual is a living center of the illimitable.

# A History of the Individual in European Culture

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*Abstract:*

*We are the children of our land and the concept of individuality is shaped by the history of our culture. In this exercise there are two preliminary remarks I would like to make: First, despite the geographical distance, sometimes, there are great similarities in the definition of "individuality" among cultures, for example, between the Indian and the European ones. Second, in our globalized world, we have to look for those elements, in the puzzle that compose "the concept of individuality" which are common. In my paper I'll try to sketch the history of "individuality" in Europe. In the ancient Greek and Roman worlds as well as in the rest of Europe, which were dominated by the ideal of "aristocracy" till the middle-ages, the status of recognized individuality applied only to very few. At the end of the middle-ages, the concept of the "individual" started to emerge. But it took a long time to become a formalized universal and accepted concept. We can say that this took origin at a time that goes back to a period between the late 1200s and 1400. Transition from the civilization of the middle ages to the civilization of the Renaissance played a main role in creating individuality. The actors were science, technology, the bourgeoisie and mainly, the "individual".*

We are children of our land and the concept of individuality is shaped by the history of our culture.

There are two preliminary remarks I would like to make regarding the subject of Individuality: First, despite the geographical distance, there are great similarities in the definition of "individuality" among cultures, for example, between India and Europe.

Second, in our globalized society we have to look for those common elements in the puzzle that constitute "the concept of individuality".

If we try to provide a reasonably shared definition of an "individual" as we conceive it today, we could say that:

The individual is a free human being with his own values and is "protected" by the "universal declaration of human rights" as adopted by the United Nations, applied by many but not all the U.N. member states.

Authoritarian regimes do not recognize the rights of the individual, particularly if the individual brings with him his or her values which are different from those imposed by the authoritarian power.

I will not make a list of these countries "pro bono pacis"; but, as you know, it would be a long list.

I'll now try to sketch the history of individuality in Europe.

Not so long ago, the church was imposing the dogma of the "holy writings" and was ready to condemn or simply burn those men and women who had different ideas. There was no space for the recognition of individuality as in the case of Giordano Bruno and many others who were burned alive. It was the same story at that time, for the protestant world.

In the ancient Greek and Roman world, dominated by the ideal of "aristocracy", the status of a recognized individual applied only to a few: philosophers, tyrants, priests, emperors, augurs and a few others. It was a society of privileged individuals, where few had all the rights and many had none at all. This type of society dominated Europe at least 'till the transition from the Middle-Ages to the Renaissance'.

At the end of the Middle-Ages, the concept of the 'individual' began to emerge. But it took a long time to become a formalized universal concept. We can say that it had its origin during the period between 1200 and 1400.

This was a time of transition between the end of the middle-ages and the onset of the Renaissance. An old equilibrium was breaking up.

This type of status, in thermodynamics as well as in society, tends to create turmoil and novelties with the tendency towards a new status, as Prigogine showed.[1]

The concept of the individual could not but appear in a period of dramatic transition.

It was the end of a phase that lasted nearly 2 millennia, if we consider the fundamental contribution of the Greeks to culture.

The European of the XV century found himself surrounded by the ruins of his/her old certitudes.

The earth was no longer the center of the universe. Where was God? Christopher Columbus discovered another world with strange animals and human beings, so different from those described in the holy Bible and those we had known for centuries. All this took place around the time that the Black Death occurred between 1300 and 1400 AD, which drastically reduced the entire European population.

The Europeans, to escape country brigands and harassment by landlords, assembled in towns protected by walls: the "communes".

The "individual", the concept of "individuality", emerged in fact during these troubled times, with the rise of the "commune", a revolutionary new social aggregation, and with the birth of a new social class: the bourgeoisie.

There are many reasons to support this idea.

The disregard for practical and manual activities and the aristocratic attitude that went back to the mental habit of the Greek and Roman society (where, for example, Euclid refused to consider any practical application for his mathematical theories) were coming to an end.

At the end of the XIII century, many philosophers and thinkers began to recognize the importance of the "artes mechanicae", craft activities, and manual labour. Roger Bacon (1214-1292), a Franciscan, supported in his writings the "artes mechanicae", experimental

activities and experimental research, was critical about the traditional attitude of the church, and was particularly against the Aristotelian Thomas Aquinas. Bacon said about Acquinas: "How can this person without knowing optics, mathematics and alchemy, without knowing "le arti minori", how can he know "le arti maggiori" (philosophy, theology etc.)?"

Now in a transition period so important for our history, focus was on human beings, the world around us, the earth, and on a series of activities that in previous times were disregarded.

Even the church, with thinkers like Bacon or the school of Chartres, shifted their attention from the sky, to see the life on earth around with its simple manual activities in a new light.

In the past, nobody would have dared to praise the technical progress and instruments, like Bacon and Petrus Peregrinus of Maricourt did.

Bacon says of Peregrinus: "He is shameful to ignore what is known to the ignorant, he is an expert in the arts of those that are working metals and minerals of any type, and he always gave attention to the enchantments of the old ladies and those of the witches".

Bacon was an alchemist and an outstanding mathematician, and represents an important turning point in the attitude of the Church. Bacon, the technician and inventor of all sorts of ideal machines, was the one who was able to predict with intuition the technological destiny of men.

So now, the idea that a large part of the population, and those we would describe today as commoners, had their activities recognized as well as their status as individuals accepted.

It was a great cultural change: also time was secularized, with the bell of the church replaced by the clockwork of enterprise that marked the working hours during the day.

And the "machine" suddenly appeared, which was another crucial actor and a further step, as we will see, towards the recognition of the individual.

Many hypotheses have been put forth regarding the appearance of the "machine", a phenomenon which is called mechanization.

For nearly half a millennium, from the end of the Roman Empire, there had been no significant technical innovation and now suddenly "impromptu" all sort of technical instruments, tools, mechanisms and machines were popping up. Why such a change?

Was it due to the lack of manpower? In Europe, at the end of the Middle-Ages, there were practically no slaves left and the Black Death had wiped out a large portion of the European population. This may have resulted in the need and interest to mechanize work.

Simple tools like the gear and others needed to apply the energy of watermills to various productions were now in use. The building and diffusion of new machines might have been facilitated also by the progress in metallurgy, which made iron cheap and readily available.

Typical is also the fact that only now appeared the invention and use of the helm, steering mechanism that would allow, with the new building techniques and with the help of compass and astrolabe, the oceanic crossing.

There is no satisfactory explanation for the appearance of the machine.

As we all know, the history of science and technology as well as that of our society is not linear but is made by sudden, unforeseen and unpredictable changes. And as Popper says, any historical or deterministic explications will be wrong. And the great historian of science, Alexandre Koyre, reminds us that Pisa does not explain Galilei or Archimedes of Syracuse. Nor Woolsthorpe, I would add, Newton.

Inside the commune, the diffusion of the machine with the establishment of small laboratories and workshops was creating a concentration of workers. They associated in corporations and "guilds": associations of free "individuals" with the same interests and profession.

The corporations had democratic statutes in order to protect the "identity" of the work and the activities of their members.

Also the commune was governed with democratic rules with the participation of citizens represented through the corporations and other associations. A large part of the inhabitants of the "commune" began to be recognized as a socially and politically active part of the community: as "individuals" with their rights and duties. Typical, in this respect is the constitutional text of the municipality of Todi in which is stated that the municipality will be run by common people and craftsmen with popular laws.

This is why we consider the "commune" as a democratic experiment typical of the European society, the culture medium of the "individual".

In Muslim society, the commune disappeared in the "mare magnum" of the Umma, the universal community of the Muslim world. And in China the commune had mainly a rural character.

During the XIV and XV centuries, laboratories began to associate themselves leading to the creation of small enterprises concentrating on the entire production cycle: raw material, industrial treatment and commercial distribution of the production.

The owner of this first enterprise was the "bourgeois" a new social actor, an "individual ante litteram" in the European panorama as we know him: capitalist and entrepreneur, far from the Byzantine and European merchant of Braudel and well described by Werner Sombart. The bourgeois was fundamentally individualistic and promoted the protection of their private and intellectual property. Thanks to the development of the press, the first patents emerged in Florence in 1421 and in Venice in 1474 and would rapidly spread to other countries.

Sombart in his book *The Bourgeois* gives us a vivid picture of the bourgeois through the character of Leon Battista Alberti.

Industrial activities were expanding all over Europe in a sort of pre-industrial revolution and the bourgeoisie confirmed itself as an increasingly economically powerful social class, the engine of the industrial and social development in Europe. From "Homo sapiens to Homo faber". Large masses of peoples who once did not have a specific identity marginalized by the feudal system were now assuming their own identity in the new historical context.

The beginning of individuality was physically protected in England, by Habeas Corpus (in the Magna Charta signed by King John Without Land in 1215, who had guardianship over not only private property but also over the physical integrity of its citizens).

European society was now rapidly evolving with the rise of the bourgeoisie and tended to become largely composed of recognized "individuals". Hence the ignition of the great individualistic bourgeois engine from Renaissance times, which thereafter would propel Europe towards the industrial revolution and the well-known series of scientific, technological, economical and social successes, (not to forget "les droits de l'homme" after the French Revolution).

Jacob Burckhardt, the great historian of the Renaissance, in his book *The Civilization of the Renaissance in Italy* provides us with a first modern definition of the would-be "individual".

"During the Middle-Ages the veil covering human souls was a cloth of faith, biases, ignorance and illusions…in so far as the human being was considered only as belonging to a race, a population, a party, a corporation, a family or any other forms of "community". For the first time, it is Italy that has broken this veil and dictated the "objective" study of the State and other worldly things. Close to this new way of considering reality, it further develops the "subjective" aspect, and man becomes "individual", spiritual, assuming consciousness of his new status."

And I would agree with Burckhardt that, in the Western society, the "individual" is the Renaissance's child.

It has not been an easy path as we said; we took almost 500 years, with great pain if we remember Giordano Bruno and the many others. Today in Europe, the human being is finally not a number, but an individual.

The Monster ready to cancel again the free identity of the individual is still here and his name can be Big Brother or the various racist and extremist groups active in our democratic society. The monster is also still there inside the theocratic regimes or inside those regimes inspired by black, red or green fascism.

Primo Levi reminds us in his book *If this is a man* the humiliation of no longer being considered an individual, but relegated as a mere number in the Nazi concentration camps.

It is up to us, free men and women, to chase back this monster to an irreversible past.

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# Individuality, Humanism, & Human Rights

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*Abstract:*

*Our article emphasizes the essential role of the individual as a transformative agent in society and the demand by individuals as essential to the development of human rights. The article contends that human rights emerge out of struggle in social process at all levels. That struggle is the struggle for the recognition of basic rights and essential dignity. In this regard, the paper also provides an insight into the foundation of values behind the idea of rights in human rights. In this regard, it also explores the importance of aesthetics as a human rights value. Additionally, the paper makes the essential linkage between rights and opportunities, and insists that values require processes to secure the satisfaction of human wants and needs. Reference is made to Dworkin's emphasis on the right of every individual to make his life a successful experience rather than a wasted opportunity (ethical principle) and conceding the same right to others (moral principle) provides a powerful and compelling rationale for enhancing human rights value demands universally.*

## 1. Introduction

We want to introduce this theme with reference to the events of global salience that have come to be referred to as the Arab Spring. These events are a good starting point to underline one of the most central values implicated in the culture of human rights, namely, that the individual is a subject of human rights policy and practice. Additionally, some may see human rights as only words on paper which implicate symbols. There is a deeper meaning. The real meaning of human rights ultimately comes from the stakeholders, those who stand to benefit from human rights in practice and theory. And those stakeholders are the individual human beings of the planet. We would suggest that human rights would not have the dynamism that it has had, as a radically infectious global scheme of fundamental expectation, without the individual human rights agents generating human rights activism from theories generated by human rights scholars and professionals and implemented by ordinary person individuals. It would be appropriate for us to understand what it is that generates the activism from the individual human beings and how that activism may creatively appropriate symbols of communication to generate a sustained activist presence demanding that states and pressure groups conform their behaviors to human rights expectations.

One of the global events we experienced in the aftermath of the Second World War was a rising tide of elevated expectations about the fundamental values behind the idea of universal human dignity. The modern crisis that this rising level of expectation generated was

an increased level of resistance to these expectations, generating what might be called 'the global crisis of human rights'. We suspect that the founders of the World Academy had an instititive sense of this problem and considered the matter to be of global salience which required, in part, the commitment of scholars unconstrained by parochial and chauvinistic practices of identity.

On December 17th 2010, a vegetable vendor from the village of Sidi Bouzid was confronted by a police official who confiscated his cart and his produce. Mohamed Bouazizi was the vegetable vendor. He was 26 years old. Bouazizi was the sole income provider for a family of 8. Bouazizi tried to retrieve his cart and his vegetables by willing to pay a small fine to the police officer. The response was official arrogance with insults directed at his deceased father. When Bouazizi went to the municipal office to complain and to retrieve his goods they refused to see him. Bouazizi was so angered by injustice, governmental repression and complete indifference that he returned to the governmental headquarters, doused himself with inflammable fluid and ignited himself.[1] Bouazizi's action had struck a nerve. It highlighted the abuses of a political dictatorship and its denial of individual self-respect and integrity. Bouazizi's action in destroying himself symbolized the frustration of a whole nation with its loss of dignity and self-respect and the regime's complete indifference to human rights. Bouazizi's act triggered widespread protests against the Tunisian dictatorship and the intensification of popular protests finally resulted in the fall of the dictatorship. Bouazizi, the individual, acting as an activist, generated a mass mobilization of ordinary people to demand the exit of President Zine El Abidine Ben Ali. The President ruled Tunisia with a ruthless iron fist since 1987. Although he was a dictator from the point of view of important Western powers, he was their dictator.

The success of the popular uprising against the Tunisian dictator had radiating effects on its immediate neighbor to the East. Egypt had been run by the dictator Hosni Mubarak for over 30 years. He too ruled with an iron fist and with a dislike for rule of law, democratic values. The Egyptian people were in a position roughly comparable to the repressed Tunisians. The Tunisian example inspired individual protesters to begin protesting the dictatorship of Mubarak. In the face of severe reaction and elements of state violence, the demonstrations grew in size and sustainability. Eventually, Mubarak was forced to leave by the activism of the Egyptian people.[2] The Arab Spring then began to develop traction in the gulf states of Arabia, including Yemen and Bahrain.[3] The influence began to be felt in Libya. The Libyans were concerned about Gaddafi's dictatorship and wanted it to go.[4] Elements of the Arab Spring also figured in renewed Palestinian demands for an end to the Israeli occupation.[5] Most importantly, the Baathist dictatorship in Syria found itself under a major popular national insurrection demanding that the current dictator of that country leave.[6]

These acts of individual activism, inspiring the mobilization of ordinary people, began to have effects in states far removed from the Middle East. For example, Israel experienced a significant level of activism in which "occupiers" protested the social injustices that appeared to characterize the policies of the state.[7] In the United States the economic crisis generated a concern for the deeper questions of political economy, fairness and social justice. The activists that gave these issues important political traction targeted Wall Street for sustained occupation demonstrations.[8] That example spread throughout major cities of the U.S. and its immediate impact has been to radically shift the terms of political debate with a focus and

insistence on fairness and greater equality. European cities had also been inspired by occupied activism.

We suggest that at the back of the Arab Spring and the occupier activism is a deeper and more important element that is reflected in the role of the individual as a stakeholder in the important issues of our time. Indeed, at the back of the Arab Spring and the demands for social justice are the foundational questions behind the human rights values of the  global community which add up to a demand for the universal recognition of equal respect and human dignity. Human rights represent the most agreed upon and defensible value system of the political and legal culture of the entire world community.[9] Human rights are mentioned in several provisions of the United Nations Charter of 1945,[10] and received fuller development in the Universal Declaration of Human Rights (UDHR) of 1948.[11] These two instruments represent the most carefully crafted framework for establishing, in political and juridical terms, the idea of human dignity founded on explicitly articulated human rights. What is crucial is that these instruments emerged and probably could *only emerge as a function of conflict and struggle*.

Human rights, as the struggle for dignity, did not begin or indeed end with the tragic events of World War II. The struggle for human rights historically has been about the struggle for essential dignity, decency, and justice.[12] In this context, struggle means a willingness to advocate, defend, promote, and, if necessary, die for these values. In his closing statement to the Supreme Court of South Africa, in the *Rivonia* Trial in 1964, Nelson Mandela explained to the Court and to the world, that he had struggled for the values of freedom and dignity and that if necessary, he was willing to die for those values.[13] Mandela symbolizes every human rights activist regardless of time, culture, economic, social, national, or ethnic background. Cecil Day Lewis, in his famous poem, the "*Nebara*," expresses a similar theme poetically;

> *"Freedom is more than a word, more than the base coinage of statesmen, the tyrant's dishonored check or the dreamer's mad inflated currency. She is mortal we know, and made in the image of simple men who have no taste for carnage, but sooner kill and be killed than have that image betrayed. Mortal she is, yet she rises always refreshed from her ashes to home, where man's heart with seasonal warmth is stirred. Freedom is more than a word."*[14]

Without human agency demanding justice, liberty, freedom, self-determination, and essential human dignity, it is difficult to imagine that humanity would have *any* rights, let alone human rights. The emphasis on demand is, in contemporary terms, the identification of the capacity for individuals and groups of individuals, however associated, to engage in the clarification and articulation of their fundamental interests. Without this clarification, activism itself is blind and unguided. The clarification, recognition, and expression of demands and claims are therefore crucial to any strategic and tactical deployment of human resources to secure the access and benefits of those demands and claims. Interest articulation, therefore, is a critical aspect of humanistic dynamism and a critical foundation for the development of the most comprehensive culture of human rights on a global basis. Modern theories of justice are inspired by the humanistic dynamism of the struggle for human rights values. For example, Professor Sen has an approach which focuses on values in terms of needs, freedoms and capabilities.[15] From this he distills an approach to justice in which there is an essen-

tial dynamism between human preferences, human capabilities and process freedoms. The expression of human capabilities requires the opportunity to acquire capability freedoms. However, the dynamism required to acquire the opportunity of capability freedoms is intricately related to the process aspect of freedom. In short, values require processes to secure the satisfaction of human wants and needs. Thus, process feeds opportunity and capability guides process. Moreover, these processes are rooted in human rights, advocacy and decision.

The further clarification, which targets the role of the individual in the theory of human rights and justice, is reflected in the recent work of Ronald Dworkin.[16] Dworkin starts with the relationship of ethics and morality to individual action and responsibility. The ethical question for the individual is "what does it take for a life to go well?" This ethical principle is a focus on the nature of self-respect. Self-respect requires that the individual takes his own life seriously and appreciates that it is ethically important to make one's life a successful experience rather than a wasted opportunity. This principle therefore reinforces the individual responsibility for self-respect and authenticity. The individual must be self-aware of the ethical responsibility to identify what counts in life as a success. The moral principle, which is derived from this, and which has global implications, is, if my ethical principle of self-respect is important to a life that it is not a wasted opportunity, then that is a principle that I can support with regard to all non-self others on the planet; in short, a principle of morality and justice for all of humanity. Both of these theories of justice root the essential dynamism of it in the individual as a starting point. There is a recognition, therefore, that the individual, in taking responsibility for a successful life, is essentially a transformative agent in the social process. For Sen, individuals have capabilities which they should recognize and the need for the demand for opportunity to fulfill those capabilities.[17] Dworkin frames the issue slightly differently but in a way that is not incompatible with Sen.[18] According to Dworkin,

> *"we need a statement of what we should take our personal goals to be that fits with and justifies our sense of what obligations and duties and responsibilities we have to others… Dworkin also requires capability and process freedoms, if life is not to be a 'wasted opportunity.' There is a genius in joining opportunity and capability with a responsibility to take one's life seriously as an aspect of both personal and community morality. The idea that each individual has a right to a life of self-respect and authenticity – which must be given operational effect by capability and opportunity freedoms – moves from that of an ethical commitment to that of a moral principle, in the sense that self-respect, authenticity, capability and opportunity freedoms are encapsulated in the universal principle of human dignity. Dynamism is rooted in the responsibility and obligation of the person to respect oneself. Such respect is sustained by the idea that the self is truthful to the self and, therefore, expresses to the self its self-validating authenticity. This means that the subjects of the idea of justice are meant to be active participants in the shaping and sharing of justice, and, moreover, to be active participants in the transformational dynamics of the principle of justice."[19]*

These views about the essential relationship between human rights values and the idea of justice effectually require the individual human being to be a subject of justice and a stakeholder in the promotion of the idea of justice implied in the fundamental human rights values. We now consider more carefully the role of the individual as an asserter of demands in the

dynamism of human rights and justice. The critical discourse of human rights should now carefully consider the entire process of claim assertion, of *demand advocacy*, as crucial to the promise of human rights. To suppress the human capacity to identify and assert fundamental interests, to undermine the institutionalized expression of institutions' effective advocacy is effectually to suppress the possibility of developing human rights and making them real in a manner that promotes peace and defends the foundations of personhood. It is the melancholy history of human experience that the suppression of thought and communication makes human beings servile, unfulfilled, and without a capacity to realize fully their innate human capacity to experience dignity and human creativity in its most appropriate manner.[20] Ultimately, the suppression of the ability to express needs, claims and demands is thoroughly insidious in its depreciation of the human prospect. In short, such a process simply erodes the capacity for human genius to contribute creatively to the improvement of man and society.

If we read into terms such as *freedom, equality, justice* and *self-determination*, the principles of dignity and human rights, we capture the sense that these values can never be extinguished so long as man is willing to struggle for them. Whatever the difficulties and sufferings in the struggle for human rights and dignity, there is the idea of hope, resurrection, and a refreshed and progressive expectation in the commitment to the struggle. Thus, the focus of this contribution is on the idea of dynamic humanism as an indispensable and complementary component of the human rights process and the imperatives for realizing a global society committed to a global culture of universal respect and dignity. In the next section we clarify the basic values behind the formulation of contemporary human rights.

## 2. The Humanism of Basic Rights and Their Central Values

The UN Charter and the UDHR were the global community's response to the most-bitter war in human memory, distinguished as it was by the concept of total war, which characterized Hitler's Germany.[21] It was a war that targeted civilians as well as members of the armed forces and a war that made the extinction of certain civilian groups a major strategic and tactical objective.

The struggle for a global rule of law, which could make peace a major and critical expectation for all peoples of the world, had a founding moment with the adoption of the UN Charter and later the UDHR in 1948.[22] This immediate background to the current structure and process of human rights holds a powerful insight; human rights and peace are things for which ordinary decent people have had to struggle.

Struggle did not begin or end between 1939 and 1945. From time immemorial, human beings have been involved in struggle and conflict.[23] Invariably, struggle has pitted the powerful against the powerless, and the powerful against the powerful, with the powerless caught in the middle. Across time and culture, the powerless have never given up on the idea that there is some dignity and worth in their own self-consciousness of being. The poor and the weak, the colonized and the dominated, the slave and the serf, the Semite in racial terms, and the Harijan in caste terms, all have sought to challenge the powerful to expropriate their humanity and dignity.

Today, there is a widespread acceptance of the centrality of the human rights principle as an indispensable part of international law and morality, and that this principle is meant to

represent the appropriate basis of the organization of the global social and political process.[24] This does not mean that there is precise agreement about exactly what human rights are and what they mean, both substantively and procedurally.[25] The fact that there are as yet no conclusive answers to many questions about the nature of human rights does not mean that there is not a great deal that can be profitably learned from what is already known, both in terms of standard-setting and the processes of implementation.

In a cross-cultural, diverse world of interdependent states, groups, associations, and persons, there will be divergent views about the ultimate source and precise methods of justification of core, basic, or fundamental rights designated *human rights*. What is constant about the human rights expectation is that, in the focal lens of human rights, every human being is a stakeholder in its promise. If that promise is symbolized by the term *human dignity,* then all human beings must be stakeholders in demanding, defending, and promoting human rights to secure their essential dignity.

### *a. Functional or Working Values That Guide Humanistic Demands for Human Rights*

There is considerable controversy concerning whether universal human rights are at all possible.[26] To the extent that such a controversy still influences important institutions of global power, it is also important to recognize that—prior to the assumption of the juridical and/or moral dimensions that justify any fundamental human right—it is critical that we are able to formulate normative claims and expectations that are clearly observable, and which may be functionally as well as analytically expressed by human agents of claim and demand. The practical reason behind this is that human beings generate problems in their relationships with other human beings. The problems invariably involve claims and the resistance to claims. The claims are about the values that human beings deem important and thus are desired. Those desires are invariably expressed as claims or demands involved in conflicting understandings and assertions of values and their importance.

However, whether human rights originate from *a priori* contemplations or bitter experience makes little practical difference if they secure empirically-based expectations that ground the principle of human dignity. Whatever the theoretical basis is for the UDHR, an observer's view of the claims may implicate the decision challenges they provoke; and the consequential promise they hold for human dignity is quite self-evident. The conceptual rights in the UDHR can be translated into functional value categories with the challenges they pose to global society and its constitutional scheme based on the UDHR. That is to say, there are a cluster of complex claims concerning the main values in the Declaration, and those values may be functionally identified and expressed.

1.  **The value of life:** This is a centrally valued human subjectivity.[27] It is referred to not in the "pro-life" sense (that a pregnant woman must bear a child), but in the Bill of Rights sense (that a person has right to personhood and autonomy). The value of life, therefore, includes the respect and deference given to the individual in the global community.[28]

2.  **The status of the value of power and security:** Should it be narrowly or widely shared? Is the common interest of all honored in a system that seeks to secure the widest possible participation in all key areas the power process? One of the central values identified in

the Atlantic Charter was the freedom from fear.[29] This concern for freedom has evolved so that today no one denies that there is a critical interdependence between the concept of peace as a human right and all the other values in the UDHR. Peace and security might well be included under the functional category of power.[30] However, peace is recognized as a complex peremptory component of the human rights value system.[31] It is of value to again recognize that there are complex ways in which all human rights values have an influence on peace and security, recognizing as well that peace and security at all levels are critical conditions for the effective mobilization of human rights values. A central aspect of the values of peace and security relates to the connection between the mobilizing force of strategy for the realization of human rights goals and the realization of these goals themselves.[32] For example, is it appropriate to deploy violent strategies of action to achieve human rights objectives? Is it appropriate to disengage the value discourse involving strategy and struggle on the one hand and idealistic value objectives on the other hand? Gandhi, for one, insisted that the morality of struggle was even more important than the morality of distant idealistic objectives.[33] Indeed, he also insisted that a disconnect between struggle, strategy, and goals was morally indefensible.[34]

3. **The status and value of economic and wealth processes:**[35] Is the common interest of all better secured by optimizing the capacity to produce and distribute wealth or the opposite?

4. **The status and value of respect and equalitarian values:**[36] Should invidious discrimination be fully prohibited (covering all areas of race, gender, alienage, etc.)? Can equality be meaningful if it is only a formal, juridical idea without regard to the legacy of exploitation, repression, and discrimination?

5. **The status and value of educational and enlightened values:**[37] Should these values be widely produced and distributed or narrowly experienced?

6. **The status and value of skill and labor values:** The centrality of labor and skills values to the human condition indicates that these are central and fundamental values implicated in the rights and expectations of those who seek to create and sustain these rights and labor values.[38] Should these rights and expectations be widely shaped or narrowly shared?

7. **The status and value of health and well-being values:** The delivery of reasonably formulated and accessible healthcare and social services to all is now widely regarded as crucial entitlements, if the most basic standards of decency in politics and society are valued.[39] Today, unemployment aid, social security, medicare, and other social services are considered crucial to a society that cares for its people.

8. **The status and value of the family and other affective values:** Because the family is the basis of collective existence and is central to the human rights of children, the public policies of a society that destroys family (and other affective ties) pose a problem for the wide generation of affective values including the loyalty values of patriotic deference.[40]

9. **The status and value of moral experience and rectitude:** A system that endorses the centrality of moral experience to the legal and political culture and seeks to maximize the spiritual freedom of all is yet another of the central themes of the human rights agenda.[41] How do we translate expectations of care or fundamental moral experience

into the practical prescription of law and policy?

10. **The status and value of cultural and aesthetic experience:** The term cultural includes the concept of the aesthetic.[42] In fact, the word "cultural" could encompass all the value preferences that we might extract from the UDHR. There is, however, a narrower meaning that the term culture might carry. That meaning ties in with the notion of human rights as also emblematic of the diversity of human experience, experience that reflects the cultural richness of humanity as a global community. There is great controversy about the issue of culture and tradition, culture and creativity of the present, culture and the elaboration of the aesthetic, which may capture and nurture the cultural narrative of creativity and beauty which may in fact be the critical psychological view of how the glue of social solidarity promotes creativity.[43] The boundaries of this discourse are controversial. Sensitive matters of sexual regulation which may differ widely may be justified by culture and yet here the culture of tradition may not be compatible with the culture and creativity of the present or the future in human rights terms. For example, female genital mutilation justified by cultural tradition is not justified by either religion or by the science of human sexuality.[44] Human rights thus provide a process by which these boundaries may be appropriately protected and appropriately expanded according to the normative challenges of human dignity. The current discourse often suggests that universality trumps cultural relativity or vice versa.[45]This is not necessarily helpful unless one sees these ideas as only the starting point for value clarification and application from a human rights perspective.

11. **The status and value of the eco-system:** Today, we recognize a complex right to a viable eco-system on what theorists have seen as Spaceship Earth.[46] The values embedded in the protection and promotion of a healthy eco-system, are, like many other values, issues of complex inter-dependence and inter-determination. However, implicit at least, in the concern for the integrity of the eco-system is clearly the notion that there are no human rights if there is no environment in which human beings can survive and possibly even improve the human prospect.[47] But this insight suggests an even higher level of moral consciousness in the sense that the eco-system (with its plant life and animals, wild and domesticated) is part of a complex cycle, in which human beings are both custodians and also utterly dependent as individuals and as society. This means that we now see in nature not something irresponsibly exploited and destroyed but central to our identity as a sentient species. To take a simple example, for all the vaunted technology of human progress and human egotism, no one has seen a dog or a cat or a rat or indeed the most elemental of recognizable life forms outside of this lonely and unremarkable planet called Earth. Thus, as humanity, we now look at life even in its most humble forms as not only indispensable to the interconnected chain of life on this planet but we see in it something new and utterly connected to the very consciousness of being human and being alive. In short, we know that our dogs identify with us. We may now know those ordinary pets in terms of how they and all other living forms have shaped our identity both psychologically and physiologically.

The values outlined above essentially are abstracted from the UDHR and, more generally, from the International Bill of Rights. To give it an activist emphasis, the values are identified as having great meaning from the point of view of the struggle to enhance, to define, and

clarify them and to recognize the currency of these values is not something apart from human responsibility. Obviously, the precise content of these generalized values are challenged and indeed are part of the prospect of social and political activism.[48] On the other hand, these tentative clarifications of the nature of the human rights values also have areas of broad agreement among 'we the people' of the global community. It is a tribute to the creation of the UN system that human rights are a central concern and problem for humanity. The UN Charter makes numerous references to human rights as statements of aspiration, of pre-existing achievement as well as juridical and political development for the future. There is little controversy about the further level of conceptualization that collectively, the International Bill of Rights and the values that sustain it mean the commitment to universal human dignity.

### b. Clarifying the Core Values of Humanistic Human Rights

Many important questions still vex the international system. What is the precise content of the rights in the UDHR? What intellectual procedures are to be used to clarify the specific content of each goal value or generalized right contained in the UDHR? How are international human rights to be implemented? What intellectually sanctioned principles of procedure are important to set out the procedural aspect of human rights realization? What are the explicit principles of content and procedure that permit us to clarify the value judgments in the human rights precept and to implement rationally these values in instances of particular application? In other words, how do we ground, that is, how do we specifically *prescribe* and *apply*, the value judgments contained in the human dignity precept?

Although there are important areas of concern about the theory and justification of human rights values, there are areas of broad agreement at a more general level about the fundamental values that should condition the social, political, and legal processes of the larger international community.[49] These may be summarized as follows:

1. Broad agreement exists about production and distribution of the core values in the UDHR and these values implicate both individuals and aggregates.

2. The values in the human rights framework cover both the so-called "negative" rights that purport to limit the abuse of power and the "affirmative" rights that implicate more directly the guidelines of responsible social change. Expectations in this latter category are styled "aspirational" rights.

3. While the word "universal" in the UDHR cannot be taken too literally, the nature of the rights in the Declaration has a more generalized character, a kind of "practical" universality.

4. The operative sphere of human rights is the socio-political conditions of interdependence and inter-determination. This means that rights are frequently "absolute," when they are contextually prescribed and applied. A cruder version of this point is the simple dictum that A's right or entitlement ends where B's like right or entitlement begins.

5. Human rights frequently give empirical specification to basic or fundamental interests.[50]

The approach to value clarification that we have outlined above may be usefully compared to the UDHR. The UDHR has been said to encapsulate three distinct generations of human rights: "first generation" civil and political rights; "second generation" economic,

cultural, and social rights; and "third generation" solidarity rights.[51] This common approach is stated in general terms. Since the rights are interdependent, this is not an approach which we value; nevertheless, the approach is conventional wisdom. First generation rights are represented in Articles 2-21; second generation rights are represented in Articles 22-27; and the third generation of solidarity rights are said to be represented in Article 28.

The second generation rights are the ones most controversial to constitution-makers, and the solidarity rights, with their transnational internationalist implications, may also be seen as far afield from conventional frames of constitutional law discourse.[52] The rights expressed in Article 28, viz that "everyone is entitled to a social and international order in which the rights set forth in this Declaration can be fully realized"[53] has been developed in various international law influencing fora to refer to a more equitable distribution of global resources, the right of all nations to political, economic, social, and cultural self-determination, and "the right to economic and social development."[54] Additionally, the right to a viable eco-system, the right to peace, and the right to humanitarian aid during emergencies also are reflected in Article 28's mandate.

This bare outline of the fundamental values attending the contemporary conception of human rights obscures a great deal of complexity, historical understanding, the pervasive and critical importance of normative insight in human experience, as well as the impact of science and change upon the human prospect. In short, human rights may have been influenced by trans-empirical or spiritual values, but its modern genesis is rooted in human experience. The human rights codes are actually given life and dynamism by the human element. We may describe this element as the element of dynamic humanism. The human element in dynamic humanism is the element of individual and associational choice. In short, human rights, as an aspect of dynamic humanism, are given momentum and relevance by the processes of human decision making. To illustrate this point with a specific example we may refer to the Polish Lawyer, Rafael Lemkin. Lemkin had an intelligence predicate for the scope of the Nazi atrocities and proceeded to dedicate himself to the creation of a universal crime of genocide. The term genocide is a neologism which he coined. However, the process of getting an international agreement on the idea of a universal crime for a major human rights violation encountered considerable resistance. It is possible that the leaders of sovereign states understood that the defendants in such a situation would be the state decision makers themselves. In any event, Lemkin's tenacity in pursuing the creation of the international crime of genocide is an inspiring example of the success of individual activism in the success generated by the adoption of the Convention that outlaws genocide.[55] Indeed, I do not believe that we would have had the universal, international crime of genocide without the humanistic advocacy of Lemkin. Additionally, the seeds that would ultimately emerge from this initiative may well be the inspiration for the creation of the International Criminal Court.

Today, we have countless illustrations of organizations which mobilized ordinary citizens' concern, activism and the corresponding influences on decision making with regard to human rights issues in all parts of the planet. For example, recent studies have shown that the global anti-apartheid movement was largely inspired by ordinary people's activism which in turn forced their governments to take stronger action against the apartheid state and which was a significant factor in the transformation of that country into a new political order.[56] Similarly, tremendous indecision in the international community regarding the scale

of atrocities of the conflict in South East Europe also generated citizen advocacy to reshape the dynamics of international intervention in that region.[57] More than that, it was again citizen advocacy that led to the creation of the ad hoc tribunals for former Yugoslavia and Rwanda.[58] Today, civil society, human rights organizations operate with global reach and are one of the most important sources of human rights intelligence. These organizations, directly or indirectly, train citizen investigators, citizen reporters, citizen advocates and citizens as human rights transformational agents. Moreover, such organizations have been skilled in utilizing modern technologies to strengthen global human rights mobilization. For example, Amnesty International has a sophisticated urgent action network, which permits it to have instant communication with thousands of members who focus on urgent human rights actions. This can be expeditiously done because of the speed with which a crisis can be communicated worldwide and generate an equally expeditious response.

## 3. Human Rights: A Functional Humanistic Approach to Activism and Decision

One of the great contributions to social and political theory made by a former President of the World Academy, Harold D. Lasswell, and his long-time associate and Fellow of the Academy, Myres S. McDougal, was to provide an insight into the architecture and related functions of the concept of decision making itself.[59] They contended that any decision would implicate an aspect of private or public policy.[60] Therefore, a generic sense of what decision making means must be rooted in the individual social participant, who frequently functions as both a claimant to shape decision making, as well as a decision maker per se. The functions of decision include the functions of (1) intelligence; (2) promotion; (3) prescription; (4) invocation; (5) application; (6) termination; (7) appraisal.[61] Any decision would implicate all of these functions, although these functions may be poorly appreciated by the decision maker. Nevertheless, we should keep in mind that the creation of a legal and political culture of human rights, as a global mandate, requires a deeper appreciation of the human responsibility for choice and decision in which human rights perspectives are grounded in the global social reality. We should also keep in mind the influences that may be brought to the focus of human rights choice and decision. Among those influences is the activism of the ordinary social participant human rights stakeholder. The stakeholder is essentially an advocate and an articulator of human rights interests and values. However, it would be important that advocacy target and hopefully influence the specific, identifiable functions of decision making in the human rights global context.

The analytical markers identified as functions of decision-making are kept discrete for analytical and descriptive purposes. They are, however, inherent in the processes of decision-making and in practice, and influence one another in complex ways. The result of which is a decision or choice. For our purposes, the emphasis will be on the decision function of promotion or advocacy. This emphasis is meant to clarify the role of advocacy, or interest articulation, within the structure of decision in order to maximize and influence beneficial outcomes in choice and decision that sustain human rights expectations. Moreover, this emphasis gives us a clearer sense of the actual workings, prospects, and efficacy in the actual human rights decision process.

Advocacy depends on knowing the facts, identifying the players, and understanding the problems that require interest articulation. The relationship of advocacy or interest articulation to decision making is often under-appreciated in the sense that the focus of inquiry tends to be on the decision outcome, and not the forces that drove interest articulation in the first place. However, without interest articulation, without the express demand for the basic values that human beings feel that they have a right, decision-making would be a pale shadow of its appropriate social and political importance. This phenomenon is partly observed in societies involved in transition to democracy. When those freedoms are initially established, the culture of interest articulation and advocacy remains weak as a function of the pre-existing political order. Thus, there is often the outcome of democracy denuded of effective interest articulation and effective advocacy.

In our time, we have witnessed the growth and strengthening of civil society on a global basis.[62] This development is not simply random and inexplicable. Civil society is the outcome of the demand and the need for advocacy in the demand for good governance, the rule of law, and universal human rights.[63] Civil society, by definition, is not the state; it is part of the community comprising the state. That community insists that its voice be heard and that its advocates promote and defend the interests of ordinary people. Further, the growth of civil society is not confined to states. It is a global phenomenon.[64] Thus, the term global community refers to global civil society and even more to the processes that generate focused interest articulation and effective advocacy. One of the most important global outcomes inherent in the civil society process has been the development of civil society interest groups specialized on a global basis to the promotion and advocacy of human rights.[65]

A central problem that effective human rights advocacy encounters is the problem of obtaining the facts about human rights deprivations, and also predicting the prospect of human rights violations in the future.[66] Thus, the human rights problem for which advocacy and promotion are demanded will need an intelligence predicate to determine whether to proceed, and, if so, how to tactically and strategically present and prosecute such a claim or demand in a forum most effectively calculated to respond meaningfully to the problem.[67] Without reliable facts or intelligence, advocacy and promotion are weak; and intervention is correspondingly undermined. A weak intelligence predicate weakens the strategic and tactical options of the advocate as well as the ultimate decision-making forum.[68]

The approach to human rights that stresses problems and interventions, such as advocacy and decision making, must examine carefully what is implicit in such ideas as advocacy, representation, and decision making (such as adjudication). Functional theory has distilled seven decision functions that are expressed or implied in human rights inquiry.[69] These decision functions are triggered by the processes of interest articulation and advocacy.[70] To be effective as an advocate and to effectively influence decision making, advocacy must target its expression of interest articulation with a view to providing a credible foundation upon which the normal functions of decision making made be deployed, and hopefully in the service of enlightened and altruistic interest articulation.[71] It is therefore obvious that the functions of decision-making are matters that fall within the strategic and tactical vantage point of human rights advocacy. What follows is a summary of the central functions of decision-making but essayed through the lens of effective advocacy as a strategy of interest or value articulation.

### *a. The Advocacy Functions of Intelligence*

Human rights advocacy whose facts or intelligence predicate are flawed may have disastrous consequences for the credibility of human rights advocacy as a whole. In cases of grave human rights deprivations, it is usually the state that is the responsible actor. However, the management of information concerning these deprivations is a matter of the state's claimed monopoly over classified information generated by its intelligence services. Thus, a significant element of human rights work pits the intelligence claims of the state against the intelligence claims of human rights advocates. This is a very sensitive matter, and is often at the heart of whether human rights work succeeds.

Human rights organizations claim access to information using their own methods and research.[72] Thus, they generate databases, case specific material, and a great deal more. Their work is sensitive and often cannot compete with the state's claim to secrecy over intelligence that may implicate the state in wrongdoing. It is through the intelligence network, especially of NGOs, that we understand the scope, relevance, and capacity for intervention and its limitations.[73] Facts are a critical basis for decision-making responses or interventions because it is from facts that we garner the scope of human rights deprivations.[74] Human rights groups, therefore, claim the right to gather, process, and distribute human rights intelligence.

It is also a critical intelligence demand, inherent in human rights advocacy, that advocacy be based on intelligence that meets the criteria of dependability, comprehensiveness (within which we include systematic contextuality), selectivity (relevance), creativity, openness, availability, and economy.[75] Without an effective process of intelligence development the deployment of critical human rights advocacy functions are weakened. To appreciate the centrality of human rights intelligence to human rights advocacy and decision making, it is important to appreciate how intelligence influences all the other functions of advocacy and decision making.

### *b. The Advocacy Functions of Promotion*

To understand the human rights issue or problem is to begin the process of promoting a solution.[76] The problem of mass murder based on race in World War II generated the promotion/advocacy functions of seeking an international prescription criminalizing certain forms of mass murder or group extinction which ultimately produced the adoption of a general policy outlawing genocide, a convention proscribing and punishing the crime of genocide.[77] Advocacy may also take the form of involvement in specific cases or issues such as those associated with survival rights. Often particular cases lead to an awareness of a practice and to levels of advocacy that have enhanced the scope and specificity of the International Bill of Rights.[78] It is hard to imagine the extent to which a Bill of Rights for mankind could have developed as it has during the past fifty years without the elements of advocacy, promotion, and attendant activism. One of the great functions of promotion is that it accesses the modern means of communication as a mechanism for influencing world public opinion.[79]

### *c. The Advocacy Functions of Prescription*

Prescription is largely a legislative undertaking.[80] Legislatures and sometimes executives ''make'' law or other effective prescriptions. What is noteworthy in the human rights context

is that there is no super-legislature or super-executive. Human rights activism often has been merged into human rights lawmaking involving state, non-state, as well as international or regional institutional action.[81] Human rights NGOs often have been the triggering mechanism through research, advocacy, and activism to create the momentum that states and institutional actors need to create international or regional human rights regimens.[82] The focus on courts, legislatures, and executives as lawmaking agents is important; but this focus may obscure the broader array of participants, who facilitate, or even make, human rights law.[83] The central truth about official lawmaking—be it legislative, executive, administrative, or juridical— is that, without some demand, without some counter-demand that generates a problem in which modern communication systems facilitate the processes of advocacy and claiming, the official prescriptive outcome of a state would indeed be very modest.[84]

The focus upon the role of lawyers must not, of course, blind us to other decision-making participants and institutions that have responsibility for participating in the prescription, application, and enforcement of human rights.[85] For example, a joint resolution of the US Congress requests the executive branch to be more active in action against torture.[86] The resolution requests that the chief of mission, usually the ambassador, actively investigate allegations of torture and make representations on behalf of the victim.[87] This would require the ambassador to use his diplomatic position to facilitate compliance with basic human rights. The US Foreign Assistance Act makes foreign aid contingent upon some measure of human rights performance.[88] This makes both the Congress and the executive branch of the US Government responsible for the employment of economic assistance as a vehicle to advance human rights and trends toward democratization.

At another level, there are many UN agencies whose work directly or indirectly impacts upon the delivery or non-delivery of human rights. The Committee Against Torture does not require that its "experts" be lawyers; The Committee on Civil and Political Rights similarly does not mandate a legal training for its members; The special rapporteur on torture may be a lawyer, but there is no explicit rule requiring this; The UN Human Rights High Commissioner in this situation was a distinguished politician.[89] This all suggests that the culture of human rights in a global context includes advocates, decision specialists, as well as scholars and scientists from very diverse backgrounds, cultures, and professions. What ties them to the culture of human rights is that they are directly or indirectly involved in aspects of decision making that have human rights consequences and impacts.

### d. The Advocacy Functions of Invocation

Lawyers in both advocacy and adjudicatory roles are familiar with the processes of fact-problem-prescriptive characterization of issues for the purpose of the specific application of human rights norms. The case of *Filartiga v. Pena Irala* is a good illustration of the invoking function.[90] However, invoking is not confined to courts, be they national or international; any human rights institution of intervention can and often does perform this function.[91] Thus, when Amnesty International focuses on an urgent action death penalty, torture, or disap-pearance case, it is in fact performing this kind of provisional function often in contexts of extreme crisis.

### e. The Advocacy Functions of Application

In an application situation, the advocate has a crucial role in specifying the nature and practical efficacy of the remedy. A central challenge for human rights is invariably the scope of the remedy. It is the advocate's job to define that scope for the authoritative decision-maker. Where the institutionalization of the decision-maker is at a higher level, such as at the European Court of Human Rights or at the US Supreme Court, the greater the ability of the advocate to predict an actual, effective, and final application and enforcement of human rights prescriptions in concrete situations is.[92]

Application is a significant problem for human rights in an era of globalization, during which there is still great dependence upon the decentralized application of human rights policies and prescriptions.[93] The international community has in fact created a significant consensus as to what human rights are and what general prescriptive force they must have.[94] On the one hand, the application of human rights norms through the United Nations represents institutional weaknesses as well as financial and logistical limitations, and on the other hand, provisions in key human rights covenants prescribe state obligations to prosecute or extradite offenders. These treaty-required obligations impose on states obligations that many tacitly believe to be their reserved domain of sovereignty and domestic jurisdiction.[95] Decentralization comports with political and legal reality, but also generates an inconsistent, untidy political mosaic of practice and precedent. The growth of human rights institutions, such as regional commissions and courts, has added coherence to the application of human rights standards.[96] Moreover, constitution making in the post-cold war world has generated institutions of basic law in some states that are extraordinarily human rights sensitive. The application of human rights norms also requires skills in grounding human rights values in specific cases. These cases represent important political challenges for theory and practice; but central to the success of advocacy is the ability to craft a framework that persuades the authorized decision-makers that application is necessary and effective.

### f. The Advocacy Functions of Termination

The termination of advocacy may mean that a favorable result has been achieved.[97] It also could mean the abandonment of advocacy that has the effect of terminating the possibility of decision-making responses.[98] All decision-making affirms and disaffirms certain preferences. The central challenge of the terminating function in human rights law is impressive. For example, human rights law in comprehensive perspective seeks to terminate all law and practice which is incompatible with the dignity of man. Termination thus is more than simply prescribing, promoting, and applying human rights law; it is terminating reactionary, retrogressive law of the old system.[99] The importance of termination is vividly illustrated in US death penalty litigation; the US Supreme Court cannot quite develop a consensus to outlaw capital punishment.[100] However, it has not terminated the practice, but instead, using loopholes and strained constructions, has in fact validated the execution of the mentally retarded, children, and upheld convictions where race is a factor. An important objective for the human rights advocate is to ensure that argument persuades the decision-maker that the decision will terminate the problem.

*g. The Advocacy Functions of Appraisal*

Human rights law, like natural law, provides a standard against which positive law can be rationally evaluated. It provides thus a critical component in addition to reason and rationality in the appraisal of the state of both domestic and international public order.

## 4. Human Rights as a Dynamic Humanistic Struggle for Dignity

In setting out the issues and problems that limit the scope of contributions that academics can make to the human rights agenda, the core ingredients of a solution to the dilemma can be identified. The solution requires a theory for inquiry about human rights.[101] The theory must have a decision-making focus to have practical relevance, since only effective decision making—formal or informal—will apply human rights perspectives and operations to particular situations and contribute to a human rights-conditioned future.

A theory about human rights, that is policy decision-focused, must self-consciously concern itself with the policy process itself by integrating actual human rights problems that require policy responses; both the problems and the decisional responses to them must occur in a disciplined contextual setting and the decisional responses must employ processes that meaningfully clarify the policy basis of human rights prescriptions.[102] Theoretical inquiry about this kind of emphasis must embrace cross-disciplinary tools of inquiry, or multiple methods, to give scientific credibility to the enterprise. This requires fidelity to at least four essential features of a theory about human rights inquiry from a humanistic policy perspective;[103]

1.  **Comprehensive mapping:** Fundamental to an inquiry is the expression of a comprehensive map of human rights problems specified in terms of functional value categories and which permit continuing refinement and elaboration. A systematic expression of these problems will underline the difference between human rights deprivation and human rights realization. The lexical formulation of human rights as rights is frequently the tail end of a process that needs illumination.

2.  **Relevance of context:** Factual, theoretical, historical, and political contextual relevance must drive the theory. All human rights, in the sense of process, must be seen in relation to every relevant community context, from local to global.

3.  **Relevance of advocacy, policy and decision:** The focus on policy and decision requires the identification of past, present, and future decisional mechanisms at every level of community that may be relevant in clarifying, specifying, protecting, and enhancing human rights. We should of course keep in mind that policy and decision do not function in a vacuum. Frequently what triggers a policy response is a problem that emerges from the social process context. That problem will emerge in the form of a dynamic humanistic claim for a human rights value and an aspect of social process that will respond by resisting that claim. Therefore, the quality and sustainability of interest articulation and advocacy will be an important foundation for a response that is authoritative and controlling to the problem that is eventually presented for decision.

4.  **Relevance of key intellectual tasks for inquiry:** The relevance of the identification and use of appropriate intellectual tools is necessary to clarify the rational, theoretical and

factual basis of the context of human rights, as well as the procedures for their realization in fact. The key discrete intellectual tasks are; goal and value clarification; the historic study of relevant trends; the scientific study of causes and consequences of human rights failures or successes; the concern for predicting possible future scenarios in terms of approximation to desired human rights goals; and the creation of alternatives to better approximate the desired human rights goals.[104]

## 5. Conclusion

The broad outlines of an approach to human rights that stress the dynamic humanism of the individual in the global environment and the importance of creative advocacy in search of solutions that from a policy point of view enhance and strengthen human rights globally remains a vital challenge. In particular, the emphasis on humanism is also a focus on the recognition of an enhanced responsibility in individuals and human institutions, in particular, institutions of science and enlightenment. These challenges are both theoretical and practical and require an enhanced sense of responsibility and an enlarged sense of empathetic identity with all of human kind. Obviously this challenge is one that requires us to struggle with a much broadened sense of who we are, and in particular, responsibility requires that the breadth of our identity be global and universal.

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95.  Kurt Mills, *Human rights in the emerging global order: A new sovereignty?* (New York: St. Martin›s Press, 1998); See also W. Michael Reisman, "Sovereignty and Human Rights in Contemporary International Law," *The American Journal of International Law* 84, no. 4(1990): 866-876; See also Richard Falk, *Human rights and state sovereignty* (New York: Holmes & Meier Publishers, 1981).

96.  *Id.*

97.  *Supra* note 76-82.

98.  *Id.*

99.  *Supra* note 59 and 75.

100. *Gregg v. Georgia,* 428 U.S. 153, 96 S.Ct. 2909 (1976)

101. *Supra* note 59 and 75.

102. *Id.*

103. *Id*.

104. *Id.*

# Secretariat of the Soul and Certainty

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***Editor's Note:***

*The quest of science over the past several centuries has been to replace the no longer sacred truths of religion with a new source of verifiable and authentic knowledge. During its nascent period, science chose carefully its subjects for investigation, confining itself to the most obvious clockwork cycles, repetitive patterns and apparent similarities in physical nature. Yet, its very success in charting the elements, classifying living species and deciphering the rhythm of the heavens led it to venture further into less certain realms until it happened upon the surprising discoveries of quantum physics. Thus, in place of the foundational faith in natural law, certainty and predictability, which characterized the scientific outlook of the 19th century, physical scientists in the 20th century ventured to explore the enigma of uncertainty, unpredictability, irregularity and complexity inside the atom, in shapes and forms, turbulent flows and other apparently chaotic phenomena. Even today the social sciences cling to shallow coastal regions where law, order and certainty appear to prevail in human affairs, avoiding to venture into the inexplicable realms of uncertainty. No subject is as far afield from the safe shallows of certainty than the remarkable phenomenon known as individuality. On the face of it, uniqueness and individuality appear to be the very antithesis of what science is qualified to examine, no less understand, yet in these distance seas so far from the safety of solid land lie greater truths and richer discoveries than any so far known. This brief essay and short dialogue, written with reference to the social sciences in general, have profound implications for revealing the laws and unraveling mystery of individuality.*

Culture is the bedrock of social evolution. Strong signs of change in both society and culture are anticipated in literature. The profound shift in thought that took place during the last century regarding the infallibility of scientific certainty is an example of such a profound cultural and social change. One of the greatest innovations of the early 20th century was the overturning of deeply-seated beliefs in the natural sciences, particularly in physics. It all began when Einstein's discoveries challenged the Newtonian view of reality, though Einstein did so reluctantly and spent the last years of his life attempting to prove that physics could once again be built on some certainties fixed and definitive in space and time. "God doesn't play dice," he once remarked about quantum theory.

Since then, indeterminism and uncertainty have occupied an increasingly greater space in the fortress of the philosophy of science. We find them, for instance, permeating the thought of philosopher Karl Popper on empirical falsification and Nobel physicist Ilya Prigogine on complexity. Both strove in their own ways to reconcile the apparent contradiction between certainty and uncertainty, which constitute two halves of an elusive still greater truth.

Ironically, if we look instead at the human sciences, particularly economics, we do not get the impression that this profound development in thought and culture has yet been recog-

nized. Still today, my fellow economists aspire to be taken as seriously on the scientific plane as the physicist or biologist. They were almost convinced of that attainment several decades ago when a Nobel Prize was introduced for economics. The ambition of this discipline has been, until very recently, to seek to provide social economic analysis with a presentation as sure and accurate as the natural sciences were thought to be equipped with. Psychology too has fallen prey to the lure of scientific respectability, focusing largely on typal characteristic of human personality and repetitive patterns of behavior, leaving the distinctive and unique to artists and poets.

These developments in philosophy and science have had profound practical significance. The 20th century marked a struggle between two contradictory worldviews over which two world wars were fought – one founded on belief in the power of the collectivist State backed by modern science, industry and centralized power; the other founded on faith in the power of the free individual and free society, founded on human rights, aspirations, creativity, idealism and spirituality. An interminable battle was fought for greater freedom and awareness and responsibility in freedom. Today we find ourselves in a new world – culturally, socially and psychologically – capable of dealing with uncertainty, yet filled with the thirst for security which lures us into the arms of blind conformity and uniformity.

The notion of uncertainty has progressively replaced that of certainty. Modern science, for most scientists, is no longer conceived of as a structure where once and for all a certain definition of reality is established and remains valid forever in time and space. Science is no longer viewed as a permanent edifice to which additional bricks of knowledge are conti-nuously added and fixed forever. Every time science produces a new brick, a new building material, the whole structure of existing thought is subject to question and review. It is a dynamic vision that makes itself felt, no longer a vision in which truth is eternal, universal and immutable in time and space. 'Truth' is never found; only greater truth is. Every ancient truth is continuously redefined and modified into new 'truth'.

The very history of evolution seems ever less like a series of equilibrium situations, and increasingly like a system perpetually leaning toward non-equilibrium. The identification of an "imbalance" highlights the fact that numerous possibilities for development always exist. The definition of "balance" implies a purpose that can easily prove to be an "imbalance" if our observation and perception of circumstances change. Some modern mathematics books can be cited, such as Kline's for example, which highlight how for a given problem tenable logic and mathematics can be applied to arrive at multiple solutions, each equally valid. Thus, we learn that we cannot apply ideas about natural science from the determinist period of the last century to justify determinist views, or views in which every future can only consist of the inevitable development of an evolution with only one way out, to which we apply the term "scientific". Evolution can take several directions: they appear determined only *a posteriori*, while everything that will happen in the future is uncertain – fortunately!

Paradoxically, it is by accepting the notion of uncertainty in the natural sciences that a link is generated for forging a union, a new alliance, between the "humanities" and the so called natural sciences. The natural sciences, which are only exact for a limited period in time and space, differ from the human disciplines or humanities only in the degree of uncertainty.

It will take a little time for culture to acquire the courage and maturity to fully welcome these ideas: to accept uncertainties without turning to drugs − physical, intellectual or ideological – and lead the way in eliminating life's challenges and pluralism, both in day-to-day living and in the historical dimension.

Let us, therefore, avoid building new medieval castles with the false hope that by hiding behind these ramparts we can enjoy greater security. Uncertainty forms part of the order of things. It is through uncertainty that a real possibility for progress exists. Fully conscious of the risks, overcoming every kind of frontier, our best survival and development are made possible. It is on this uncertainty that the future of Europe and the World hinges.

It is for this reason, that two decades following the Club of Rome's report on *The Limits to Growth*, I submitted to the Club my report on *The Limits to Certainty*, an economic analysis closely linked to some cultural fundamentals.

## Balance Sheet for a Secretariat of the Soul and of Certainty

The tension between the two world views and the process of reconciling them is reflected in the literature and art of the past century. The writings of Robert Musil, an early 20th century Austrian, have been a cultural reference point for me regarding this quest for reconciliation between certainty and uncertainty. He represents the culture of "Mitteleurope", of central Europe, to which Trieste Italians like me are particularly sensitive. He is best known for having written a book entitled *The Man Without Qualities*. This translation of the title constitutes a betrayal. The German term is "Eigenschaften", for which the term "qualities" is an incongruence. It would be better to use the word "properties" in the chemical meaning of the term. The book describes the state of a man who, in a world dominated by science and the determinist view of things, refuses as a person to be limited to one specialty, to be tied exclusively to one label. The drama is even more powerful when one knows that Musil had a scientific education and that in his time education in the humanities and in the sciences were completely separate. This inner conflict between scientific determinism and the individual's freedom of choice gave rise to his conception of the man without qualities, who feels far from the world that arose immediately after the First World War, – when even political theories tried to become "scientific" – which was on its way towards one of the greatest disasters in history.

The book begins in a paradoxical manner: Ulrich, the protagonist of the long novel, is tasked with setting up a "Secretariat of the soul and of certainty". The date is August 1913. Some German patriots decided it was important to celebrate the anniversary of William II. Austria had not succumbed to the charm of Prussia and Germany, and wished to prepare great celebrations for Franz Josef who, in 1918 would celebrate 70 years of his reign, an impossible event given that when Musil wrote his book it was already known that the emperor and his empire no longer existed. The 70th anniversary of the reign of Franz Josef was meant to have taken place on the basis of the idea that it was possible to overcome the cultural barriers which at the time (and in part still today) divided what Musil called the two half-truths. On the one side is a world founded on the scientific ambition to arrive at some certainties through physics and mathematics; it is the world of science, understood as the realisation of the 19th century utopia that aimed at assuring society of a future made up of certain, definitive and

absolute knowledge. On the other side, Ulrich is condemned to impotence because human reality and the species' becoming are made up of more or less irrational deductions and intuitions that are not ascribable to Cartesian type definitive certainties, and which challenge the mechanistic and deterministic forecast towards the inevitable.

## Two "*half-truths*"

Musil opens up the path to a new culture where science is no longer only deterministic, but presupposes a dialogue with indeterminism rooted in the soul, in the uniqueness of the individual. And on this path he represents the beginning of the possibility of rebirth. Musil alludes to "two half-truths" because he knew them both very well. He had written a thesis on Mach, was an engineer and had a mathematician's ambitions. At the same time Ulrich himself, in the novel, remembers ever so often that mathematics is the field in which he tries to make concrete his aspirations towards precision. From his previous book *Young Torless,* it can already be seen that Musil is very attracted to the intuitive and impulsive aspects of human existence. Nevertheless, he does not allow himself to be taken in by stereotypes or by the Viennese atmosphere of that age, of which he is often harsh in his criticism. The judgment expressed by Musil about Vienna derives from the idea that it was a decadent provincial world, incapable of planning its own survival in contemporary reality. The place where a more solid European culture was to be found at the beginning of the century was Berlin.

*The Man without Qualities* begins with an account of what was strange in the kingdom of "KAKANIA" (Kakanie = Kaiser und Konig, Emperor and King), a world which no longer believed enough in itself to fight and to propose a synthesis "of the soul and precision". Ulrich feels alone and abandoned in such a world. The whole of Europe seems to be falling into ruin in its wild attempt to transform a half-truth of mechanistic certainty into a total and all-absorbing truth.

As the novel progresses, one realises that what Musil is trying to free is the New Man, the emerging individual who will arise amidst the crisis in Europe - Europe as an extrapolation of the Viennese world of the Austro-Hungarian empire of 1913, on which few hopes could any longer rest. There was not enough breath yet to give rise to a new culture, a new model capable of dealing with uncertainty rather than being subjugated by it.

Another proof of Musil's positive and optimistic will comes from a fierce criticism of Oswald Spengler and his thesis on the decline of Western Civilization. For Musil, this crisis was not inevitable; it was not registered among the inescapable "scientific" facts. We must learn that we are not an absolute truth, that man is not complete, that man is a project in search of himself, and that a civilization cannot give itself or create for itself a future if it separates, in a schizophrenic way, the aspiration for precision of the scientific type from the idealistic cultural aspiration in the broad sense. A surrender of our individuality would create an irreparable split and civilizational collapse.

Why evoke today the balance sheets of a secretariat and its activities which, as Musil's novel takes shape, end up disappearing in the reader's hands like sand that runs through the fingers and is scattered? There is an underlying cultural wave that can be found in hundreds of publications, which justifies the conclusion that the secretariat of precision and of the soul created by Musil in this novel has effectively accomplished its task a century later. Despite

having begun with an idea that has never been made concrete organisationally, one can now speak of a positive balance sheet. The two half-truths are no longer schizophrenically separate. We now live in a post-Cartesian reality in which ideas are no longer distinct. If they remain so, they often become irreconcilable and unproductive. There is an ever growing consensus on the fact that between one field of human knowledge and another there are grey areas, overlapping areas. Between poetry and literature, economics, political sciences, chemistry and physics, there are no longer any definitive irreconcilable divisions. The poet's inspiration is close to the physicist's intuition. The custom of cutting reality into slices was, after all, simply a tool of convenience to help promote research in a certain number of sectors, until the details could be integrated into the whole. This old method of thought is what caused the European disasters of the last century. It was the exclusive State-Nation and the lack of understanding of political federalism, condemned because "confused", that admitted and even stimulated a division of sovereignty.

Paradoxically, this secretariat that in the end was no more than a plan, today, almost one hundred years later can discover signs of its realization. We now have the potential to discover the means of reconciling these contradictory half-truths – that which conforms to universal law and that which is unique, that which binds us together as members of a single species and that which distinguishes the individuality of each. In that reconciliation lies an immense power for the advancement of civilization, science and culture and for the promotion of human welfare and well-being.

I pictured the following dialogue as an "Intermezzo".

## Intermezzo: Dialogue on the Foundation of a Secretariat of Certainty[1]

"Did you say Ulrich, Ulrich Tuzzi?"

Having left the office I took about a quarter of an hour to get to the Grangettes clinic at Chêne-Bougeries, a district of Geneva. Near the car parking area, to the west of the building, I found an old two-storey house, surrounded by trees among which perhaps had survived four pines, already old at the time, and two birches described by Robert Musil in notes recounting the last years of his life. Unless, of course, those had been sacrificed to make way for the car parking area.  I was just about to check whether the half-moon shaped pool was still there, when I became aware of the presence of a friend, a research Fellow from CERN (European Centre for Nuclear Research). He was a physicist and was accompanied by a person of about forty, a man with a decisive air, a high forehead and black hair brushed straight back. Both of them seemed to be looking for something in the area around the old house.

A handshake and my friend performed the introductions: "One of my colleagues from CERN, Ulrich Tuzzi".

He then explained that they had come to see if it would be possible to rent the ground floor of the house with the veranda so as to set up a general secretariat of certainty there.

"You see," Ulrich Tuzzi explained to me, "a few years before the outbreak of the First World War which was to put an end to the Austro-Hungarian Empire (I'm of Austrian origin),

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[1] This dialogue was originally published in French in Orio Giarini's *Itinéraire vers la retraite à 80 ans,* Economica , Paris, 2002.

my grandfather dreamed of creating a General Secretariat of certainty and the soul."

"I seem to remember reading somewhere…"

"---but he didn't succeed. He wanted to reconcile culture and the European scientific tradition, which from Descartes through Newton to our time has never ceased widening the gap between the soul and the body, between knowledge resulting from the natural sciences, and – something more difficult to define – that engendered by artistic perception, between certainty and uncertainty. He often used to say that in his universe, until then, every truth appeared to be divided into two half-truths."

"No! You who work in a highly prestigious centre of fundamental research are not going to tell me that the discoveries are only half-truths!"

"In a certain sense, yes. Some things were not so clear in my grandfather's time – a time dominated by positivism and by a great number of absolute and universal cognitive elements. As Popper said, Science progresses thanks to a process of falsification. It studies Newton's laws until it realizes that under certain conditions these laws are partially false. Up until the time when Einstein arrived on the scene and revealed that they were not completely relevant. After Einstein came Heisenberg and then Prigogine. Research is a dynamic process and does not stop with the acquisition of eternally valid details. With every new synthesis, every new detail, the meaning of the component parts and the theory of reference changes."

"But a chair will always be a chair, a tree a tree, an atom an atom."

"In a certain sense, and under certain conditions, yes. Heisenberg's uncertainty principle makes us recognize that at the level of the infinitely small, the equivalent of a chair can, at a determined point in time, appear as something absolutely different."

"Yet, it is true that technology becomes increasingly more efficacious and that I'm able to distinguish − in a manner of speaking – ever more clearly the infinitely small."

"There comes a time when the simple act of observing the infinitely small changes it because the energy released by the observation interacts with the object observed. A little more progress is made thanks to some mathematical models and formulae, but for the moment the situation is increasingly complex and the numerous hypotheses are often contradictory."

"My dear Mr. Tuzzi, if that is the case are you perhaps telling me there is no longer any difference between human and social sciences (in which we ourselves are immersed) and natural sciences, subject as they are by definition to clear and objective observation?"

"This designation has its limits. The exact sciences and social sciences are ever more frequently found in the same situation: they both deal with different degrees of uncertainty. But thanks to this we have a possibility of filling the hole that obfuscated my grandfather's view. From this it is clear that it is now possible that the creation of a centre for reflection on uncertainty would lead to something of which the general secretariat of certainty and the soul would have been incapable at a time when it was thought that these two poles were always separate. This is the reason the secretariat never came about and my grandfather lived this infinite romance, split by the contradictions between the nature of man and that of a certain positivistic science, in pursuit of a synthesis that seemed impossible. Today, however, the

word "End" can be placed on the word impossibility, thanks to a new age that is opening on research and knowledge."

"What you are telling me now is that your grandfather's life, or rather his romance, comes to an end precisely because it can continue…"

"There isn't a paradox. Concerning this, Musil wrote that 'men of this type certainly exist today, but there are not many of them, and for this reason it is difficult to assemble what is dispersed'. Currently a new culture is developing and spreading around the world, a culture in which it becomes increasingly less common to find isolated elements. A culture in which a New Alliance is forming, and as the Nobel recipient Prigogine states, it is a culture of a process of integration and construction."

"As a matter of fact it seems rather problematical to me that all this springs from uncertainty, and makes me wonder if the little certainty that remains in the world – some scientific certainties – is hidden beneath our feet."

"On the contrary, all the dogmas and pseudo-religions that are often transformed into political ideologies have totally exploited the concept of an exact, certain and inevitable science. From it they have deduced a great many legitimisations with no foundation. In the Middle Ages wars and massacres were justified in the name of God. Still more horrible, particularly barbarous massacres were perpetrated last century in the name of society's scientific laws. Never before had chaos been so efficiently orchestrated."

"But how is it possible to live and give life while proclaiming that uncertainty has a positive value?"

"It's not a matter of spreading uncertainty. The problem is recognizing that life is uncertain. Sooner or later humanity must decide to create a truly civilised world, built by people of proven maturity. This means recognising reality. It is an act of deep cultural awareness, essential if we want to avoid the manipulations of those who offer us definitive certainties. It is a matter of learning to live better, of accepting one's own responsibility, of facing uncertainty and accepting it. It will be the best of psychotherapies…"

"I see…It's not for nothing that you're Viennese…"

"Yes, but a Viennese who accepts reality, and who demands that there should be a speedy investigation into what in Freud is false."

"I must admit, my dear Mr. Tuzzi, that I'm a little, well actually, very puzzled. I understand that you feel great affection for your grandfather. But couldn't you perhaps say that your attitude is due, in large part, to a world in crisis, to a world in a state of decomposition? If I remember correctly, your grandfather lived in Vienna mostly during the years immediately before the fall of the Austro-Hungarian Empire. Could not his desire to found the general secretariat of certainty and the soul -  I hope you will not hold it against me if I speak frankly – have perhaps come from a desire to flee reality, of taking part in the political breakup of his country and also, perhaps, of being to some extent responsible for it?"

"Clearly the Austro-Hungarian Empire had fallen into a serious crisis and was incapable of facing the historical developments of the time, and particularly the rise of nationalisms."

"A period that lasted several decades which appears to have coincided with the great development of the Industrial Revolution."

"Exactly, Cartesian and Newtonian logic corresponded to that of industrial specialisation, of material manufacturing productivity, of people specialisation and consequently that of nationalism and of the classes. The drama occurred when the line of demarcation between dialectic and conflict was broken and the breach became beyond repair. The incompatibility between these two poles is once again one that exists between certainty and the soul. The Cartesian method of subdividing the world and life reveals an approach that is intrinsically incapable of stimulating the differences in a positive way. Here in Switzerland it is accepted that the State guarantees and protects the individuality and sovereignty of the Cantons. This federalist system combines autonomy and supra-nationality, and reinforces them. It is the path, perhaps, that Europe is taking, in order to fully make the most of its peoples and their diversity."

"But an independent State can at least defend its freedom."

"It depends on its strength. Independence of unequal countries puts the weak at the mercy of the stronger. Only the strongest State can consider itself truly independent. Currently there are more than 150 'independent' States in the world. They all represent only half truths while international imbalances represent the other half."

"So, for you the fall of the Hapsburg Empire was a historic disaster. Don't you think this shows a little nostalgia on your part? You aren't by any chance creating your Centre to commemorate the anniversary of Franz Josef's birth?"

"I have to admit you are right on one point. On the one hand the many reasons for which the old Empire of the Hapsburgs had to disappear are soon told: its inability to present a valid plan for modern federalism, its indecisive management of the destructive effects of the Industrial Revolution, the clumsy renewal of the social structures… However, on the other hand it is necessary to underline the positive aspects of the co-existence of different peoples, not forgetting that the disintegration of the empire also opened the way to Nazi-ism. The essential point consists in finding in this new culture that is spreading throughout the world, a new possibility of overcoming the current situation, of progressing, of recreating an image of the future and of opportunities that the old cultures and ideologies (which are no longer those of the Austro-Hungarian Empire, but rather those that destroyed the Empire) have increasingly greater difficulty in promoting."

"Your Centre of certainty certainly isn't lacking global ambitions. I'm afraid however that you're looking for a humanity that simply doesn't exist."

"Of course, in all of this there is a great challenge to be met. If no one takes it on it will be difficult for our planet to survive adequately, as it may become a prey to vulnerability of every kind and provenance. But it's true it's a question of human quality, of good sense and intelligence."

"Everything depends on what you mean by quality. My grandfather used to say that he had none. He refused to see himself confined in a restricted vision of life. A one-dimensional

life with a single truth that quickly resembles a form of blindness. To have many truths and subject them to checks is much better than having only one truth. What is necessary is to want it and to want to improve it."

"Perhaps it's true. I too tend to define myself as a man without qualities."

"If you want to help me with the Centre of certainty you are welcome."

Night had fallen and someone had lit the lights in the veranda of the house on chemin des Grangettes (nr. 29 to be exact).

<div align="center">***</div>

It is there that we can even now imagine Robert Musil still walking around, perhaps pleased with the developments of the 21st Century which he perceived in vision long before they became a reality.

We are pleased to bring you Part 3 of Issue 1 of *ERUDITIO,* the new electronic journal of the World Academy of Art & Science. We have indicated previously that the first issue of *ERUDITIO* is dedicated to the theme of individuality viewed from a multidisciplinary focus with implications of social consequences and policy possibilities. The papers emerged from a web seminar of the Academy on "Individuality" as well as a conference on "Humanities and the Contemporary World" organized by the Montenegrin Academy of Sciences and Arts in June. Issue 1 will eventually contain approximately sixteen (16) papers, which will be released in four (4) parts. Links are provided so that you may also access the individual papers online.

## Issue 1 – Part 3: Individuality

[Looking for a New Alchemy: from the Lead of Information to the Gold of Knowledge](#)

   *- by Emil Constantinescu*

[A New Model of Education: Development of Individuality through the Freedom of Learning](#)

   *- by Mirjana Radovic-Markovic*

[The Evolution of Cooperation](#)

   *- by John Scales Avery*

[The New Morality](#)

   *- by Yehudi Menuhin*

**Emil Constantinescu's** essay on the search for a new alchemy that can overcome the limits of lead-based information overflow to the creation of an intrinsic golden dimension of knowledge is a profoundly thought-provoking and challenging contribution. This contribution explores the meaning of knowledge, its philosophical implications and the fact that knowledge is a complicated and not easy to understand idea. However, there is an important task that requires a better integration of what we mean by knowledge and its consequences for humanity on a global basis. One of the contemporary challenges is the insistence that higher education, in particular, be connected to the efficient market and the generation of profit. Such a demand seeks to ultimately marginalize the idea of creativity, which is the foundation of theory generation from which practical consequences may be generated. However, there will be no practical applied benefits and profits without the creativity required for theory construction. When you bring the element of creativity, we bring in the humanities, the classics and indeed, the salience of emotional intelligence. Indeed, the great truths from the classics, such as Socrates' statement that an unexamined life is not worth living for a human being, represent an insight into knowledge and the human element implicated in it. To undercut the humanities is in effect to undermine knowledge, and to undermine knowledge in this sense destroys the narrative imagination of the human being. The author concludes as follows, "I think that an alchemy able to transform the huge quantity of information in true knowledge is, indeed, an essential skill, and even the mother of all science, in the modern world." The author has given us a brilliant insight into one of the most important precepts that guides the values of the Fellows of the World Academy of Art and Science: the need for a new alchemy of knowledge itself.

**Mirjana Radovic-Markovic** approaches the theme of knowledge in the context of practical educational challenges, which she formulates in five basic questions. One of those questions requires that we explore what should be done to increase freedom in learning and foster individuality. Since she has a background in business education, she is particularly interested in the question of students learning

entrepreneurial skills and how this might be applied, in particular, to the education of women. Her paper summarizes a cross-cultural study of these issues in nine (9) countries. In effect, her strategies to improve learning require the development of an entrepreneurial orientation, which is an application of the notion of creative intelligence but with a specific application and relevance to the status of women. The paper then develops an understanding of how to encourage creativity as an active mode of learning in a new teaching approach. The author then explores the important question of the impact of new technologies on education and whether such technology enhances individual freedom and self-awareness. She sees great potentials in the learning process when the students can access new and diverse forms of information and can combine face-to-face learning with e-learning opportunities. Some of these issues require changes in the role of teacher in a virtual learning environment. The author then addresses the link between education, creativity and entrepreneurship, in particular, as it applies to women. The last part of Professor Radovic-Markovic's paper deals with the cross-cultural empirical findings of a survey relating to these issues. The data suggests the importance of "multi-dimensional relationships between course concepts and community based on entrepreneurial experiences". Creative and interactive education must provide a completely new dimension for gaining knowledge. This mode of learning generates innovative personality development in the individual. The individual in turn creates something unique and transforms it into entrepreneurial behaviour, at least regarding the education of women.

**John Scales Avery** has written a brilliant paper on the evolution of cooperation. The paper starts with the apparent paradox that human beings will generate the most destructive of behaviours out of altruism justified by some symbol of the altruistic. In short, individual crimes for selfish motives are generally insignificant compared to the numbers massacred at the altar of unselfish love. Quoting Koestler, Avery notes that "wars are not personal gain, but out of loyalty and devotion to king, country or cause". He then explores the symbols and conditions, which create in a group a sense of the "we" in which unlimited altruism may be important and the "other" which may be a perceived threat to the "we". He notes that population genetics and group selection may explain the willingness of individuals to sacrifice themselves for their own groups. The question then is, how do we biologically explain the issue of in-group altruism? At the birth of antiquity, altruism was tied to group survival, particularly if there was competition with other groups. Individuals, loyalty and altruism in the group increased the group's chances of survival. In order to distinguish the in-group from the out-group, the distinguishing factors tended to be cultural rather than biological. These included scarification and, as Avery notes, there are endless signs and symbols, which constitute cultural markers for differentiation. Language is of course an important and ubiquitous marker of difference. It establishes the group boundary. Religion is another marker. Avery provides an insight into the cultural factors that make up group identity, which would seem to have important psychosocial implications. However, the important point is that group identity is a cultural/social construction. If this is true, then it has large-scale implications for an organization such as the World Academy of Art and Science. What role can the Academy play in the expansion, culturally speaking, of human group identity to the point that group identity represents global human solidarity? Avery moves from these insights back to science and biology and examines the evolution of cooperation. He finds that there is a wealth of evidence of cooperation at all levels of biological existence. In particular, he uses illustrations between single cell and multi-cellular organisms as examples of cooperation, which have altruistic elements. He notes, additionally, that multi-cellular organisms live in cooperation with animals and humans since bacteria are essential for the digestion of food. Insects, in turn, are essential for plant pollination. The comparison of animal cooperation with humans shows that humans are profoundly impacted by cultural as distinct from genetic evolution. Our changes are not significant in the genetic code, but they are revolutionary in the cultural communications context. Moreover, cooperation is central to the new form of human evolution because cultural advances can be shared universally. These insights lead us

to see that humanity is going through a gigantic transformative evolution, which advances cooperation and indeed, makes cooperation a global and cultural necessity. Avery notes that competition has a role in evolution, but cooperation is clearly more important. Cooperation is confronted with cultural regression in the form of genocide and the threat of nuclear extinction. The challenge is to strengthen cultural cooperation on a global basis recognizing that human nature still nurtures a dark side.

The final essay in this part of *ERUDITIO* is a speech made available from one of the most distinguished Fellows of the World Academy of Art and Science. I refer of course to **Yehudi Menuhin.** In reviewing Menuhin's paper, we considered it especially relevant to the theme of individuality in this journal. Menuhin was one of the greatest violinists ever. He was also a great and distinguished intellectual. The central point in the paper is his effort to define morality in the most comprehensive terms possible. For example, he suggests that he "would like to envisage morality as simply the unseen senior partner presiding at every transaction between a human being and his environment, as within a human being, between himself and his person. Morality could be described as that attitude or approach essential to achieve maximum joy, satisfaction, ecstasy, security and health—mental and physical, over the longest possible period for oneself and other creatures." Menuhin draws attention to the drive for development and the role of indigenous Indians in New Mexico to preserve a sacred lake from being contaminated by the forces of development for profit. He sees a profound insight in their idea that private property should be limited: "they believe that land is very much like air and water, that you cannot tie it down, cut it up and apportion it—that it belongs to everybody". With numerous other illustrations, Menuhin makes the case for a new morality, which is a matter of current contemporary salience as well. In some ways, Menuhin was making a plea for a new inclusive paradigm of morality and values, which would be cross-cultural, trans-disciplinary, and global in its importance. This makes the essay worth reprinting in our journal.

**Winston P. Nagan**
**Trustee**
**Chair, Program Committee**
**Editor-in-Chief,** *Eruditio*

# Looking for a New Alchemy:
## From the Lead of Information to the Gold of Knowledge

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*Abstract:*

*There is a general agreement about the main characteristic of the contemporary ways of progress. Knowledge is unanimously recognized as its driving force. What is less unanimous is a comprehensive definition of knowledge itself. In many documents, analyses, working papers and so on, the term is considered as universally understood, but in fact, there are many competing significations on the market. Too many of these definitions confound information and knowledge, reducing the realm of knowledge to an accumulation of technical skills.*

*The quantity of contemporary information is so huge that the risks of robotization of the men and women of our world have become obvious. In my view, bare information opens a royal way to massification, whereas knowledge stimulates the harmonious development of responsible individuality. There is no other antidote for de-humanization but an individual capacity for transmutation, as in the old alchemist's retorts, of the lead of information into the gold of knowledge.*

*My contention here is two-fold. I propose, first, that the significance of the term 'knowledge' as a driving force of the contemporary world must be as deep as possible, in the most comprehensive, philosophical meaning of the term. Modern knowledge cannot and should not be reduced to a technical compilation and use of information, but has to be coextensive to the depth and breadth of the human wisdom accumulated through millennia. The second theme stems from the first one, and envisages the realm of modern knowledge as a territory of synergies, where each domain of research functions as a "bouillon de culture", a nourishing medium for the other domains of knowledge: history for the sciences of the Earth as well as geology for history, classics for physics, and ethics for biology – or vice-versa.*

Knowledge is unanimously recognized as the driving force of contemporary societies. Be it the rather stereotyped resolutions formally issued by the European Union, in science-fiction comics or serial films, the future is brighter only if it is more intelligent, better informed, more understanding of the world, or even the worlds, in which humanity evolves. The pursuit of knowledge is as essential for humanity as the pursuit of happiness, and may even be coextensive with that fundamental pursuit. And yet, we may hardly find a comprehensive definition of knowledge; many documents, analyses, working papers and so on consider the term universally understood. In fact, there are many competing significations on the market. Too many of these definitions confound information and knowledge, reducing the realm of knowledge to an accumulation of technical skills and competencies.

One of the great challenges of the contemporary world is the huge quantity of information that we find today in various media, be it traditional – as the books or the printed press

seem to be – or modern, visual or electronic. The necessary skills in the contemporary post-industrial world are more complex than ever. Acquisition of both information and skills is time-consuming, and so, carries with it more than ever the risks of robotization. Here lies, I think, the main question of the difference between information and knowledge. Bare information opens a way to massification, whereas only knowledge stimulates the capacity for critical evaluation and generates the harmonious development of responsible individuality. There is no other antidote for de-humanization but an individual capacity for transmutation, as in the old alchemist's retorts, of the lead of information into the gold of knowledge.

My contention of today is two-fold. I propose, first, that, if we seek a truly better world both for ourselves and for tomorrow, we must bestow the concept of *knowledge* as a driving force of the contemporary world with as deep a sense and as complex a meaning as possible, in the philosophical meaning of the term. The second theme stems from the first one, and envisages the realm of the modern knowledge as a territory of synergies, where each domain of research functions as a bouillon de culture, a nourishing medium for other domains of knowledge: history for the sciences of the Earth, geology for history, classics for physics, and ethics for biology – or vice-versa.

Knowledge cannot and should not be reduced to a technical compilation of information. It has to be coextensive to the depth and breadth of human wisdom accumulated through millennia. The quest for a true understanding of knowledge must go back at least to Plato, who once told that his master's interlocutor asked Socrates, his master: *And what, Socrates, is the food of the soul? Surely*, Socrates answered, *knowledge is the food of the soul*. Knowledge as the food of the soul must be our theme of reasoning. We must confess that this is a great metaphor, but it is not a definition. In fact, no single definition of knowledge exists, and there are practically as many theories to explain it as there are philosophers or scientists who probe into its depth.

As Bertrand Russell wrote in his "Theory of Knowledge",[1] at first sight it might be thought that knowledge might be defined as belief, which is in agreement with the facts. The trouble is that no one knows what a belief is, no one knows what a fact is, and no one knows what sort of an agreement between them would make a belief true. As Wittgenstein commented on this proposition, so may we: he observed that one can say he believes it, but it isn't so, but not he knows it, but it isn't so.

Following these ideas, we may say that *knowledge* has to be understood as **a cluster concept** that is not adequately captured by any single definition. An interesting view in this respect is that of Karl Popper,[2] who identifies three worlds of knowledge:

*World 1* which is the physical universe. It consists of the actual truth and reality that we try to represent. While we exist in this world, we do not always perceive and represent it correctly.

*World 2* which is the world of our subjective personal perceptions, experiences, and cognition. It is what we think about the world as we try to map, represent, probe into its past and anticipate or formulate hypotheses. Personal knowledge and memory form this world, based on self-regulation, cognition, consciousness, dispositions, and processes.

*World 3* which is the sum of the objective abstract products of the human mind. It consists of such artifacts as books, tools, theories, models, libraries, computers, and networks.

While knowledge may be created and produced by *World 2* activities, its artifacts are stored in *World 3*, for example, the Bible, Plato's *Dialogues*, Maslow's hierarchy of needs, and Gödel's proof of the incompleteness of arithmetic, theories of history and of social structure of the world, and so on.

The main point of this Popperian hierarchy of knowledge consists in the postulate of interdependence, and in the idea that there is a permanent bi-univoc exchange between the three realms of knowledge. *World 1* enables *World 2* to exist, *World 2* tries to control *World 1* through intelligible models, and in this way it produces *World 3*, while *World 3* helps in the recall and the education, development, and learning of *World 2*. *World 3 World 1* is the inferred logic of *World 3*, which describes and predicts *World 1*. As a consequence, we cannot survive in the physical, objective world either without the scientific knowledge that helps us in our daily life and progress – the sum of which we usually name **civilization** – or without the sum of our subjective perceptions about the world – which we define as **culture**.

Popper held that scientific theory, which is the foundation of any human knowledge, is generated by creative imagination in order to solve problems that have risen in specific historical and cultural settings. This means that, if we choose to amputate culture out of the hypothetical "objective knowledge" realm, we risk losing the very essence of civilization. A common set of cultural facts and information matters not for its own sake, but because a shared intellectual landscape is essential in empowering us to strive to attain the essence of knowledge.

The modern world seldom recognizes that the first and foremost objective of knowledge should be the disinterested dedication to the broadening of human mind. In spite of any theory, and mostly because of the complexity of human knowledge, the social capital invested today in its different components, or as Popper imagined them, the investment in the exploration of these three interrelated worlds, tends to be selective. In our society, the humanities have seemingly lost most of their traditional value as the core of the formation of the human person, and the balance of options inclines drastically towards the applied sciences and technologies. Or, it is obvious that the progress of the applied sciences and techniques depends almost entirely on the progress of the theoretical knowledge of the fundamental sciences, which cannot be quantified but remains essential. On the other hand, it is my thesis here that the general progress of theoretical knowledge cannot flow freely without the nourishing broth of the arts and humanities. One of the main errors in the decisions which shape the evolution of contemporary sciences and technologies is the marginalisation of the humanities in the general realm of the pursuit of knowledge.

The profitability of knowledge seems to be the dominant goal aimed at by the modern quest of a new philosopher's stone. A reader once crudely commented in a public debate about the place of humanities in modern education that, *no poet creates a vaccine or a tangible good that can be produced by a Fortune 500 company*. This kind of misjudgment is flatly contradicted by Einstein, who praised above all *the supreme art of the teacher to awaken joy in creative expression and knowledge*. Or, earlier, by Nietzsche, who wrote once that *our treasure lies in the beehive of our knowledge. We are perpetually...honey gatherers of the mind.*

Although none of these commentators uses the word, the issue they implicitly raise is justification for continuing to invest in the humanities, in spite of their apparent uselessness

in terms of profit. If it is true, then, that the humanities exist for their own good, the modern manager of education and research asks more often than not why we do not let them live from their own products.

In happier times, the luxury of founding arts and humanities found its use either in the perpetual glory of the kings and tyrants, or in the moral education of souls. The Latin poet Horace promised Emperor Augustus to erect an immortal monument, more resistant than bronze, *exegi monumentum aere perennius*, and we must observe, sadly, that even today the dictators spend much more money than the free, democratic world does for the founding of arts and humanities. Truly, they are, of course, crooked and biased by propaganda; but the fact remains that poets were better paid under Communist societies than in liberal societies.

On the other hand, moral education of the young generations has abandoned completely the old idea of the humanities as a repository of ethical models. In his *Defense of Poesy* (1595), Philip Sydney wrote: *Who reads Aeneas carrying old Anchises on his back that wishes not it was his fortune to perform such an excellent act?* What happened to Faust should teach us not to sell our souls, and Kant's categorical imperative forbids us to impose restrictions on others which we would resist if they were imposed on us. Alas, the tragic experiences of the last century teach us that a solid classical education does not guarantee anything less than moral behavior of the human subject. On a more familiar ground, we may see for ourselves in the academic world that people who spend every waking hour with great books and great thoughts are seldom paragons of virtue themselves.

What can you say to the tax-payer who asks, *What good can a program in Italian poetry of the Trecento do for me?* It is possible, but cannot bear proof, that the economy of a country can benefit by reading "Hamlet". A great Romanian mathematician, Grigore Moisil, wrote once that, in his belief, the productivity of a qualified worker will be improved if he is familiar with Shakespeare's work. Hardly proven. We hesitate to argue that a well-versed graduate in the history of Florentine art will be more attractive to employers than an IT specialist – and that, in spite of the fact that some of the most brilliant bankers I have met when in office started in their careers by graduating in Classics. If your criteria are productivity, efficiency, and consumer satisfaction, it seems that the only thing that makes sense is to withdraw all material support from the humanities, and support only programs that produce immediate results the man or woman in the street can understand and appreciate at once.

Of course, the criteria of any respectable scientific and academic community must not be reduced to aiming only for productivity, efficiency and consumer satisfaction. But the interrogation of the ordinary taxpayer cannot be avoided. There are two layers of answer to this interrogation. One may seem too abstract, but cannot be avoided. In the last decades, the scientific study of human intelligence and creativity has proved beyond any doubt that the performance of our brain depends on a complexity of factors: intelligence is but one of them, the necessary condition, as it were, but the sufficient condition resides in what the specialists call the *emotive intelligence*. More precisely, it has been proved that the performance of a person with an Intelligence Quotient – IQ – over 130-140 points depends not essentially on his/her IQ, but on the harmonization between their intelligence and emotions. In this respect, it would be a scientific heresy to eliminate from the educative processes precisely the disciplines which foster and develop the emotive intelligence. The absence of a culture that privileges learning to improve oneself as a human being may not only be a simple error of

judgment, as it carries with it the great risk of amputating the human person of one essential asset. That is why we must proclaim the value of liberal arts education as often as we can, and to help all the decision-makers concerned understand what is being lost when traditions of culture and art, which have been vital for thousands of years disappear from the academic scene.

Why have the great creators of our time turned so regularly to classical myth, literature, art and philosophy for their inspiration, and what has been the impact of this bond on them to the classical past? In André Gide's *Thésée,* written in 1944, Daedalus meets Theseus, who is about to enter the Cretan Labyrinth, and explains the deep sense of the thread of Ariadne: *This thread will be your link with the past. Go back to it. Go back to yourself. For nothing can begin from nothing, and it is from your past, and from what you are at this moment, that what you are going to be must spring.*[3] This thread to the past serves as a catalyst rather than as an inhibitor to our originality, and so leads us not only back but also forward. As the great stoic Seneca[4] wrote, *while we live, while we are among human beings, let us cultivate our humanity*.

Last, but not least, the main goal of the humanities is to create a long-term conception of citizenship for the future. In the recent past, democracy has based its institutions of learning on this ideal, striving to a degree unparalleled in the history of the world, towards the cultivation of the whole human being for the functions of citizenship and life. It is not for today, when democracy has a chance to spread more than ever, to abdicate this goal.

In her famous essay *On Not Knowing Greek*, Virginia Woolf writes: *what draws us back and back to the Greeks* is the fact that *the stable, the permanent, the original human being is to be found there.*[5] Socrates, in Plato, *Apology 38 A, says: If I tell you ...that the unexamined life is not worth living for a human being, you will be even less likely to believe what I am saying.* But *that's the way it is, gentlemen of Athens, as I claim, though it's not easy to convince you of it.* The question of the relationship of a liberal education to citizenship has a very long history in the philosophical tradition. Since Socrates, it has examined the ideal of an education that liberates the mind from the bondage of habit and custom, producing people who can function with sensitivity and alertness as citizens of the whole world.

The capacity for critical examination of oneself and one's own traditions, the Socratic *examined life*, that questions all beliefs and accepts only those that survive reason's demand for consistency, requires the capacity to test what one reads or says for correctness of fact and for accuracy of judgment. Socrates compared himself to a gadfly that awakens democracy. A gadfly is not comfortable to live with, and testing the stereotypes of your fellow citizens can be risky, as Socrates learned too well. And yet, not only ancient democracies, but also modern ones are prone to hasty decisions, and to the substitution of invective for deliberation. That is why democracy needs citizens who can think for themselves rather than those who simply submit to authority. Scientific education produces sophisticated scientists and technicians, but only the humanities, which may seem incapable of producing anything, are capable of producing gadflies.

Citizens who cultivate their humanity need, further, an ability to see themselves not simply as citizens of some local region or group but also, and above all, as human beings bound to all other human beings by ties of recognition and concern. The idea of the "citizen

of the world", *kosmopolites*, has two converging roots, that of the ancient, Greco-Roman Stoic philosophy, and that of the universal religions, starting with the Christian one. This idea had a formative influence on Immanuel Kant in the philosophical tradition during the Enlightenment, as well as on the American Founding Fathers. In the present-day multicultural and multinational world, many of our most pressing problems ask for a dialogue. The basic prerequisite is that, in whatever way we order our many loyalties, we should still be sure that we recognize the worth of human life wherever it occurs.

Humanities are the only way for understanding a human being different from oneself, for being an intelligent reader of that person's story, and to understand the emotions, wishes and desires of other human beings. When we identify with a poet's feeling, or with a character in a novel, we also judge that story in the light of our own goals and aspirations. This kind of ability can be called *the narrative imagination*. This means the ability to think what might be, maybe not as opposed to, but certainly different from what is, now and here.

Almost all present issues, from business to agriculture, from human rights to the relief of famine, are global, and call on us to trespass narrow loyalties and to consider the reality of distant lives. Cultivating our humanity in a complex world involves understanding the different ways in which different people meet and surpass different circumstances. This requires a great deal of education in the humanities and in social sciences, which are the gateway to the knowledge of distant cultures, of minorities within our own society, of differences of gender – in short, which provide the instruments we can use to know and understand the other. Maybe the best way to explain how the humanities earn their keep is to understand how many wars, at home or abroad, they may have helped to avoid.

We also need, in the modern world, the best of our capacity to use and to decipher the true meaning of words. We live almost all our lives, and to a degree unparalleled in the history of the world, in the realm of words, we communicate most often through the use of language, but our communication skills depend heavily on our general knowledge and on our humanistic education. People high in general knowledge tend to be highly open to new experiences and to intellectual engagement. Conversely, people high in openness are motivated to engage in intellectual pursuits that increase their knowledge. Citizens cannot think well on the basis of factual knowledge alone, and they need more than a few hundred words to factually understand themselves and the world. We may think about Orwell's *Animal Farm* to observe in a glimpse the disastrous effect of an impoverished vocabulary: yet another example of the social utility of literature, arts, and the humanities in general. That is why I think that an alchemy able to transform the huge quantity of information in true knowledge is, indeed, an essential skill, ability, and even the mother of all science in the modern world.

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# A New Model of Education:
## Development of Individuality through the Freedom of Learning

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*Abstract:*

*Meeting new challenges calls for new priorities in education. It means an interactive style and education based on individual needs and abilities that should provide a completely new dimension of gaining knowledge and make learning a more convenient process. The course curricula have to be devised in view of the experience acquired from either the entrepreneurial environment or any other environment, depending on the type of the curriculum.*

*It is necessary to stress that there is little documented evidence of what specific factors within the curricula are effective in fostering entrepreneurial abilities in students through education and by raising entrepreneurial intentions after students' graduation. Our research investigates five main questions: (i) What is the meaning of freedom in learning? (ii) What does freedom in learning mean to students? (iii)What should be done to increase freedom in learning and foster individuality? (iv) How can we encourage the entrepreneurial abilities of students through education with focus on women? and (v) In what direction should educational strategies be developed? The research methodology in this research is qualitative in nature. This approach involves carrying out in-depth interviews with respondents from different countries all around the world (respondents were mainly from Serbia, Iran, India, USA, Nigeria, Canada, China, Pakistan, and Philippines).*

*Our research shows that the modern business environment should be accompanied by the change in educational environment. Namely, it is necessary to offer multi-dimensional relationships between course concepts on entrepreneurship and the community based on entrepreneurial experiences. The new educational strategy also needs freedom in learning and teaching and an active mode of learning influences innovative personality development, which creates something unique and turns it into an entrepreneurial activity. Furthermore, the new entrepreneurship educational strategy should provide a more women-centered approach. It is also impossible to achieve all new educational advantages without close relationships between governments, schools and women's organizations. In other words, only their synergies allow the education system to be efficient and can bring prosperity for women.*

## Introduction

Freedom is the most important condition in almost any aspect of life. Freedom in itself is a main issue in human affairs. History is full of movements and protests of different people from different walks of life at all social levels, who were looking for freedom in various

aspects of their lives. Learning is amongst those issues which has always been a hot topic in the literature of freedom. As Lankshear argues:

> *"Freedom and learning have been linked in educational philosophy and theory within the western tradition since the time of the Greeks, and was especially significant in Anglo-American educational debate throughout much of the twentieth century."*

Association of American Colleges & Universities (AAC&U) mentions that:

> *"The academic freedom implies not just freedom from constraint but also freedom for faculty and students to work within a scholarly community to develop the intellectual and personal qualities required of citizens in a vibrant democracy and participants in a vigorous economy."*

A good education system gives students the freedom to recognize their capabilities and individual potentials. In this way, as Forte elaborates, in order to give students the freedom to learn, creating a new classroom atmosphere where thinking, questioning and imagining are encouraged and are not hampered is essential. In this context, education should encourage students to work collaboratively and ask questions creatively about ideas and issues across a range of disciplines. As creative thinkers, they try to imagine and explore alternatives, and to think in a different manner. Such an approach is required for a solid academic foundation and for enhancing their intelligence, including "soft skills" such as understanding, empathy and communication skills. The use of different learning materials and various resources allows students with various principal learning styles to understand information in the most effective way. Learning is fostered by multidimensional interactions between students and teachers. To learn on their own, youth need unlimited time to play, explore, become bored, overcome boredom, discover their own interests, and pursue those interests. It helps students develop their analytical and critical reasoning skills with particular emphasis on exploring and evaluating competing claims and different perspectives. Education leads to greater personal freedom through greater competence, if it becomes organized to consider diverse perspectives. However, as Forte argues, a student's freedom to learn requires the teacher's freedom to teach, and these are in a close relationship with each other. In this context, current educational systems need to adopt new methods and strategies that are able to support educational goals and ensure the freedom of learning and teaching.

Women's freedom in learning is also a critical topic to be investigated, especially in the field of entrepreneurship. Although women are improving their status in the educational systems, there are still some nuances in scholars' approach. For instance, as Radovic-Markovic et al., (2009) mention in their study:

> *"The changes in women's educational and career attainment may have multifaceted characteristics. Women might have increased their enrolment in colleges compared to men, but women may still differ in terms of the types of subjects in which they are enrolled."*

In this study, we will try to investigate the freedom in learning, individuality and women's entrepreneurship education, concentrating on the gender differences between the respondents. Therefore, first we will discuss the educational strategies appropriate to increase freedom in

learning. Then, we will elaborate on the impact of new technologies on education, based on its role on freedom and individuality. Afterwards, we will discuss education, creativity and entrepreneurship, and the linkages between them. Finally, the research methodology and the results will be presented and the chapter concludes.

## Theoretical background

A new education strategy which encourages interaction between teachers and learners needs different learning styles. Primarily, this means fostering creativity, which requires an active mode of learning, and consequently a new teaching format, where the teacher is a coach. Creative teachers are willing to change and welcome new experiences; they are not afraid to go off the main track or step into the unknown. Namely, the teachers are key figures to implement change, but they need support to understand and accept creativity in their practices. Creative teaching may be defined in two ways: firstly, teaching creatively and secondly, teaching for creativity. Teaching creatively might be described as teachers using approaches to make learning more interesting, engaging, exciting and effective. Teachers have to attract students' interest and attention in a new way, and as a result the development of creative approaches is called for. Simplicio adds that teachers must make an effort to better understand their students and their educational needs. On the other side, learners are empowered to take ownership of their own learning processes, and to feel that they can influence their educational contents. As some authors pointed out, "these aspects point towards a learner-centered pedagogy, where personalisation and individualisation of learning have a growing role, and where pupils have a say in the fashioning of tasks". In addition, some researchers agree that in creativity, there is always some new, critical and useful idea, understanding, information, approach or solution to a challenge that emerges at different (i.e. individual, group, organization, or even social community) levels, which could lead to better innovative performance of learners. Considering the advantages of creativity for different people at different levels, expecting widespread use of creative practices in education is a normal expectation. The creative practices in education should help learners to work on building their knowledge through defining things, which are especially important in their eyes, and in the process, strengthen their sense of self and individuality. They also involve developing students' personal qualities, including a strong sense of responsibility in self and others. In other words, according to some authors, the new education model should be based on the individual's growth and be able to foster individuality, flexibility and personality enabling development toward the following:

- promoting achievement;
- tackling barriers to inclusion;
- creating a learning and teaching environment that is sensitive to individual needs;
- original and creative thinking;
- intelligent decision-making;
- fostering young people's learning experiences through multi-dimensional relationships between course concepts and community;
- support individuals to take ownership of their own learning processes;

- improving students' relationships with teachers, where the teacher is a coach;
- acquisition of knowledge for resolution of problems;
- flexible adaptation to new situations;
- effective cooperation with others;
- learner-centered pedagogy which is focused on individual learners, their experiences, perspectives, backgrounds, talents, interests, capacities and needs with a focus on learning. In this context, new education strategies should encourage interaction between teachers and learners.

To many scholars, educational strategies should provide the learners with a fertile ground to enhance their potentials. In this way, the learner will not be hampered by disturbing and discriminating elements. As Schrank argues:

> *"As now defined, academic freedom...ignores the intersubjectivity of all persons in the setting... such an approach conceals the vulnerability of women and other historically excluded groups who are still marginal in the academy, and does not take account of the historic advantages enjoyed by white, heterosexual, able-bodied males... it does not acknowledge power imbalances in relations based on gender, race, sexuality, class, and other dimensions of difference..."*

Educational strategies should be developed in a manner that could prevent any discrimination against women.

## The impact of new technologies on education: Does technology support freedom and individuality?

New technologies allow for exploration of new areas of learning and thinking. These could support creative learning and innovative teaching and foster individual potential. Computer-based educational techniques and technologies have been considered as useful means for individualization. The different levels of interaction and collaboration characteristic of new technologies facilitate personalisation of learning paths and customization of educational services. Namely, the development and implementation of student-centric technologies will highlight a need to shift to student-centered pedagogy and the ownership of learning by learners, a quality that is indispensable for fostering creativity. In other words, digital instruments let learners learn at their own pace, teach skills needed in a modern economy and hold the attention of a generation weaned on gadgets. They can also support personal growth and intellectual maturation of both students and teachers. Adding distance courses and programs to existing services will increase the number of alternatives that students can choose from and therefore increase their freedom in learning. Certainly, students can personalize their own education through their choices. If their alternatives can be expanded, then individualization can be increased. This expansion of alternatives depends on the willingness to provide more individualized and student-centered educational services.

New technologies and tools also can enhance communication between students and teachers. As Keamy mentions:

> *"They allow each student greater diversity for learning, enhance interactivity*

*between individual students and individual teachers, provide a space for persona-*
*lized, flexible learning beyond the classroom walls and allow students to live locally*
*whilst learning globally- through the use of external resources accessed via the*
*world wide web."*

A large amount of literature deals with comparison of the modalities of electronic edu-
cation with oral speech, especially with a direct, face-to-face communication, despite the
fact that electronic education displays a large number of properties similar to the real world
education. Similar to the face-to-face education, electronic education is interactive in nature.
The result is that the behaviour in electronic education takes on the characteristics of both the
documents – the written and the informal education. Regardless of the advantage in terms of
the speed of exchange of information virtually and to larger distances, electronic education
revealed some additional misconceptions, e.g., the tasks will not be solved faster if set elect-
ronically, which is not truly the case.

Technological platforms require educational policymakers to devise new approaches for
learning methods. These technological platforms provide the learners with lots of opportuni-
ties, such as what is learnt through an online learning or a combination of face to face with
online learning systems. Moreover, in short range we can expect that the learners could learn
with software that is customized based on their kind of intelligence and learning methods.
Various online applications could be used to enable teachers to become more and more inno-
vative in their teaching styles, as well as students to develop their analytical and creative
skills and to learn and think creatively. According to Liarokapis, the advent of virtual envi-
ronments in higher education has the potential to bring a significant change in the learning
experience of learners. Namely, the online learning environment is quite different from a
traditional classroom, in which one has limited interaction and almost unlimited access to
learning resources. In other words, online courses require participants to take on new and
different teaching/learning behaviors, which are quite different from the old ones. Recent
research has compared online learning to face-to-face learning qualifications, explored the
effectiveness of online instruments such as discussion boards and chat rooms, addressed
evaluating effective online instruction, and assessed the value of online courses in specific
fields of study. Draves provides a list of reasons why he believes that the Internet enhances
learning, including such advantages as being able to learn at a peak time of the day, learning
at your own speed, accessibility to more information, an ability to track personal progress,
and the capability to test personal learning efforts. In addition, the e-learning students are in
an environment where professors respond to students' needs on demand whenever students
could reach them online, and not only in the classroom. Teaching and learning take on a more
collaborative sense in an e-learning environment.

We can conclude that with new technologies in hand, the process of learning in the class-
room can become significantly richer as students have access to new and different types of
information and can combine face to face learning with e-learning opportunities. This com-
bination provides them a lot of opportunities to learn more new things in quite a different
environment. Students can do their research projects and control experiments in comple-
tely exciting and interactive ways, and can be provided the freedom to communicate their
results and conclusions in a variety of media to their teachers, students in their classroom,
or students worldwide. Advocates of high-tech classrooms say computers are not intended

to replace teachers. But they do believe in a fundamental change in the teacher's role in the virtual learning environment.

## Linking education, creativity and entrepreneurship

Entrepreneur is a change agent of his/her society, who generates employment opportunities for others and him/herself. Therefore, it is necessary to pay attention to improving skills of entrepreneurs and their education, which should increase their competencies. Considering the importance of education for entrepreneurs, recently, it is evident that entrepreneurship is one of the fastest growing sciences in today's undergraduate curricula in the United States and worldwide. In the past 3 decades, formal programs (majors, minors and certificates) in entrepreneurship have more than quadrupled, from 104 in 1975 to more than 500 in 2006. The development of courses in entrepreneurship has been exponential.

The concept of creativity is one that is often discussed in conjunction with entrepreneurship because creative thinking is an essential element in the formulation of business ideas and is necessary at every stage of business development and execution. Talking about creativity brings different definitions to our minds. But, usually creativity has been defined as "the production of novel ideas that are useful and appropriate to the situation". It means escaping from existing perceptions and concepts to open up new ways of looking at and doing things. Recent literature suggests that creative individuals are more likely to engage in entrepreneurial behavior. To highlight the importance of creativity, Schumpeter's idea of "creative destruction" is a good sample to be discussed.

In existing literature, creativity has also been regarded as a form of knowledge creation and how it can benefit learning opportunities. Moreover, creativity and innovation have close links with knowledge and learning. Hence, creative education involves a balance between teaching knowledge and skills, and encouraging innovation (NACCCE report 1999). To many scholars, creativity is considered as the main success factor of well-known entrepreneurs all around the world.

Creativity has long been thought to be characteristic of highly gifted and noble people; however, such an argument has been proved to be a wrong attitude. A number of researchers consider creativity as a component of innovation which is the basic aspect of entrepreneurship. Although every individual has certain creative abilities, the extent to which these potentials will be developed largely depends on how much these abilities are encouraged and well treated. It is in this view that education plays a crucial role and significantly determines whether its outcome will be "passive imitators" or "active, creative contributors".

In traditional learning systems, students are passive participants at all the educational levels. Their personal creativeness is not encouraged, nor are they challenged to think critically and originally. On completing the process of formal education, they are capable of more or less successfully reproducing the information they learned in the course of their schooling; however, they don't learn to implement the acquired knowledge in practice and use this knowledge as a basis for creating new ideas and making business decisions autonomously. The knowledge students acquire in the course of their education process has frequently turned out not to be really applicable or be rather inadequate to meet the modern requirements of the business environment.

''Learning by doing'' is a non-traditional approach in which students are actively engaged in experiences that will reinforce lessons and teach skills that will have a lasting impact and, thus, help them become better learners. In this context, multiple perspectives take the educational experience beyond the classroom to cultivate real-world applications and to elaborate the matter in question. Service learning, community-based learning, community action research, internships, study abroad, and similar experiences all provide opportunities for authentic learning that engage students in using their critical skills to understand and to better the world. For instance, acquiring entrepreneurial knowledge not only helps students identify entrepreneurship activities, but also stimulates them to run their own businesses and to be more adaptable to the fast changing entrepreneurial environment. According to Ashmore, students start to understand that although a business may be successful today by performing a given set of tasks, tomorrow a quite different set of tasks or skills may be required. Therefore, the modern business environment should be accompanied by a change in educational environment. Consequently, it is necessary that permanent adjustments between these two environments should be made that will be beneficial for both individuals and the society.

Education has also been noted as one means to infuse women more concretely into the entrepreneurial experience. A recent study found that education plays different roles in countries' economic development at different stages. For example, in a developed country, the level of education was found to be one of the significant variables affecting the performance of female enterprises. Considering the importance of education for women as entrepreneurs, it has recently become evident that the new Age is looking for new forms of education, such as creative education. Creative education and training should help women to raise their creativity, logical thinking and entrepreneurial activity.

Namely, entrepreneurship emerges from an individual's creative spirit into long-term business ownership, job creation, and economic security. Women bring commitment and integrity because they care about economic empowerment, entrepreneurial development and innovation. The special understanding of innovation within that framework, and the role that women play in creating and commercializing that innovation are necessary. In addition, women's participation in the human capital-generating activity, which was of historically lesser degree before, is now increasingly essential to innovation entrepreneurship, that being education in science, technology, mathematics, and engineering, which likely obscures the need to study female entrepreneurship in this context. Whatever the causes, the study and, ultimately, the improved engagement and success of women in innovation industries, including through entrepreneurship, are urgent needs in both domestic and international economic, legal, societal, and development contexts.

Due to different approaches to female entrepreneurship, it can be suggested here that this field of research is considered to be very broad. Some of the theories outlined in this research can be linked to the study of this phenomenon, such as gender theories, managerial theories, public policy, etc. In our opinion, all of these approaches should be as integrated as possible in order to provide a complete understanding of female entrepreneurship. In addition, a shift in thoughts and research in the field of female entrepreneurship is also necessary. It should follow the changes in the roles and tasks of women as entrepreneurs as the main conductors of these activities, influenced by new flows of economic operation in the age of globalization.

Namely, the recognition of the capacity of women entrepreneurs in our global community is no longer a matter of debate, but is a realisation that female entrepreneurship is now one of the major factors contributing to the development of many countries.

## Methodology

The research methodology for our research is qualitative in nature. This approach involves carrying out in-depth interviews with respondents from different countries all around the world. Also, we designed an online questionnaire that helped respondents answer the research questions in a better manner. Respondents varied by gender, occupation and country. Our research investigates five main questions as follows:

1. What is the meaning of freedom in learning?

2. What does freedom in learning mean to you?

3. What should be done to increase freedom in learning and foster individuality?

4. How can we encourage the entrepreneurial abilities of students through education with focus on women?

5. In what direction the educational strategies should be developed?

In order to collect the required data, a number of questionnaires were sent online to the respondents and they filled out the questionnaires and sent them back to us. It should be noted that the respondents were from different countries, but mainly from Serbia, Iran, India, USA, Nigeria, Canada, China, Pakistan, and Philippines.

## Research findings

The research findings are presented according to the aforementioned research questions. The general information of the respondents is as follows:

*Table 1 General information of respondents*

| Gender | Male | Female |
|---|---|---|
| **Number (Percent (%))** | 52 (55%) | 43 (45%) |
| | | |
| **Occupation** | Teacher/Lecturer | Student |
| **Number (Percent (%))** | 43 (45%) | 52 (55%) |

Here we present the research findings based on the conducted survey. The bar charts showing the differences in responses between male and female respondents are presented in the Appendix section.

*Table 2 Nationality of Respondents*

| Country | Number |
|---|---|
| Iran | 20 |
| Serbia | 18 |
| India | 15 |
| USA | 15 |
| Nigeria | 8 |
| Canada | 5 |
| China | 3 |
| Pakistan | 3 |
| Philippines | 3 |
| Malaysia | 2 |
| Denmark | 1 |
| South Africa | 1 |
| New Zealand | 1 |
| Total | 95 |

**Question One:** What is the meaning of freedom in learning?

With the first question, we were looking to elaborate the meaning of freedom in learning. Based on the qualitative stage of the research, the following choices were proposed:

a.   Each student must be involved in deciding which skills to develop.

b.   Students are free to express their opinion even if it is wrong.

c.   Students can recognize their individual potentials.

d.   Flexibility in learning, taking into account the time and place of learning.

The occurrence of answers is shown in the following pie chart. As shown in Figure 1, almost all choices have the same occurrence. But, choice one is to some extent (30%) the most preferred.

The bar chart (see Appendix) does not show any significant difference between the responses of male and female respondents. As you could see in the bar chart, the order of the selected choices and their proportion is the same. Therefore, freedom in learning to male and female group respondents has the same manner of occurrence distribution.

*Figure 1 Responses to the question on the meaning of freedom in learning*
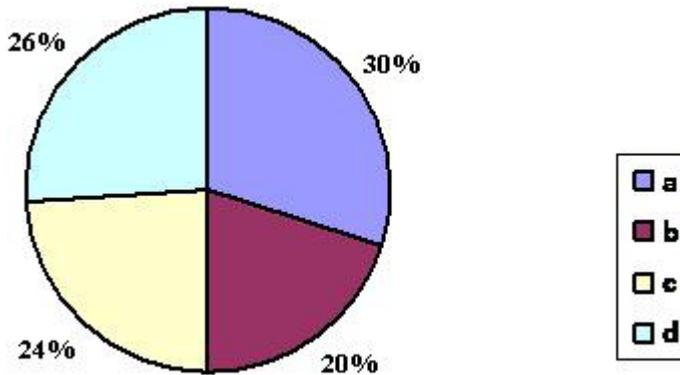


**Question Two:** What does freedom in learning mean to you?

With this question, we were asking the meaning of freedom in learning from the stand-point of respondents. The responses were different, but we categorized the answers in the following categories. It should be noted that some of the main samples from each category are included.

**a. Freedom in choosing the course and the course content:**

Adopt programs to suit individual interest and needs; option can be provided by others but choice should be according to students' talent; creating an educational atmosphere wherein students are able to choose and develop skills that are in line with their innate ability and background; to be the motivating and responsible agent of his/her own learning process; It means being allowed to observe and participate in decisions, design and functionality of an educational system that encourages specific goals.

**b. Freedom in learning without religious, political, or any other kind of constraints:**

Freedom from political and religious interference; learning without interference of external environmental force; it is an interaction between the teacher and the students which must reflect freedom and not rigidity.

**c. Freedom for expressing ideas and opinions:**

Students and teachers should be involved in creating a flexible environment by sharing new information and developing skills; students are free to express their opinion and discuss a lot of topics, ask questions and make close connections with professors and other students; students are free to express their opinion even if it is wrong; the ability to demonstrate unre-strained rights about what affects students' future either within the classroom or outside.

**d. Learn and expose anything which relates to skills, potentials and creativity:**

Learning beyond the syllabus; to find something in the hope of learning new, interesting and useful information.

**e. Freedom to learn the truth:**

To be free to ask questions and discuss them without obstacles; opportunity to express one's own opinion and to develop original thinking.

**f. Flexibility in learning, taking into account the environment (time and place) of learning:**

To have space and opportunities to grow as teachers and learners through an intensified use of learning management systems; the educational environment needs to build a solid platform for the individual on completion of their education to help them use the knowledge and skills obtained during the course of their studies.

    **Question Three:** What should be done to increase freedom in learning and foster individuality?

    With the third question we were looking for the most effective and efficient solutions to increase freedom in learning and foster individuality. Based on the qualitative phase, the following choices were given to the respondents for the third question.

    a.   To obtain better learning environments for students
    b.   To obtain freedom in teaching
    c.   Fostering young people's learning freedom through multi-dimensional relationships between course concepts and community
    d.   Supporting individuals to take ownership of their own learning processes

    The following chart shows the occurrence of each choice. As it is shown in Figure 2 the most preferred choice was C (45%), i.e. fostering young people's learning freedom through multidimensional relationships between course concepts and community. Choice D was the second preference of the surveyed population (32%). It was about supporting individuals to take ownership of their own learning processes. One of our most exciting findings is that these choices were the ones mentioned in question two, as the respondents' perception of freedom in learning.

*Figure 2 What should be done to increase freedom in learning and foster individuality?*
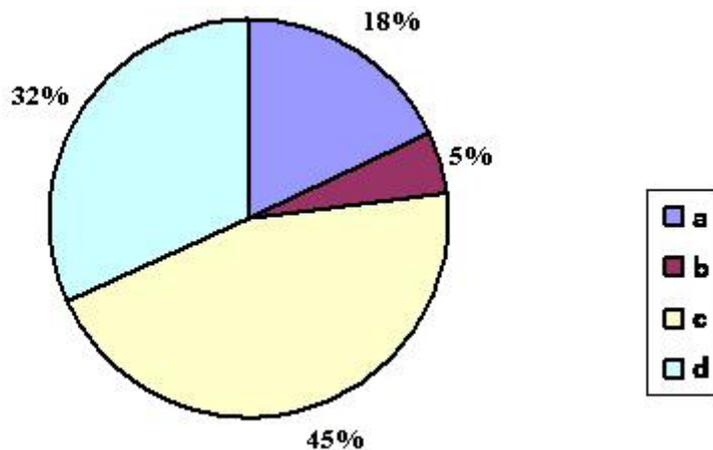
The bar charts (see Appendix) do not show any significant difference between the ideas of male and female respondents regarding the actions to be done to increase freedom in learning and foster individuality. The occurrence distribution of both groups is almost the same.

**Question Four:** How can we encourage the entrepreneurial abilities of students through education with focus on women?

In this question, we were searching for the best choice to encourage the entrepreneurial abilities of students through education. The following choices were designed according to the qualitative phase:

a.  Fostering creativity through education.

b.  Offering students the tools to think originally, develop and test their business ideas.

c.  Fostering innovative personality development that creates something unique and turning it into entrepreneurial activity.

d.  Offering multi-dimensional relationships between course concepts and community-based entrepreneurship experiences.

The frequencies of each choice are shown in the following pie chart. Figure 3 shows that choice D (40%) was the most preferred action to encourage the entrepreneurial abilities of students through education. Then, offering multidimensional relationships between course concepts and community-based entrepreneurship experiences were highly preferred. Moreover, choice B and C, respectively 23% and 20%, were almost equal in the eyes of our respondents.

*Figure 3 How can we encourage the entrepreneurial abilities of students through education with focus on women?*
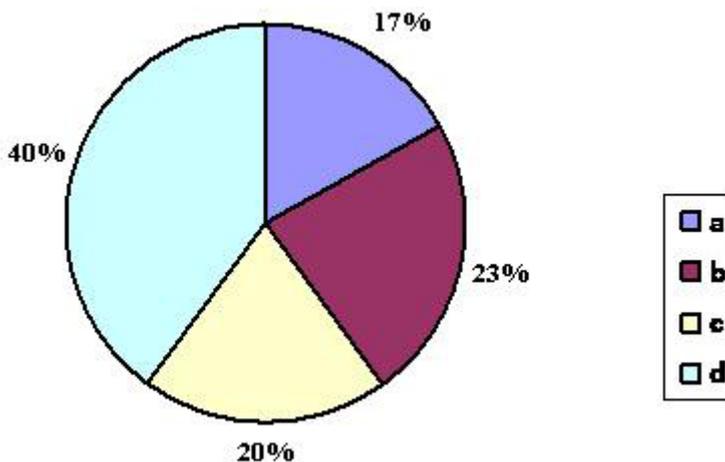


Based on the bar chart (see Appendix), there is a difference in opinion between the male and female respondents. While female respondents believe that fostering innovative persona-

lity development of individuals who create something unique and turn it into entrepreneurial activity is one of the most effective ways to encourage the entrepreneurial abilities of students, male respondents believe it to be the less preferred choice. But, the most preferred choice for both male and female respondents was to offer multi-dimensional relationships between course concepts and community-based entrepreneurship experiences. As you might see in the bar charts in the Appendix section, the order of male and female respondents' answers is as follows: D, B, A, C, and D, C, B, A.

**Question Five:** In what direction should the educational strategies be developed?

With the last question, we were looking to find the most appropriate direction for the educational strategies to be developed in order to reach the mentioned goals that were the subject of the other questions related to increasing freedom in learning and fostering individuality, and encouraging the entrepreneurial abilities of students. Therefore, the following choices were provided based on the in-depth interviews:

  a.   To be more oriented towards the individual needs of students
  b.   To increase an individual's level of independence and freedom
  c.   To increase creative abilities and original thinking
  d.   All of the above

The occurrence of each choice is shown in the pie chart below. Figure 4 reveals the preference of all three choices simultaneously to direct the development of educational strategies (67%).

*Figure 4 In what direction should the educational strategies be developed?*
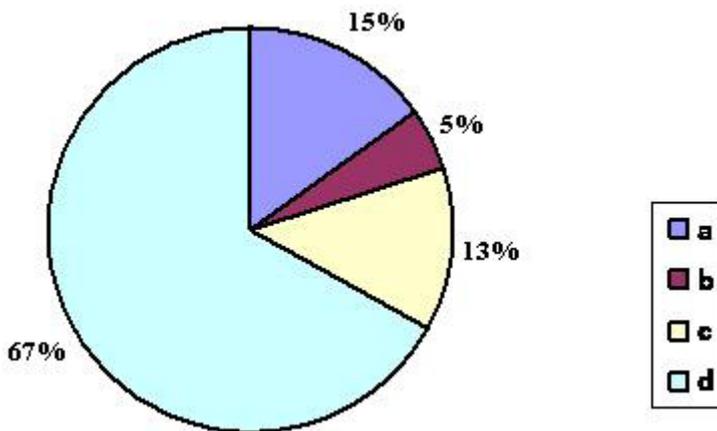


According to the bar chart (see Appendix), the most preferred choice for both male and female respondents was D. But the most exciting point is that male respondents considered choice A (i.e. to be more oriented towards the individual needs of students) in the second place and with a considerable percentage (i.e. 21% of male respondents). This claim also

could be supported by the male respondents' ideas in question two, as most of the male respondents were looking at the "freedom in learning" concept as to have freedom in choosing the course and the course content, while female respondents were mostly arguing about the freedom in expressing ideas and opinions, and freedom in learning without religious, political, or any other kind of constraints.

## Conclusion

Our research shows that creative education based on freedom of learning and teaching helps to foster creativity and original thinking. Accordingly, the existing education system and educational programs for women's entrepreneurship should be redefined. They have to obtain multi-dimensional relationships between course concepts and community based on entrepreneurship experiences. Consequently, the creative and interactive education should provide a completely new dimension of gaining knowledge. This active mode of learning provides innovative personality development in the individual who creates something unique and turns it into entrepreneurial activity.

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# Appendix

## Annex 1 Distribution of the answers based on the respondents' gender.

1. **Question One:** What is the meaning of freedom in learning?

| Gender Q1 Cross-tabulation | | | | | | |
|---|---|---|---|---|---|---|
| Count | | | | | | |
| | | Male: 1 | Female: 2 | | | |
| | | 1.00 | 2.00 | 3.00 | 4.00 | Total |
| Gender | Male | 16 | 10 | 12 | 14 | 52 |
| | Female | 12 | 9 | 11 | 11 | 43 |
| **Total** | | **28** | **19** | **23** | **25** | **95** |



Bar Chart
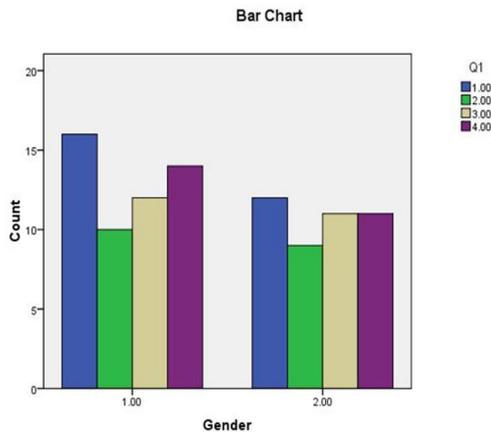
2. **Question Three:** What should be done to increase freedom in learning and foster individuality?

| Gender Q3 Cross-tabulation | | | | | | |
|---|---|---|---|---|---|---|
| Count | | | | | | |
| | | Male: 1 | Female: 2 | | | |
| | | 1.00 | 2.00 | 3.00 | 4.00 | Total |
| Gender | Male | 11 | 4 | 21 | 16 | 52 |
| | Female | 6 | 1 | 22 | 14 | 43 |
| **Total** | | **17** | **5** | **43** | **30** | **95** |
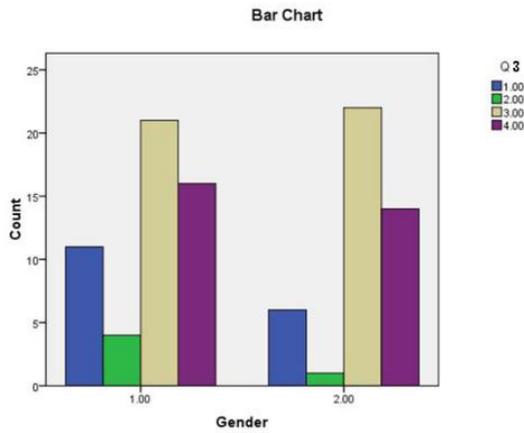
3. **Question Four:** How can we encourage the entrepreneurial abilities of students through education with focus on women?

| Gender Q4 Cross-tabulation | | | | | | |
|---|---|---|---|---|---|---|
| Count | | | | | | |
| | | Male: 1 | Female: 2 | | | |
| | | 1.00 | 2.00 | 3.00 | 4.00 | Total |
| Gender | Male | 11 | 13 | 7 | 21 | 52 |
| | Female | 5 | 9 | 11 | 18 | 43 |
| **Total** | | **16** | **22** | **18** | **39** | **95** |
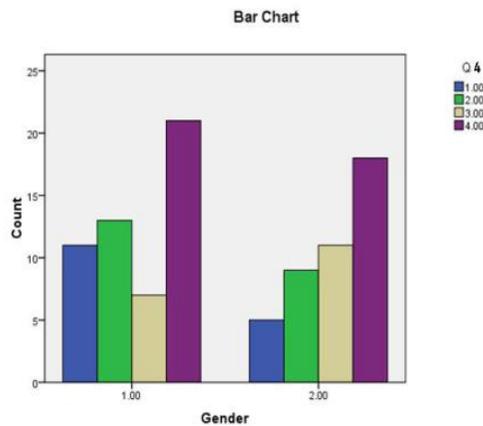
4. **Question Five:** In what direction should the educational strategies be developed?

| Gender Q5 Cross-tabulation | | | | | | |
|---|---|---|---|---|---|---|
| Count | | | | | | |
| | | Male: 1 | Female: 2 | | | |
| | | 1.00 | 2.00 | 3.00 | 4.00 | Total |
| Gender | Male | 11 | 1 | 6 | 34 | 52 |
| | Female | 3 | 4 | 6 | 30 | 43 |
| **Total** | | **14** | **5** | **12** | **64** | **95** |



Bar Chart
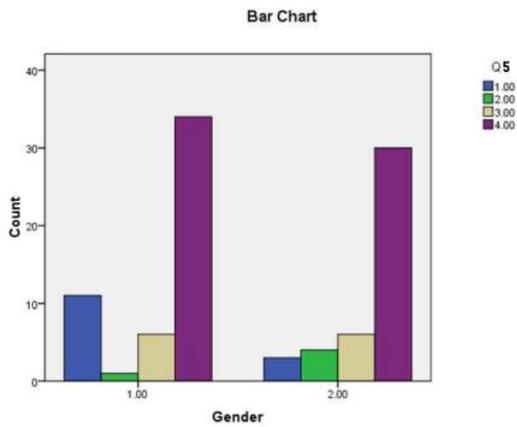
# The Evolution of Cooperation

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*Abstract:*

*The success of humans as a species is due to our genius for cooperation. Cultural evolution, a new form of evolution, in which information is passed between generations in the form of linguistic symbols rather than genetically, has been the key to human success. Cultural evolution depends on the sharing of knowledge, and humans have developed remarkable linguistic and cooperative abilities.*

*At the same time, human nature also has a darker side inherited from our ancestors who were hunter-gatherers living in small genetically homogeneous tribes competing for territory on the grasslands of Africa. The pattern of intra-tribal altruism and inter-tribal aggression, which humans have inherited from their remote ancestors, has been explained by the theories of population genetics and group selection put forward in the 1930s by R.A. Fischer and J.B.S Haldane, and discussed more recently by W.D. Hamilton and E.O. Wilson. In this picture, the tribe itself, rather than the individual, is the unit on which evolutionary forces acted.*

*This essay will try to show that symbiosis and cooperation have been responsible for all of the great upward steps in evolution, including the development of the first prokaryotes, the first eukaryotes, the first multi-cellular organisms, and the first cooperative groups of multi-cellular organisms. The views of T.H. Huxley, who stressed competition as an evolutionary force, will be contrasted with the ideas of Charles Darwin himself, Peter Kropotkin and Lynn Margulis and others, who fully understood the importance of symbiosis and cooperation in evolution.*

## The Explosion of Human Knowledge

Cultural evolution depends on the non-genetic storage, transmission, diffusion and utilization of information. The development of human speech, the invention of writing, the development of paper and printing, and finally in modern times, mass media, computers and the Internet – all these have been crucial steps in society's explosive accumulation of information and knowledge. Human cultural evolution proceeds at a constantly-accelerating speed, so great in fact that it threatens to shake society to pieces.

Every species changes gradually through genetic evolution; but with humans, cultural evolution has rushed ahead with such a speed that it has completely outstripped the slow rate of genetic change. Genetically, we are quite similar to our neolithic ancestors, but their world has been replaced by a world of quantum theory, relativity, supercomputers, antibiotics, genetic engineering and space telescopes; unfortunately, by a world of nuclear weapons and nerve gas too.

Because of the slowness of genetic evolution in comparison to the rapid and constantly-accelerating rate of cultural change, our bodies and emotions (as Malthus put it, the "passions of mankind") are not completely adapted to our new way of life. They still reflect the way of life of our hunter-gatherer ancestors.

Within rapidly-moving cultural evolution, we can observe that technical change now moves with such astonishing rapidity that neither social institutions, nor political structures, nor education, nor public opinion can keep pace. The lightning-like pace of technical progress has made many of our ideas and institutions obsolete. For example, the absolutely sovereign nation-state and the institution of war have both become dangerous anachronisms in an era of instantaneous communication, global interdependence and all-destroying weapons.

In many respects, human cultural evolution can be regarded as an enormous success. However, at the start of the 21st century, most thoughtful observers agree that civilization is entering a period of crisis. As all curves move exponentially upward – population, production, consumption, rates of scientific discovery, and so on – one can observe signs of increasing environmental stress, while the continued existence and spread of nuclear weapons threaten civilization with destruction. Thus, while the explosive growth of knowledge has brought many benefits, the problem of achieving a stable, peaceful and sustainable world remains serious, challenging and unsolved.

## Tribal Emotions and Nationalism

In discussing conflicts, we must be very careful to distinguish between two distinct types of aggression exhibited by both humans and animals. The first is intra-group aggression, which is often seen in rank-determining struggles, for example, when two wolves fight for pack leadership, or when males fight for the privilege of mating with females. Another completely different type of aggression is seen when a group is threatened by outsiders. Most animals, including humans, then exhibit a communal defense response – self-sacrificing and heroic combat against whatever is perceived to be an external threat. It is this second type of aggression that makes war possible.

Arthur Koestler has described inter-group aggression in an essay entitled "The Urge to Self-Destruction", where he writes:

"Even a cursory glance at history should convince one that individual crimes, committed for selfish motives, play a quite insignificant role in the human tragedy compared with the numbers massacred in unselfish love of one's tribe, nation, dynasty, church or ideology... Wars are not fought for personal gain, but out of loyalty and devotion to king, country or cause..."

"We have seen on the screen the radiant love of the Führer on the faces of the Hitler Youth... They are transfixed with love, like monks in ecstasy on religious paintings. The sound of the nation's anthem, the sight of its proud flag, make you feel part of a wonderfully loving community. The fanatic is prepared to lay down his life for the object of his worship, as the lover is prepared to die for his idol. He is, alas, also prepared to kill anybody who represents a supposed threat to the idol."

Members of tribe-like groups are bound together by strong bonds of altruism and loyalty. Echoes of these bonds can be seen in present-day family groups, in team sports, in the fellowship of religious congregations, and in the bonds that link soldiers to their army comrades and to their nation.

Warfare involves not only a high degree of aggression, but also an extremely high degree of altruism. Soldiers kill, but they also sacrifice their own lives. Thus, patriotism and duty are as essential to war as the willingness to kill.

Tribalism involves passionate attachment to one's own group, self-sacrifice for the sake of the group, willingness both to die and to kill if necessary to defend the group from its enemies, and belief that in case of a conflict, one's own group is always in the right. Unfortunately these emotions make war possible; and today a Third World War might lead to the destruction of civilization.

## The Mystery of Self-Sacrifice in War

At first sight, the willingness of humans to die defending their social groups seems hard to explain from the standpoint of Darwinian natural selection. After the heroic death of such a human, he or she will be unable to produce more children, or to care for those already born. Therefore, one might at first suppose that natural selection would work strongly to eliminate the trait of self-sacrifice from human nature. However, the theory of population genetics and group selection can explain both the willingness of humans to sacrifice themselves for their own group, and also the terrible aggression that they sometimes exhibit towards competing groups. It can explain both intra-group altruism and inter-group aggression.

## Fischer, Haldane, Hamilton and Wilson

The idea of group selection in evolution was proposed in the 1930s by J.B.S. Haldane and R.A. Fischer, and more recently it has been discussed by W.D. Hamilton and E.O. Wilson.

If we examine altruism and aggression in humans, we notice that members of our species exhibit great altruism towards their own children. Kindness towards close relatives is also characteristic of human behavior, and the closer the biological relationship is between two humans, the greater is the altruism they tend to show towards each other. This profile of altruism is easy to explain on the basis of Darwinian natural selection since two closely related individuals share many genes and, if they cooperate, the genes will be more effectively propagated.

To explain the communal defense mechanism from an evolutionary point of view, – the willingness of humans to kill and be killed in defense of their communities – we have only to imagine that our ancestors lived in small tribes and that marriage was likely to take place within a tribe rather than across tribal boundaries. Under these circumstances, each tribe would tend to consist of genetically similar individuals. The tribe itself, rather than the individual, would be the unit on which the evolutionary forces of natural selection would act.

According to the group selection model, a tribe whose members showed altruism towards each other would be more likely to survive than a tribe whose members cooperated less

effectively. Since several tribes might be in competition for the same territory, successful aggression against a neighboring group could increase the chances for survival of one's own tribe. Thus, on the basis of the group selection model, one would expect humans to be kind and cooperative towards members of their own group, but at the same time to sometimes exhibit aggression towards members of other groups, especially in conflicts over territory. One would also expect intergroup conflicts to be most severe in cases where the boundaries between groups are sharpest – where marriage is forbidden across the boundaries.

## Language, Religion and Tribal Markings

In biology, a species is defined as a group of mutually fertile organisms. Thus, all humans form a single species, since mixed marriages between all known races will produce children, and subsequent generations in mixed marriages are also fertile. However, although there is never a biological barrier to marriages across ethnic and racial boundaries, there are often very severe cultural barriers.

Irenäus Eibl-Eibesfeldt, a student of Konrad Lorenz, introduced the word "pseudospeciation" to denote cases where cultural barriers between two groups of humans are so strongly marked that marriages across the boundary are difficult and infrequent.

In such cases, he pointed out, the two groups function as though they were separate species, although from a biological standpoint this is nonsense. When two such groups are competing for the same land, the same water, the same resources, and the same jobs, the conflicts between them can become very bitter indeed. Each group regards the other as being "not truly human".

In his book "The Biology of War and Peace", Eibl-Eibesfeldt discusses the "tribal markings" used by groups of humans to underline their own identity and to clearly mark the boundary between themselves and other groups. One of the illustrations in his book shows the marks left by ritual scarification on the faces of the members of certain African tribes. These scars would be hard to counterfeit, and they help to establish and strengthen tribal identity. Seeing a photograph of the marks left by ritual scarification on the faces of African tribesmen, it is impossible not to be reminded of the dueling scars that Prussian army officers once used to distinguish their caste from outsiders.

Surveying the human scene, one can find endless examples of signs that mark the bearer as a member of a particular group – signs that can be thought of as "tribal markings": tattoos; piercing; bones through the nose or ears; elongated necks or ears; filed teeth; Chinese binding of feet; circumcision, both male and female; unique hair styles; decorations of the tongue, nose, or naval; peculiarities of dress, kilts, tartans, school ties, veils, chadors, and headdresses; caste markings in India; use or nonuse of perfumes; codes of honor and value systems; traditions of hospitality and manners; peculiarities of diet (certain foods forbidden, others preferred); giving traditional names to children; knowledge of dances and songs; knowledge of recipes; knowledge of common stories, literature, myths, poetry or common history; festivals, ceremonies, and rituals; burial customs, treatment of the dead and ancestor worship; methods of building and decorating homes; games and sports peculiar to a culture; relationship to animals, knowledge of horses and ability to ride; non-rational systems of belief.

Even a baseball hat worn backwards or the professed ability to enjoy atonal music can mark a person as a member of a special "tribe".

By far, the most important mark of ethnic identity is language, and within a particular language, dialect and accent. If the only purpose of language were communication, it would be logical for the people of a small country like Denmark to stop speaking Danish and go over to a more universally-understood international language such as English. However, language has another function in addition to communication: it is also a mark of identity. It establishes the boundary of the group.

After language, the most important "tribal marking" is religion. It seems probable that in the early history of our hunter-gatherer ancestors, religion evolved as a mechanism for perpetuating tribal traditions and culture. Like language, and like the innate facial expressions studied by Darwin, religion is a universal characteristic of all human societies. All known races and cultures practice some sort of religion. Thus, a tendency to be religious seems to be built into human nature.

## Formation of Group Identity

Although humans originally lived in small, genetically homogeneous tribes, the social and political groups of the modern world are much larger, and are often multiracial and multiethnic.

There are a number of large countries that are remarkable for their diversity, for example, Brazil, Argentina and the United States. Nevertheless, it has been possible to establish social cohesion and group identity within each of these enormous nations. India and China too, are mosaics of diverse peoples, but nevertheless, they function as coherent societies. Thus, we see that group identity is a social construction, in which artificial "tribal markings" define the boundaries of the group.

As an example of the use of tribal markings to establish social cohesion over a large group of genetically dissimilar humans, one can think of the role of baseball and football in the United States. Affection for these sports and knowledge of their intricacies establish social bonds that transcend racial and religious barriers.

One gains hope for the future by observing how it has been possible to produce both internal peace and social cohesion over very large areas of the globe – areas that contain extremely diverse populations. The difference between making large, ethnically diverse countries function as coherent sociopolitical units and making the entire world function as a unit is not very great.

Since group identity is a social construction, it is not an impossible goal to think of enlarging the already-large groups of the modern world to include all of humanity.

## The Social Insects

The social insects, ants, bees, wasps and termites, exhibit nearly perfect altruism towards members of their own group. This extreme form of altruism towards near relations (kin altruism) is closely connected with the peculiar method of reproduction of the social insects.

The workers are sterile or nearly sterile, while the queen is the only reproductive female. The result of this special method of reproduction is that very nearly perfect altruism is possible within a hive or nest, since genetic changes favoring antisocial behavior would be detrimental to the hive or nest as a whole. The hive or nest can, in some sense, be regarded as a superorganism, with the individuals cooperating totally in much the same way that cells cooperate within a multicellular organism. The social insects exhibit aggression towards members of their own species from other hives or nests, and can be said to engage in wars. Interestingly, a similar method of reproduction, associated with extreme intra-group altruism, has evolved among mammals, but is represented by only two species: the naked mole rat and Damaraland mole rat.

## From Thomas Huxley to Lynn Margulis and Symbiosis

Charles Darwin (1809-1882) was acutely aware of close and mutually beneficial relationships between organisms. For example, in his work on the fertilization of flowers, he studied the ways in which insects and plants can become exquisitely adapted to each other's needs.

On the other hand, Thomas Henry Huxley (1825-1895), although he was a strong supporter of Darwin, saw competition as the main mechanism of evolution. In his essay "Struggle for Existence and its bearing upon Man", Huxley wrote: "From the point of view of the moralist, the animal world is about on the same level as a gladiators' show. The creatures are fairly well treated and set to fight; hereby the strongest, the swiftest, and the cunningest live to fight another day. The spectator has no need to turn his thumbs down, as no quarter is granted."

Prince Peter Kropotkin (1842-1921) argued strongly against Huxley's point of view in his book "Mutual Aid; A Factor of Evolution". "If we ask Nature," Kropotkin wrote, "'who are the fittest: those who are continually at war with each other, or those who support one another?' we at once see that those animals that acquire habits of mutual aid are undoubtedly the fittest. They have more chances to survive, and they attain, in their respective classes, the highest development of intelligence and bodily organization."

Today, the insights of modern biology show that although competition plays an important role, most of the great upward steps in evolution have involved cooperation. The biologist Lynn Margulis (1938-2011) has been one of the pioneers of the modern viewpoint which recognizes symbiosis as a central mechanism in evolution.

## One-Celled Organisms seen as Examples of Cooperation

The first small bacterial cells (prokaryotic cells) can be thought of as cooperative communities in which autocatalytic molecules thrived better together than they had previously done separately.

The next great upward step in evolution, the development of large and complex (eukaryotic) cells, also involved cooperation: many of their components, for example, mitochondria (small granular structures that are needed for respiration) and chloroplasts (the photosynthetic units of higher plants) are believed to have begun their existence as free-living prokaryotic cells. They now have become components of complex cells, cooperating biochemically with the other subcellular structures. Both mitochondria and chloroplasts possess their own DNA,

which shows that they were once free-living bacteria-like organisms, but they have survived better in a cooperative relationship.

## Cooperation between Cells: Multicellular Organisms

Multicellular organisms evolved from cooperative communities of eukaryotic cells. Some insights into how this happened can be gained from examples which are just on the borderline between the multicellular organisms and single-celled ones. The cooperative behavior of a genus of unicellular eukaryotes called slime molds is particularly interesting because it gives us a glimpse of how multicellular organisms may have originated. The name of the slime molds is misleading, since they are not fungi, but are similar to amoebae.

Under ordinary circumstances, the individual cells wander about independently searching for food, which they draw into their interiors and digest. However, when food is scarce, they send out a chemical signal of distress. (Researchers have analyzed the molecule which expresses slime mold unhappiness, and they have found it to be cyclic adenosine monophosphate.) At this signal, the cells congregate and the mass of cells begins to crawl, leaving a slimy trail. As it crawls, the community of cells gradually develops into a tall stalk, surmounted by a sphere – the "fruiting body". Inside the sphere, spores are produced by a sexual process. If a small animal, for example, a mouse, passes by, the spores may adhere to its coat; in this way, they may be transported to another part of the forest where food is more plentiful.

Slime molds represent a sort of missing link between unicellular and multicellular organisms. Normally the cells behave as individualists, wandering about independently, but when challenged by a shortage of food, the slime mold cells join together into an entity which closely resembles a multicellular organism.

The cells even seem to exhibit altruism, since those forming the stalk have little chance of survival, and yet they are willing to perform their duty, holding up the sphere at the top so that the spores will survive and carry the genes of the community into the future.

Multicellular organisms often live in a symbiotic relationship with other species. For example, in both animals and humans, bacteria are essential for the digestion of food. Fungi on the roots of plants aid their absorption of water and nutrients. Communities of bacteria and other organisms living in the soil are essential for the recycling of nutrients. Insects are essential to many plants for pollination.

## Cooperation in Groups of Animals and Human Groups

The social behavior of groups of animals, flocks of birds and communities of social insects involves cooperation as well as rudimentary forms of language. Various forms of language, including chemical signals, postures and vocal signals, are important tools for orchestrating cooperative behavior.

The highly developed language of humans made possible an entirely new form of evolution. In cultural evolution (as opposed to genetic evolution), information is passed between generations not in the form of a genetic code, but in the form of linguistic symbols. With the invention of writing, and later the invention of printing, the speed of human cultural

evolution greatly increased. Cooperation is central to this new form of evolution. Cultural advances can be shared by all humans.

## Trading in Primitive Societies

Although primitive societies engaged in frequent wars, they also cooperated through trade. Peter Watson, an English historian of ideas, believes that long-distance trade took place 150,000 years ago. There is evidence that extensive trade in obsidian and flint took place during the Stone Age. Evidence for wide ranging prehistoric obsidian and flint trading networks has been found in North America. Ancient burial sites in Southeast Asia show that there too, prehistoric trading took place across very large distances. Analysis of jade jewelry from the Philippines, Thailand, Malaysia and Viet Nam shows that the jade originated in Taiwan.

The invention of writing was prompted by the necessities of trade. In prehistoric Meso-potamia, clay tokens marked with simple symbols were used for accounting as early as 8,000 BC. Often these tokens were kept in clay jars, and symbols on the outside of the jars indicated the contents. About 3,500 BC, the use of such tokens and markings led to the development of pictographic writing in Mesopotamia, and this was soon followed by the cuneiform script, still using soft clay as a medium. The clay tablets were later dried and baked to ensure per-manency. The invention of writing led to a great acceleration of human cultural evolution. Since ideas could now be exchanged and preserved with great ease through writing, new advances in technique could be shared by an ever larger cooperating community of humans. Our species became more and more successful as its genius for cooperation developed.

## Gracilization and Decreasing Sexual Dimorphism

Early ancestors of modern humans had a relatively heavy (robust) bone structure in relation to their height. This robust bone structure seems to have been favored by frequent combat. During their evolution, modern humans became less robust and more gracile. In other words, their skeletons became lighter in relation to their height. Simultaneously, the height and weight of males became less different from the height and weight of females. These trends are generally interpreted as indicating that combat became less important as present-day humans evolved.

## Ethics and Growth of the Social Unit

Early religions tended to be centered on particular tribes, and the ethics associated with them were usually tribal in nature. However, the more cosmopolitan societies that began to form after the Neolithic agricultural revolution required a more universal code of ethics. It is interesting to notice that many of the great ethical teachers of human history, for example, Moses, Socrates, Plato, Aristotle, Lao Tzu, Confucius, Buddha, and Jesus, lived at a time when the change to larger social units was taking place. Tribalism was no longer appropriate. A wider ethic was needed.

Today, the size of the social unit is again being enlarged, this time enlarged to include the entire world. Narrow loyalties have become inappropriate and there is an urgent need for

a new ethic – a global ethic. Loyalty to one's nation needs to be supplemented by a higher loyalty to humanity as a whole.

## Interdependence in Modern Human Society

All of the great upward steps in the evolution of life on earth have involved cooperation: prokaryotes, the first living cells, can be thought of as cooperative communities of auto-catalysts; large, complex eukaryote cells are now believed to have evolved as cooperative communities of prokaryotes; multicellular organisms are cooperative communities of euka-ryotes; multicellular organisms cooperate to form societies; and different species cooperate to form ecosystems. Indeed, James Lovelock has pointed out that the earth as a whole is a complex interacting system that can be regarded as a huge organism.

The enormous success of humans as a species is due to their genius for cooperation. The success of humans is a success of cultural evolution, a new form of evolution in which information is passed between generations, not in the form of DNA sequences but in the form of speech, writing, printing and finally electronic signals. Cultural evolution is built on cooperation, and has reached great heights of success as the cooperating community has become larger and larger, ultimately including the entire world.

Without large-scale cooperation, modern science would never have evolved. It developed as a consequence of the invention of printing, which allowed painfully gained detailed knowledge to be widely shared. Science derives its great power from concentration. Attention and resources are brought to bear on a limited problem until all aspects of it are understood. It would make no sense to proceed in this way if knowledge were not permanent, and if the results of scientific research were not widely shared. But, today, the printed word and the electronic word spread the results of research freely to the entire world. The whole human community is the repository of shared knowledge.

The achievements of modern society are achievements of cooperation. We can fly, but no one builds an airplane alone. We can cure diseases, but only through the cooperative efforts of researchers, doctors and medicinal firms. We can photograph and understand distant galaxies, but the ability to do so is built on the efforts of many cooperating individuals.

An isolated sponge cell can survive, but an isolated human could hardly do so. Like an isolated bee, a human would quickly die without the support of the community. The comfort and well-being that we experience depends on far-away friendly hands and minds, since trade is global, and the exchange of ideas is also global.

Finally, we should be conscious of our cooperative relationships with other species. We cannot live without the bacteria that help us to digest our food. We cannot live without the complex communities of organisms in the soil that convert dead plant matter into fertile topsoil. We cannot live without plants at the base of the food chain, but plants require pollination, and pollination frequently requires insects. An intricate cooperative network of inter-species relationships is necessary for human life, and indeed necessary for all life. Competition plays a role in evolution, but the role of cooperation is greater.

## Two Sides of Human Nature

Looking at human nature, both from the standpoint of evolution and from that of every-day experience, we see the two faces of Janus: one face shines radiantly; the other is dark and menacing. Two souls occupy the human breast, one warm and friendly, the other, murderous. Humans have developed a genius for cooperation, the basis for culture and civilization; but they are also capable of genocide; they were capable of massacres during the Crusades, capable of genocidal wars against the Amerinds, capable of the Holocaust, of Hiroshima, of the killing-fields of Cambodia, of Rwanda, and of Darfur.

As an example of the two sides of human nature, we can think of Scandinavia. The Vikings were once feared throughout Europe. The Book of Common Prayer in England contains the phrase "Protect us from the fury of the Northmen!" Today the same people are so peaceful and law-abiding that they can be taken as an example for how we would like a future world to look. Human nature has the possibility for both kinds of behavior depending on the circumstances. This being so, there are strong reasons to enlist the help of education and religion to make the bright side of human nature win over the dark side. Today, the mass media are an important component of education, and thus the mass media have a great responsibility for encouraging the cooperative and constructive side of human nature rather than the dark and destructive side.

## Suggestions for Further Reading

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# The New Morality

**Yehudi Menuhin**
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***Editorial Remark:***

*YEHUDI MENUHIN was a Fellow of the World Academy of Art and Science, who apart from his work as an artist, was deeply and actively concerned with problems of education and human welfare. For his philosophical works on music and his influence on music teaching, he held honorary degrees in Music and Law from various Universities and was awarded honorary distinctions in many countries. In the following article, he presents his view on the subject as an artist and educationist. His article is an abridged version of his Chuter Ede lecture, delivered on March 30, 1965, at Hamilton House, London.*

As by definition, the Chuter Ede lecturers are drawn from outside the ranks of educationalists per se, so do I propose to consider the art of education in its widest implications, implications of knowledge and superstition, of fact, fancy and reason, as of God and morality.

It took a long time for man to relate facts to each other; facts were isolated phenomena explained only by the most daring feats of fantasy; each man was isolated to his God and it was only common fantasy which joined people and not common knowledge. Today, along with common knowledge and I should add common doubt, which have both cast a pall on fantasy, we need to build a common morality as well as to release myriad new worlds of fantasy. For liberating fancy, imagination, dreams, abandon — these are man's lifeline to the infinite and man's greatest privilege. Born to seek light, unlike the tireless black ant, he is also as the peacock to the sun; fancy was man's reason before his reason built himself a prison. It is a very old habit born of our senses and our intellect, the legitimate offspring of both. Thus in the past facts did not explain themselves — fancy came to the rescue, and reason served fancy. Even today when a fact is supposed to be a fact, it is still meaningless except for what we can bring to it.

At one time every fact had to be interpreted as an isolated phenomenon and any hypothesis, however childish or wild, was apparently better than none. But at least, we as human beings were involved with body and soul, committed in life and death; we interpreted and we assumed, quite understandably, that the piece was composed for us, and in a sense perhaps it was... Now one fact is explained by another, and this other by a third, and so on, but we are left out of it. The facts, as it were, speak for themselves and except for revealing the fact in the words and the numeral, we are ourselves no more or less than any lump of clay; or then, as any comparison goes, why not than any lyrebird, dolphin, or for that matter any illiterate but heartrending tenor, proverbially mindless?

The great question is: Are we no more than clay plus intellect? What lies in between? What about that fancy which clothed the most trivial fact in the most richly ornamented and embroidered cloak? What went into that cloak? Fear and sorrow, yes, but also joy, hope and pride and all the ecstasies of the infinite; of infinite love, infinite space and time, infinite

beauty, and in absolute contrast, infinite pain, torture and anguish. For life is born of the infinite and yearns for it at every turn.

Morality and faith too are born of the infinite. Man does himself a great injustice when he lives only in terms of measurable — for the measurable will never yield the infinite and it is, therefore, partly untrue. Here is where imagination and fancy, art and morality come in. These come into play automatically with and in proportion to the time-space factor and infinity. Morality exists as soon as we feel for others, every kind of others, and so soon as we think of our future and the future of mankind. Morality can be built back into reality, not as a superstition, but as the inevitable attitude to life when seen in a certain perspective. What is this perspective? Science has explained so many of our phenomena — that, for instance, the fear of castigation by some Deity in the form of disease, earthquake etc. no longer holds water. We can indeed live a "godless life" within a very narrow compound: within these limits we can do that with impunity and a clear conscience, but it still remains a prison compound. Infinity is present at all times and it can be proved only in the more subtle ways; just as science today has discovered that infinity must enter into reckoning, so do these subtleties enter into the infinity within ourselves, into that depth of perception, into the intensity and quality of sensation, into the breadth of our horizon, of our vision. Whoever doubts that we are driven by the infinite should contemplate the sheer dimensions of power dreams, of pyramids and palaces which at their mightiest were never big enough for their makers. We must rather build in depth and in time what we seek to achieve in the immediate present in matter: actually, this means working even harder than we are.

Today, unfortunately, eternity is no longer represented: the mysteries of death as the subtleties of life are to a large measure ignored.

I would like to envisage morality as simply the unseen senior partner presiding at every transaction between a human being and his environment, as within a human being, between himself and his person. Morality could be described as that attitude or approach essential to achieve maximum joy, satisfaction, ecstasy, security and health—mental and physical, over the longest possible period for oneself and other creatures.

Man has always known that the reality in terms of the evidence of his senses was only half the story and that however enjoyable or painful this half was, the evidence was untrustworthy. He has always allowed for this second half, the so-called superfluous, and clothed it in ritual, symbol and all the colourful trappings of his imagination. This second half of our life — invisible, inaudible, intangible — is still with us. That fact has remained. Ever since thousands of years ago, perhaps even before man rode a horse, when he lived under the stars in a clear warm climate, by sheer dint of reasoning he was able to discover that the earth was round, and since then we have learned — and, alas, also forgotten—more and more facts not immediately apparent. This learning process grows in direct proportion to our humility, to our capacity for objectively subtracting ourselves as individual little vicars of God on earth, in direct proportion to the breadth of the concept wherein we figure as only one part, however essential and eternal, of the evolving whole. The success, the diversity, the survival strength of a civilisation has always been in proportion to its fund of knowledge, its wide distribution among its people, as well as to the physical and mental health of its people and their willingness to sacrifice themselves individually and collectively for a great object.

In those terms our learning, therefore, leaves much to be desired. We have, as it were, lost one compass; it was found wanting, as all first compasses must eventually be. It has been repeatedly redesigned to guide us in widening dimensions and we have not yet distributed the new models. We will not even begin to achieve the new morality which is required today unless we respect the milestones and the repositories of the morality and of the wisdom of the past. Furthermore, some of these ancient and inspiring institutions are yet capable of new vigour and leadership witness the inspired call of the late Pope. We should, therefore, favour the inductive processes of learning, the inductive processes of education, rather than drill only the end-products and facts into the classroom.

Thus to sharpen the mind and stimulate the processes of logical thought you might ask the child "If you were a shepherd, awake most nights gazing at the horizon and the stars, how many observations, and which ones would you have to make before being convinced the earth was round and that it spun?" Merely to stimulate fancy, a different question might be posed as "Given certain conditions of environment, what kind of social order, what kind of religion, what purpose of life would you imagine would take form?" Then the child's answer could be compared with the actual description of a particular civilisation representing such conditions.

Once a belief is held as of a particular kind of God, it takes a very long time to die and usually its death carries its civilisation with it, together often with much that is useful and beautiful. I remember how moved I was to hear when I last was in New Mexico about the sacred Lake of the Red Indians, to which they make an annual pilgrimage and which they would never consider desecrating in any way whatsoever, and the tremendous fight that they had, and still have to put up to protect that lake against the real estate prospectors who, of course, saw it as an ideal place for hot-dogs and stands and camps. Although I hold no brief for their cruelty, I respect and admire the Red Indian's inscrutable pride. They cannot understand the concept of private property that we have; they believe that land is very much like air and water, that you cannot tie it down, cut it up and apportion it — that it belongs to everybody.

Today our lives are as much as ever determined by the impalpable, as for instance radiation of many kinds, chemical food additives, while in the meanwhile our finest senses are being ever more blunted. We almost refuse to accept the testimony of our own taste and smell and thus we further coarsen our five senses. Is it not another duty of the new education to re-awaken lost subtleties of apprehension, for I am convinced that we have hidden natural gifts and capacities which correspond to and anticipate every new realm rediscovered, as it were, by science?

I believe we are on the threshold of a subtler age. Ours has been a rather coarse history all in all — from the Testament eye-for-an-eye to the darkest ages of "applied" Christianity. Today we have the means of making living sense of aesthetics and of morality, of God and of Faith. I would say that Faith is as essential to ensure continuity and to overcome setbacks and disappointments, as credit is in a capitalist economy. In a capitalist economy we have to assume that every customer entering the store can, in fact, pay for what he buys; for the good of the system, this act of faith is essential. Therefore, for practical purposes and failing any previous knowledge of the customer, and very often in spite of such knowledge, every

person must a priori be credited with good intentions, even though every person may fail by the same token. Obviously, where basic incompatibility with society exists, separation of the individual from the group is indicated, but we must never give up the battle for the health of body and soul, any more than the Early Christians gave up the battle for men's souls.

The teacher's responsibilities are, therefore, enormous. They go from the earliest origins of life to the projection of the future and they must, of course, take in the present and living reality and not as some textbook pattern. We must, therefore, teach not only isolated or comparative facts, but critical capacity to make wide choice. We cannot build the new world alone, for that we depend on succeeding generations, but at least to them must we transmit reliable materials and good tools, not merely facts.

Children who have shown a special inclination for a particular field must be given the opportunity of creating their own world and their own climate. This is unfortunately no longer possible in a world where both the home and the streets have become inimical to a child's climate the apartments are too cramped, the parents too busy, the streets polluted. In fact, allow me to make a plea for the inclusion in every apartment house of rooms where children can play, where they can make music, where they can practise the trombone and the violin, where they can use mud and clay, where they can get together, and also where their parents can get together. This is essential today because the ordinary apartment represents only off-time to parents; it is when they have stopped working that they go back to their apartments and children return when they have finished school-hours.

It is a curious fact that the emancipation of women has meant so far that we have fewer teachers and nurses, rather than more; fewer mothers and grandmothers than before, as they turn their backs determinedly on everything which remotely smacks of "Kinder, Kirche and Küche", and they become astronauts and secretaries, foremen and, to my delight, ministers. But without these small islands of intimacy, or privacy, of the fanciful children's world, our schools and our apartment blocks are simply huge, faceless factories out of which no individual can emerge, only the mass, blind and brutal. Children, for instance, love cuddling together in mystery and twilight; children love other living things as dogs, butterflies, trees, lawns and flowers. Where do they find these in our glass boxes, in our asphalt playing grounds? Are these asphalted so that they may be turned into paying car parks?

The child will not have its birthright until it enjoys more space, more scope, more privilege than the motor car. In fact, although always grateful for help, I look upon the tie-up of industry and education with some miss- giving because it is dangerous unless it is balanced with the building of independent minds and with the cultivation of crafts.

In music we can follow the same development as in all other forms of culture, i.e. from the God-given to the man-made; pre-theme, when music was symbol and ritual in the service of God, the individual almost nonexistent in terms of his own life theme, and then theme music, when pure music became an end in itself and wrapped itself around its own theme. Today there are more and more themes. We live in a world which finds itself between the God-given theme and its own theme, as it were, and every man, woman and child, every group must evolve its own theme and build — it's rather corny — a symphony on it. For myself, I don't think symphony is always the best form! A centralised authority supplying one theme is today inconceivable, for as soon as a man-made theme is available, different

men can make it. Even Utopia has different faces some have their Heaven inhabited by angels and others by various other creatures, but on earth the only things, sadly, that can still unite us at present would seem to be fear, hate, ignorance, war and, finally, sorrow, grief and guilt.

We return to the need for a new morality as the one binding thought among a mankind as variegated as each imagination can possibly make it. Morality, therefore, must exist as a climate; it cannot be legislated.

Therefore, when we speak of real life, i.e. where ability and achievement are measured in actual pain or progress, we must allow the schools to encourage individual inclinations which are at odds with the main streams of national life. I mean, for instance, that where ability and achievement usually carry financial tags, we must all the more encourage achievement and knowledge, service, beauty, craft and sport, which draw upon other well-springs.

An overwhelmingly military nation would, for instance, apply the one criterion of automatic integration, absolute reliability and subservience to rank in preference to any other value. As we have seen in the case of Germany, this one-sided excess can prove a nation's downfall.

We realise today that however essential one or two specifications may be in times of crisis, no civilisation can survive without all, each and every tribute. I fear, for instance, that commerce and money, as basically democratic and unprejudiced as their exercise is in an industrial, mass-produced, mass-credit society, are hardly in themselves sufficient to offer a reliable indication of every value. Knowledge of history, artistic excellence, readiness to sacrifice, aesthetic judgments, inspirational goals, as well as the gipsy, the tramp, the poet, the dreamer — these are all multi-shaped pegs that will not all grind down to regulation holes.

The young delinquent too escapes the criteria of commercial and financial value. There is incidentally a good deal of blindness, self-delusion and unconscious hypocrisy in the adult attitude to these "delinquents". They are, in fact, precocious adults. For the first time on such a vast scale has adulthood been available in terms of freedom of choice, time money, energy, example and stimulus; adulthood with all its privileges and none of its penalties, adulthood without responsibility and, therefore, requiring only daring, but no courage — never has such adulthood been available to so young a section of the community.

Their behaviour is entirely patterned on the principles and simplified choice the adult world offers them—at home, at school, on the street, on the screen, in the newspapers, and unfortunately in the current events of the world at large. The choices appear to be only relative to each other, not to a third larger purpose which I am trying to define in this lecture. The choices are on the one hand a "good" life offered them—drab, monotonous, unadventurous, stretching ahead indefinitely with nothing new, not even sex to lure them on; a life of facts, some dry as dust, others sordid and cynical—a "good" life without vision, guaranteed unto death (what a pretence! — We know that where there is no vision, a people perish) ; a life they are expected to accept passively and docilely and, on the other hand the "bad" life in which the initiative, the planning, the decisions rest with them. Although far from behaving with originality, they are surely only imitating the chief forms of adventure, excitement, violence and destruction, in a search for release and ecstasy, provided by their elder's fictitious models as exposed on the screen, the printed page, coloured advertisements and in the predatory design of their fast motorcars.

If we cannot provide a wholesome environment for infants, children and adolescents within the stream of our daily adult lives, we owe it to them, or at least to the most promising, talented and best of them, if we cannot afford to do better, to take these out of the stream into special, quiet lakes where they can develop beyond such corrupting influences in the time-honoured English way.

But even more important is the quality of adults, the teachers serving such groups of children, for they must be of the brightest quality. It is nonsense to assert in one breath the need for a higher general average of education, which it is officially admitted cannot be accomplished without depriving the better schools of their teachers, and in the next breath to demand more scientists, more astronomers, more of the first-class in every walk of life. I am afraid that, by the sheer force of mathematics, and until we can train many more teachers of the very highest calibre and imagination, we are committed to unequal education. A simultaneous two-pronged drive is the only answer — the highest standards must be defended, even improved, undiluted as much as possible, and the lowest standards raised, broadened and improved as much as possible.

Although I realise that the demands of industry and commerce are justified, I fear somewhat when I see how heavily indebted our culture and our values are both to new wealth and new government. For instance, when we reiterate every day the overwhelming importance of a nation's economy, its industrial capacity, financial credit, technical standards, nuclear knowledge and so on, do we really mean to imply that a country's moral and physical health, its attitude to family, other people, sickness, famine, death and birth are either of negligible importance, or utterly dependent upon the aforementioned items, and do we mean that without these items we ourselves, or the inhabitants of any country, would automatically revert to cannibalism and savagery, filth and desperation? When I look upon the Hindu civilisation, I for one refuse to believe this, but it is nonetheless important to be reasonably sure. I know that humility (e.g. the conviction that we are but one little link in the chain of life), and such terms as knowledge, beauty, love of one's fellow men, the need to act upon faith, reference for a Higher Power, the will to fight and sacrifice for one's loves, virtue and honour, all sound corny and old-fashioned, but they sound hollow only because they have so often been misused and because they carry hypocritic, dark overtones. Yet in a world bereft of all those things we produce today, it would become of supreme importance to know who would be trustworthy, who would nurse the sick and teach the young... wife, mother, husband, father and friend, all somewhat dusty appellations, these would come back into their own.

We need all these people desperately, all these wives and mothers and teachers, but it is most particularly the less gifted children, those who otherwise would adhere to the nameless mass who, even more than the gifted, need social opportunities, practical experience and service, craftwork and games. They must have their senses stimulated: our senses were given us to guide us, to delight and to warn us. These children most of all could enjoy stimulation of their senses; yet children in the cities are herded into conditions that are shocking to our five senses, from the foods they are given to the noise they must suffer. They spend most of their day, especially if they spend their free time on the street instead of in your beautiful parks, in an aesthetically repulsive environment. How can they be expected to become self-expressive and creative if their own senses that might lead them are blunted and starved?

We must preserve the balance between the world of our senses and all its works from music to architecture, from sculpture to the culinary, and from poetry to mathematics, works of fancy and imagination, and that other partitioned world of knowledge and fact which has found its way into the printed page, the blueprint, the computer, the bomb and the satellite.

I would like to dwell shortly upon the teacher's attitude to children. Children are much quicker than adults in their perception of the vain and pompous, the unsympathetic, the ungenerous, the fraud and the fraudulent — these they all recognise instantly. For my own part I believe there is no shame in owning up to one's own ignorance, to ask a child quite honestly a matter of information about which the child may well be more informed than the adult, or to admit the stupidity, the tragic idiocies and arrogance of adults since creation. We must always be prepared to recognise superiority and pay respect wherever it is due, even if it crosses the line or runs against the stream of established strata of respect and rank. In these admissions there is no shame, for the pompous pretence of being all-knowing is worse than useless. Of course, a teacher must be able to guide and to impart ability, technique and knowledge in an absorbable way; he must also be able, however, to live every moment of his task as if it were his first and his last. His routine must merely serve him to understand the particular moment, the particular child, the particular need and condition; he must not lazily barricade himself behind his position of authority or the text book, not to speak of the cane, however useful these may be at times.

But for the purposes of education, this frozen kind of instruction is dead and, to the extend it may still be applied, it lays the cold hand of death on children's fancy, talent and, eventually, their souls and creative intellect as well. Thus not only should the teacher teach, but every person in the swim of life, as he never abandons learning, should also give part of his time to teaching. Surely a principal justification of early retirement of able people from Government or industry should be to enable such men and women to teach; and the teaching profession must be prepared to welcome assistance from every quarter and every age. I can think of nothing more degrading and humiliating in the human sense than the closed-shop mentality among teachers.

The position on the ladder, the hierarchy, as it were, of the teaching profession, or of any other social ladder, should merely be a skeleton on which the living flesh and blood—on which life itself must be hung. The teacher must have something on the one hand of the nursing mother, and on the other of course of the dignity of his rank and his task.

It was the superstitions we shared which have hitherto bound human beings into groups; it was the God that they had in common, the God covering all the unknowns and all the unspecified. He was there not to explain; He was there to punish. As He also had sometimes to prove His own free will, He, therefore, had to be arbitrary and wilful, like those Red Indian gods of volcanic origin, placated only by live sacrifice. He had always to be available to support us and if possible, to uphold and justify as many of our immediate urges, appetites, survival exigencies and all of our meaner impulses and this was only by proclaiming His superiority over the gods of all our chosen enemies. Thus belief as such is as ready to serve the wicked as the good; it certainly does not of itself resolve the conflict of good and bad. Even the pardoning, forgiving God who, in the long run in spite of our best efforts, even forgives our enemies, does not quite achieve this. No, I firmly believe our new morality, our

new faith, can and must be based on foundations far more solid than have ever before existed. As our teachers change, so will our Gods and vice versa.

Morality may be divine, but it is not dependent upon God. It is by no means the preserve of any one church or "ism". But it is a formula for the highest kind of success.

The test of success in life is a happy and healthy old age, as well as the happiness of those one has lived with, and beyond that, of one's own people and all the peoples of all the earth. Again they are other limited fields of success depending upon criteria: the highest is self-sacrifice to others, as well as for knowledge and achievement in art and science. Somewhere in the middle there is success in finance and other forms of worldly success; in security and various forms of privilege, such as that of being able to order one's life more or less as one would like to. And, lowest of all, is success gained by cunning, flattery or brutality, all of which lead to very pitiful ends.

And finally, the words of a poet who saw more than we can explain

*All nature is but art unknown to thee,*
*All chance, direction which thou canst not see,*
*All discord, harmony, not understood,*
*All partial evil, universal good.*

The first contribution in this part of *Eruditio* is an article by **Garry Jacobs and Winston Nagan.** The piece is titled ["The Global Values Discourse."](#) It is based on authors' participation in a conference organized in part by the Club of Rome and the Alliance of Religions and Conservation, which is a British foundation. The conference was in effect, meant to be a brainstorming session lasting several days in which participants came from diverse cultural and intellectual backgrounds. Central to the theme of the meeting was the idea that humanity confronts a vital values deficit. Greater intellectual and scholastic effort is required to improve the vitality of values in shaping global public policies for the present generation and the future ones. An important guideline for the meeting was the stress on the value of the narrative as a mechanism for accessing the centrality of those values important to the future of humanity. Several other Fellows of the Academy participated in the meeting as well. In this report, the authors present their views and summarize the views of three other participants in the meeting. They readily recognize that this report does not reflect the breadth, richness, and diversity of all the perspectives presented during the meeting. However, the authors thought that this short report had some value for our Fellows and hope that it will stimulate a wider discussion among them.

The article commences with an appreciation of the evolving identification and importance of the individual in global society. The salience of the individual is of course a major theme for our Academy's current interests. The authors present an evolutionary gloss on the struggles that led to the centrality of the individual in Western civilization. It is a narrative that touches on the Renaissance, the commercial revolution, the demise of feudalism and the revival of learning as a major cultural force. These factors led to the reaffirmation of the individual in the birth of the enlightenment, the development of science and modern democratic ideals. Particular reference is given to the values behind the French Revolution and its affirmation on the rights of the common man, ideas that implicated freedom and equality and spread throughout Europe. These ideas took on a new life in the United States where the emergence of individualism was identified with the American dream.

The expansion and integration of individualism with older cultural traditions represent an ongoing challenge with important prospects for the promotion of freedom and equality. Reference is also made to the importance of evolving self-determination and nationalistic ideals, the challenges of scientific truths and laws, as well as the emergence of the culture of the machine. The paper explores the issue of key values which may shape human future. This brings the authors' paper to the point of clarifying values, narratives, and collective myths. The paper also examines the issue of transcendental values versus existential values. A clarification of this issue emerges from the Buddhist and Confucian thinking. It was Confucius, in particular, who suggested that we know nothing about transcendental reality and not enough about existential reality.

The focus on values in the existential sense permits us to fast-forward to the emergence of secular values in our time. Here we explore the work of WAAS Fellows in seeking to provide a framework of values rooted in social process and human institutions. These issues are tied to the emergence of contemporary human rights values.

A reference is made to Martin Palmer (ARC) who stresses the importance of values to improve the prospect of responsible choice making. Ian Johnson, a Fellow of the Academy, focused on the relevance of human segmentation and stratification forms that often lead to social injustice. He believes that the clarification of values is imperative for understanding the common good. David Korten provided a comprehensive paper carefully examining a multitude of cosmologies that represent contending visions relating to human values and the future of humanity.

The next article by **Saša Popović and Ljudmila Mila Popovich,** titled ["Economics of Dignity: Growing People from Consumers to Members,"](#) is an original and creative exploration of human-centered welfare economics. The article starts with a reference to Easterlin's paradox in his paper "The Economics of Happiness," where he suggests that material wealth is not a sure guarantee of personal happiness. This insight raises important lines of inquiry touching on economics, psychology and the humanities. According to the authors, such an approach brings post-modern economic thought to the equivalent of a post-mortem of classical economic perspectives. Central to this latter perspective is the issue of economic growth reflected in the idea of the gross domestic product. The authors suggest that there are other factors that also influence the satisfaction of the citizen consumer. These factors might include broader values implicating personal development and life satisfaction as perhaps more important than pure wealth for the satisfaction of human life.

The authors then explore the evidence of changing business practices in which the consumer is now somewhat differently understood. Cyber business permits this development. It creates in the consumer a sense that he is connected to a community, although this is a virtual community and is generated by entrepreneurial innovation. Still membership is membership, and the entrepreneur understands that membership implicates loyalty and captures the emotive need to belong. In this sense, the consumer is not only choosing what to consume, but is also involved in a choice of roles. Those roles are adding values but not at the altar of price. They use a very interesting illustration from the Starbucks chain of coffee shops. The Starbucks website includes links to the idea of a shared planet. It is receptive to the consumer's ideas and encourages a broader connectivity. Other illustrations are given, which demonstrate the dynamics of broader connectivity among people. This suggests that technology is stimulating human interaction and connectivity as important aspects of doing business. This suggests that under our very noses we are transforming humanity and transforming the values of community, identity, and connectivity. This implies that we are tentatively approaching the notion of an economics of human dignity. The interests of the Academy in the idea of a new economics are an important background factor lending substance to this creative contribution.

The third article by **Saulo José Casali Bahia and Craig Hammer** is titled, ["Returning to Vico: The Role of the Individual in the Investigation of the Social Sciences."](#) The authors focus on the dominance of Cartesian logic in its application to the social sciences. The Cartesian approach is quintessentially scientific in the sense that it seeks to generate objective scientific truths from observation to testing and verification. The authors of this piece examine the work of the Italian intellectual and theorist Giambattista Vico, who challenged the relevance of the Cartesian approach to the study of human affairs. Vico argued that the Cartesian approach was forced to use a degree of reductionism in the study of human relations, which provided scant interests in "verum-factum" and a greater concern for "verum-certum." Cartesian certainties in this sense simply missed too much of the role of the individual and the mind of the individual in constructing and developing the framework of human relations. The problem with the Cartesian approach is its lack of connection with individual creativity. Vico stresses a point that is peculiarly modern. Regardless of the official standardized Cartesian rules of society, individuals frequently are involved in unofficial rule making that cannot be adequately accounted for. However, a proper understanding of this process will show that at the informal level human ingenuity and creativity create community rules that modern theorists have called 'the living law of the community'. In short, there is the official scientific law codified in the books, which we may describe as the myth system of scientific rules. There is also alongside the myth system, the actual operational code reflected in the living law of the social participants.

The authors illustrate this with the example of the emergence of *"jeitinho."* This word is untranslatable but roughly means "knack, twist, way, or fix." This means that in Brazil there is a myth system of official law rooted in the constitution. There is also the Jeito, which is the behavioral law that fills

in the gaps and inadequacies of official law. The authors note that the Cartesian approach has been dominant. However, they acknowledge that Vico was vastly ahead of his time and that the human subjectivities of individuals have a critically important role to play in the construction of cultural, social, and legal rules that implicate an adequate description of human social processes.

The final article in this part of *Eruditio* is **Ullica Segerstrale's** "The Heart of the Humanities." This article underscores the unfulfilled need globally for a relevant value discourse. In this connection, the author draws attention to the challenge posed for the humanities in fully engaging in this urgent task. Part of the problem is the gravitation of the scientific perspective to the human sciences. This seems to suggest that along with the imprimatur of science, there is a willingness to avoid the value implications of human sciences. The initial challenge that she sees is to bring the humanities and the human sciences closer together in order to significantly enhance the relevance and quality of the value discourse in both areas of inquiry. She draws attention to what she sees as the current crisis in the humanities. This raises questions about the humanities, why they exist at all, and who needs them. She notes that value discourse is generally not part of the self-perception of the scientific perspective. The value discourse generated from the humanities may be politically uncomfortable. It may be that for this and other institutional reasons, the idea of an academic neutrality is a more comfortable fit in the context of the way in which higher education institutions are operating today.

The author raises a crucial question about the issue of knowledge generation and its social and possible policy consequences. Many scientists are deeply committed to the principle that their self-identification as scientists is limited to the production of new knowledge. What happens to the knowledge after it is produced is in effect, not a scientific question but a policy question. Still, in such important areas as managing arms control and the possible proliferation of nuclear weapons, scientists have been forced into a role of advising governments about precisely the consequences of one agreement over another, based on their estimate of the consequences that may flow from such an agreement. The author has provided an important insight into the culture of science and the humanities and the values that are required for the appropriate level of intellectual responsibility of both fields. She concludes her piece with a challenging call to "academic activism." As an editorial gloss, I mention that the Union of Scientists has adopted a human rights framework as an indication of its leadership in science with professional responsibility.

**Winston P. Nagan**
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# The Global Values Discourse

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*Abstract:*

*Values are not merely utopian ideals or empty platitudes. They represent the distilled quintessence of accumulated human experience regarding the foundations for stable social existence and sustained evolutionary progress. Values direct and determine the social process. Humanity's remarkable social advancement in recent centuries can be traced back to its progress in embracing and implementing a core set of universal values. The multiple crises the world confronts today are indicative of a growing gap between the values needed to support continuous social evolution and the retardant and reactionary forces which cling to outmoded conceptions and anachronistic social attitudes. This article explores the central role of values in resolving the crises now confronting humanity.*

The founding of the World Academy of Art and Science was inspired by a conviction that knowledge and technology alone are an insufficient basis for human development, unless guided by and subordinated to the pursuit of universal values inclusive of all humanity. The founders were cognizant of the challenges of complexity and interdependence consequent on the increasing flow of goods, services and people resulting from rapid globalization. They recognized that rapid social evolution was undermining traditional notions of sovereignty, giving rise to new conceptions of global responsibility and human rights. Concerned about the social consequences and policy implications of these radical changes, they searched for new principles of global governance based on the common interests and rights of all humanity.

The current crises confronting humanity today reinforce the importance of global values as the essential basis for global social progress. Unregulated markets that serve the few at the expense of the many, undemocratic institutions of global governance, rising levels of inequality, unsustainable exploitation and destruction of our natural resource base, rising alienation of human capital from productive employment and rising levels of social instability are signs of a social fabric increasingly divorced from and insensitive to the welfare and well-being of large sections of humanity. At the root of the multiple crises confronting humanity today is a crisis of values that must be resolved before there can be any hope of lasting solutions to the problems facing humanity.

Concurrently, we are compelled to recognize the enormous progress humanity has made over the past few centuries in enhancing the values by which we live — the unprecedented freedom consequent of the expansion of democratic forms of governance, the unprecedented security resulting from rising levels of economic development, the greater recognition and

enforcement of human rights, the gradual emergence of principles of a global rule of law and justice governing relations between nations and global society, which until recently were dominated almost exclusively by power politics and military power. Each of these changes is partial and certainly incomplete, but the direction is evident and the will for progress still growing. Thus, we must reconcile our growing sense of dissatisfaction with the absence of values with a perception of their increasing importance. Jasjit Singh attributes this paradox to the fact that aspirations and expectations are rising faster than ground level social realities.[1]

The concern for global values, their meaning, and salience have also been a concern for the Club of Rome (CoR). The Club's own interests in rational global economic policy and practice in the common interest represent a challenge to it to better understand what the common interest actually is and what it implicates. Both WAAS and CoR have felt a compelling need for a deeper and wider transdisciplinary inquiry into fundamental questions relating to the values in the global system. Such an inquiry is essential for understanding the present state of the world order to which we have arrived as well as for charting a better collective future for humanity based on universal values for sustaining a world order in the common interest.

Over the past two years, the World Academy and the Club of Rome have been exploring the root causes of the crises facing humanity relating to the international financial crisis, unemployment, growing inequality, ecological destruction, global governance, international security and social stability. It soon became evident that the problems we face are rooted in the ideas and values that underpin the current global system, and the effective lasting solutions to these problems will require fundamental changes in the normative foundations of global society in the 21st century. In order to validate this premise, the Club of Rome convened an eclectic group of 18 individuals from diverse cultural, intellectual and moral frameworks to participate in a two-day workshop in Bristol, UK conducted in association with the Alliance of Religions and Conservation (ARC) to reflect on the impact of myth, narrative and values on social evolution and to provide insights into the values needed by the global community to support constructive development of all humanity in an increasingly cross-cultural, value/pluralistic world. The group included four Fellows of the Academy, including the authors. Following two days of very stimulating creative discussion, participants were requested to submit answers to the following questions summarizing their insights into the role of values and narrative in the past, present and future development of global society.

1.  What are the key stories that have brought us to where we are culturally today and, which have been creative and which problematic?

2.  What do you see as being the key values that could shape the future and where would they come from?

3.  Which value, e.g. Liberty; equality; compassion — is the crucial one for you? Could you do a brief piece on both why and also on how it has changed its meaning in the last couple of hundred years?

4.  Going back to your roots, what were the key stories and values that shaped you? How have these changed? Do they shape the present? If so, how?

These questions produced a number of wide-ranging responses reflecting the professional and cultural diversification of the group. Since the World Academy currently puts a major emphasis on Individuality, our initial contribution provided a perspective of the Academy which focused on the evolution of individuality and its implications for the values fundamental to the global social process. We summarize the central points that we submitted stressing the evolution of a narrative of individuality from a global perspective. In this regard, we suggested that the present is on a trajectory launched far in the past and moving well into the future. To know where we are going, we must first understand where we have come from and how we have arrived at the present. Viewing the past few centuries in the light of four value-based narratives offers important insights regarding humanity's recent achievements, current problems and future challenges.

## The Rise of the Individual

The rise of the individual has been the dominant story in Western civilization over the past few centuries and has in recent decades spread to encompass almost all of humanity. With rare exceptions, such as a brief period in ancient Athens, throughout history the individual has been subordinated to the collective and compelled to conform to the beliefs, behaviors and actions endorsed by the collective. This was especially true during the Middle Ages in Europe where the Church suppressed education and literacy and imposed a common dogma throughout the continent. The emergence of the modern conception of the individual can be traced back to the Italian Renaissance, as Augusto Forti discusses in his paper in *Eruditio* Issue 1, Part 1, when the commercial revolution in the great Italian city states broke the stranglehold of feudalism, and the revival of classical learning restored freedom of thought in art and literature. The Reformation, Enlightenment, birth of science and the rise of modern democratic ideals marked further stages in the progressive emergence of the individual in Europe.[2]

For present purposes, it may be sufficient to consider the human narrative that emerged from the French Revolution, which played out with most dramatic results across the Atlantic in North America. The Revolution marked a definitive stage in the rejection of traditional feudal values and class structures and the affirmation of the rights of the common man. It challenged the notion that birth, blood, heredity and class status were forever fixed. It affirmed the fundamental value and, therefore, rights of every human being. Although it was quickly followed by a new aristocratic class structure in Napoleonic France, the spirit of freedom and equality spread far and wide throughout Europe.

The ideals of freedom and equality born in Europe but stifled by the inertia and resistance of centuries of social, cultural and religious structure found freer play and greater scope in the North American wilderness. Millions of nameless, impoverished immigrants escaping social, political, economic and religious persecution discovered a new world where they were free to start afresh and create a life for themselves liberated from the inherited traditions, social prejudices, religious intolerance and quixotic circumstances of European history.

The American Dream is not so much the story of a nation or a system as a narrative about faith in the value and power of the individual. The nation came to embody a faith of mythic

proportions in the capacity of the individual human being, who was liberated from tyranny and constraining social conditions he faced in Europe and given the opportunity to act independently and achieve almost anything. The heroes of the American dream were pioneers, explorers, inventors, and entrepreneurs, — self-made men and liberated women — ordinary people like Lincoln born in log cabins and self-educated, incessant inventors like Edison, resourceful men of industry like Ford. British historian Paul Johnson recorded that during the late 19th century, penniless European immigrants landing in New York and living in slums rose to middle-class status in an average of 7 to 77 weeks based on the strength of their own capacities and effort. America symbolized the rise of a dominant middle class politically, economically, socially and culturally. The idea that any and every individual could escape the fickle fortune of birth, blood, class, caste and attain middle class levels of security, comfort, leisure and status spread around the world and became a dominant motif of the last half century.

Freedom inevitably carries with it both positive and negative expressions, freedom for progress and for destruction, freedom of the oppressed to determine their own future and freedom for the strong and advantaged to exploit and dominate over others. The result depends on the idealism and self-restraint with which it is exercised. Of the three ideals of the French Revolution, only liberty took strong root in America. The interpretation of freedom widely associated with egoistic individualism was strongly influenced by circumstances and experience in early America, so it is important to liberate the value of freedom from the limitations arising from its natural evolution in society. Freedom in the New World meant freedom to act individually without encumbrance and with minimal responsibility for the welfare of the collective.

The extreme emphasis on freedom made legitimate the individual pursuit of self-interest to the exclusion of all concern for community. Individuality was largely subverted into egoistic individualism, a creed of every man for himself. The excesses of Neoliberalism illustrate the obvious dangers of affirming the value of freedom in isolation from the other two. The excesses, which arise from a culture of individual freedom are not an indictment of the value of the individual, but rather of the particular variety of self-centered, egoistic individualism, which has been its first form and remains its dominant expression in the world today.

It is probably inevitable that some may regard the emphasis on the individual as an imposition of a Western cultural bias. While the modern forms of individuality described here have certainly been more prominent in the Occident in recent centuries, the case is rapidly changing. The younger generation in India today is reminiscent in many ways of the generations born in America before 1940, when the quest for education and material achievements broke down many of the traditional bonds of family life. India's ancient cultural tradition has always affirmed the ultimate right of the individual to pursue his own religious or spiritual path, which is why the country worships God in so many forms, embraces such a wide variety of spiritual disciplines, and reveres its greatest spiritual individuals — the Vedic rishi, the yogi, sage and Mahatma — as embodiments of divinity.

But the issue of cultural differences remains an important one and hopefully will be a source of humanity's future salvation. For all the apparent superficial similarities between Mumbai, Moscow, London and New York, deep-seated cultural differences still underpin

and differently shape the expression of values. It is likely that as human rights, democracy, education and prosperity spread through the rest of the world, the form which individuality takes will be quite different from the extreme form now prevalent in the West. If so, that may be humanity's salvation. It is not by rejecting the individual but by defining his/her rightful place that humanity is likely to arrive at the most fruitful future. The West has much to learn from Asia in that regard.

## Self-Determination and Nationalism

The rise of individualism during the 20th century coincided with the rising aspiration of suppressed peoples everywhere for self-determination, resulting eventually in the end of colonial empires following World War II, the spread of democracy in successive waves throughout Europe, Asia and Latin America, the resurgence of Asian power, and the evolution of international institutions designed to represent and safeguard the interests of the nation-state. These historical facts give expression to a belief system centered on the value of the nation-state. Creating larger self-governing aggregations of people based on common language, history and culture marks the definitive end of political and military imperialism. At the same time, nation-states jealous to protect and advance their own interests in comparison with those of other people have given rise to a competitive global security system and a competitive economic system that pose serious impediments to global governance. Competitive nationalism was the principal cause of the two world wars. As Jasjit Singh has eloquently argued, it has given rise to a global security system in which each nation is responsible for its own self-defense. This is the reason why nations spend $1.5 trillion annually on defense, why nuclear weapons states refuse to give up weapons whose use would be a crime against humanity, and more states strive to acquire these weapons, why small arms trade proliferates and why in the name of democracy, we persist in affirming the validity of a highly undemocratic United Nations system. So too, we are prevented from adequately addressing the global financial crisis because of a competitive monetary system; and from responding to the ecological threats to earth because of an economic system in which nations compete for access to scarce resources.

The storyline behind the present global system can be summarized by the use of the word 'sovereignty'. In current conception, 'sovereignty' refers to the rights of nations represented by their governments, not the rights of people within nations or of humanity as a whole. In practice, the claim to sovereignty is applied with equal self-righteousness by democratic and autocratic governments, whose authority for representing their people is subject to debate. It is applied by a few powerful nations on behalf of the entire unrepresented humanity or in direct contradiction to the rights and interests of other peoples. As we have argued elsewhere, it is necessary to alter our fundamental conception of the source of rights throughout the world and weave a new narrative which embraces and assigns a rightful place to the individual, the community, nation-state and humanity.[3]

The emergence of the European Union acquires great significance in this light as the most serious endeavor thus far for a group of mature nation-states to overcome their centuries-old rivalry, prejudices and sense of separateness to forge a political and economic union based on social and cultural inclusiveness. This marks the attempt to write a new narrative for the human community. The whole world has a tremendous stake in the success of this enterprise.

# Natural Law*

In Europe, the rise of individualism was also associated with the rise of science and the search for an objective standard of truth liberated from the dogmas of religion. Natural law was frequently cited by early political idealists as a basis for affirming the rights of man, for framing democratic forms of governance and new legal concepts founded on objective principles. But, as science expanded its discovery of the laws of the physical universe, a strange alchemy has occurred. Material science founded on universal mechanical laws of nature has come to reject or discard the most sacred elements of our humanity — denying the existence of free will other than as a product of chance or uncertainty; denying the existence of individual uniqueness, other than as the result of genetic mutation; denying the essential reality of all that is immaterial; and thereby according greater reality to a mud pie or plum pudding than to patriotism, idealism, romantic love, goodness, Plato's Symposium, the Mona Lisa, Hamlet, or Beethoven's Ninth Symphony. In a world governed by impersonal laws of nature, human choice has no real place. Consciousness is merely a freak accident. Nature affirms only the value of the species, not that of the individual. In attempting to discover the truths of the world around us, science has arrogantly rejected and discredited the collective psychological knowledge and spiritual wisdom of humanity acquired over millennia.

Science applied to society has led to an unquestioned faith in mechanism, which undermined the principle of individuality from which modern science rose. If society like nature is merely a giant machine, then all we need to do is discover the laws by which it works. Applied to governance, it gave rise to state socialism. Applied to economics, it gave rise to Newtonian laws that place inordinate faith in self-governing social institutions such as free markets (glorified social Darwinism). The Cartesian divorce between the scientist and observer, the separation of man from nature, has also driven a wedge between humanity and the social mechanisms it has devised to promote its welfare. David Korten's classification of cosmologies is an important reminder that science has become the prevailing religion of humanity.[4] The old religions based their claim to authenticity on scripture and teaching. The new religion bases itself on a materialistic metaphysic that is equally blind and intolerant of diverging opinion, yet wields far more power than any religion ever did, and therefore, is potentially far more dangerous.

# The Rise of the Machine

The rise of science was associated with a growing faith in mechanism, technology, and the power of the machine. Modern science was born in Europe during the Enlightenment and reached its creative heights of original thinking on the continent. But the adoption and application of science for physical processes gained their greatest traction in America where land was abundant, labor was in short supply and new means were urgently needed to quench the growing needs and aspirations of a rapidly growing and fast rising population. The inventor and the engineer have always been revered in America. Labor-saving devices such as the washing machine and processed food liberated women from drudgery at home, enabling them to seek employment and pursue careers earlier and in greater numbers than in any other

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*The term 'natural law' here refers to the laws that emerge from the material world of causal relations. This is distinguished from the natural law used in legal discourse which focuses on the normative dimension of natural law.

country. The working women became a symbol of the liberated feminine gender, liberated from the traditional role model as a subservient housewife. The faith in science-based mechanism was embodied in America's invention of the atomic bomb, the race to the moon, and the personal computer revolution. Technology was perceived as a liberating force and answer to all problems.

Humanity has a strange propensity to become enslaved to the instruments it creates for its advancement. Technology can dominate social existence and enslave as well as liberate. Technology in the factory is making human labor dispensable and converting employment into a privilege rather than a fundamental right. So too, a blind faith in the wisdom of the impersonal marketplace can destroy social integrity and undermine human values. So completely have we accepted this voluntary bondage that we regard as legitimate almost any scientific quest and any technological invention regardless of its impact on humanity. We do not even hold scientists responsible for the consequences of the technologies they invent.

Physical mechanism has its social counterpart. The quest for impersonal principles governing physical nature has also given rise to unprecedented creation of new forms of social organization rooted in practical arrangement rather than tradition and culture. America, in particular, exhibited a remarkable capacity for organizational innovation. Freed from the inertia of centuries-old traditions, generations of Americans were compelled to fashion new types of organization adapted to the changing times and circumstances. Both the strengths and weaknesses of American society can be traced to the replacement of traditional social institutions with the rapid proliferation of new types of social organization. On the positive side, the American constitution and democratic political institutions, land-grant colleges and universities, mass production, telephone networks, stock and commodity exchanges, motion picture and television studios, international credit card systems, overnight courier delivery, community colleges, and the emerging social organizations of the 21st century — the Internet, world wide web, global retailers such as Amazon, social-networking — not all of them were invented in America, but these and countless other organizational innovations were adopted in the United States more rapidly and extensively than anywhere else to transform the way work is done, people interact and communities are organized.

Every positive has a downside. The rise of impersonal organizations for a highly mobile, uprooted population also contributed to the breakdown of family and community relations, and rising sense of isolation and loneliness. Fifty years ago, John Galbraith prophesied that the modern corporation would replace the family as the basic unit of American society. In doing so, it has liberated individuals from the limitations of a particular family background but also deprives them of close social and psychological relationships and cultural inheritance. Organizational know-how has replaced community and social culture as the bond between people and communities. Physical isolation, social alienation and psychological loneliness have grown dramatically as a result. An inordinate faith in organization, technology, money and markets has reduced social existence to a mechanism for connecting discrete and separate parts, replacing the organic concept of living cultural community with impersonal social machinery. The gains in productivity and efficiency have been offset by the loss of human relationships, collective responsibility and cultural enrichment. Ironically, the culture founded on the value of the human being is in danger of dehumanizing society.

In sum, the rise of individualism has been closely associated with the Reformation, democratic revolution, spread of education, and unprecedented economic prosperity of the modern age. Ironically, the very movement that was apparently intended to liberate our humanity has done much to dehumanize society, replace culture with mechanism, impersonal organization, competitive nationalism, and a rational science striving to apply Newtonian laws of nature to human life. The age-old struggle between the individual and collective is approaching the end of an evolutionary curve. After a long history of collective tyranny, a world view emerged, which justified a new form of state tyranny in the name of freedom, of which Nazi Germany, the Soviet Union and Chinese state socialism have been exemplary models at the national level and which the present United Nations Security Council exemplifies internationally. The old ideal of individualism affirms itself today as a social version of Darwin's survival of the fittest. The inalienable democratic ideals of life, liberty and the pursuit of happiness have become a front for governance by plutocracy and a justification for the wholesale pursuit of selfish self-interest. The nexus between corporations and government is compounded by the fact that it transcends national boundaries, enabling multinational businesses to leverage their independence to compel national governments to compete for their favor and yet remain beyond the pale of national law. The faith in free markets has become a justification for unbridled greed and unconscionable inequality. The greatest tragedy of the modern era is that for the first time in history humanity possesses the capacity to meet the needs of all human beings, and yet we stand enslaved and helpless witnesses to a system run amuck.

## Key Values Shaping our Future

What are the key values that could shape the future and where would they come from? The three great values of the French Revolution can form the basis for a powerful new narrative of human evolution. One of the great challenges humanity faces today is how to reconcile unprecedented freedom with greater social equality and community in full affirmation of the value of the human being. Faith in impersonal mechanism has to be replaced by institutions dedicated to the rights, dignity, welfare and well-being of all humanity. Every existing legal concept, institution and policy has to be revamped to reflect the new values. True democracy has to be established locally, nationally, internationally, in fact, as well as in word, replacing the prevailing political system of power and privilege. Plutocracy has to be supplanted by true political and economic democracy. Economic democracy must come to mean not merely the freedom to work, but the guaranteed right to access to gainful employment opportunities, education, medical care and economic security. The sovereign sanctity of the nation-state — a relic of a previous age — has to be supplanted by a conception that recognizes the legitimate rights of people at all levels from local communities to the global human community. Individuality implies rationality, for the domination of the collective is characterized by blind conformity to social norms, which leave no scope for true rationality. The superstition of blind conformity has to be outgrown in all its forms, scientific and academic as well as religious and ideological. A shift is needed from faith in money and technology for their own sake to faith in human beings and an effort to maximize the welfare and well-being of all. A competitive culture based on selfishness and greed needs to embrace the psychic values of goodwill and self-giving.

These changes cannot be brought about by a return to collective domination over the individual, as state communism and state socialism attempted, or even by a compromise between opposing ideologies. The collective has demonstrated time and again its disregard for the integrity of the individual. Nor can the change be achieved by according unlimited freedom for individuals to pursue their own personal benefit. The contradictory principles have to be reconciled at a higher level and converted into mutually supportive complements. That requires a new narrative, a new image of individuality and society for humanity to aspire for.

The dichotomy has to be bridged between man and nature, the individual and the collective. The conscious individual is nature's most remarkable creation, the representative peak of humanity, who embodies and gives expression to his cumulative endowments and future aspirations. The individual is the catalyst and leader of the evolution of society, the representative of society and not merely a lone, isolated person. It is not by subordination of the individual but by an evolution of culture from egoistic individualism to true individuality, from selfish egoism to identification of the individual with the common good of the social collective and of humanity as a whole that the dichotomy can be reconciled. The true individual, described by Jung, Maslow and others as one who is self-actualized or self-realized, is conscious of him or herself as part of the community, one with humanity, and aspires for the good of all, not merely for their own personal benefit and salvation. That is a story worth writing. Aspects of this narrative are found in the work of Harold D. Lasswell and Myres McDougal, Fellows of the World Academy, in their study *Jurisprudence for a Free Society: Studies in Law, Science and Policy.*[5]

## Narratives and Collective Myths

Idealistic proclamation of universal values is a relatively recent mode of capturing the essence of cultural wisdom and emerging aspirations of humanity. Traditionally, values have been embedded in the form of myths and complex narratives containing within them doctrines and formulas around which social life is to be organized. The story behind myths may generate doctrines encoded in both ideology and counter-ideology. Again, the stories behind ideology and counter-ideology suggest that in the social process, there is often a contestation about the very values behind myths and narratives. In addition, symbols possess an immense power to convey human understanding and comprehension. We could say that myths and narratives are generated as signs and symbols, which also implicate myths and counter-myths, ideologies and counter-ideologies. The concepts of myth, narrative, symbol and sign, are an ongoing issue about the values that should guide our global society in ways that avoid destruction and enhance a brighter human prospect.

## Transcendental vs. Existential Values

The problem of values invariably implicates sacred and secular issues. In general, religion stresses the importance of the transcendent spiritual life and the importance of this life for the nurturing of the soul in the next life. This seems to imply that values are largely important for transcendental rather than existential experience. Buddha thought it was a waste of time to contemplate the absoluteness of deity and was searching for a way out of suffering in the here and now with his famous Eight Fold Path of Virtue. To some extent, he was making

a break with the values for transcendental purposes only. For Confucius, humanity has not yet learned to know life. If it does not know how to live, why be concerned about another life before you know how to live this one. Hence, the sage wisdom 'live one life at a time'. This carries the implication that in doing good in life, one is not doing it for a reward in the next life; one is doing good for good's sake. That is a challenge for altruism. One of the most important insights that Confucius generates is his insistence that social good emerges from human interaction from micro-social family ties to ties that are community-wide. In these relationships, decorum, humanity, uprightness, tolerance, and sincerity are paramount values. His additional focus on etiquette, dress, and style was a way of making morality a component of civilization enhanced by the polite style. Confucius' aspirational personality type emphasized the expression of human nature in terms of a golden mean, which was balanced, tempered and under control. He saw this in the gentlemen scholar. The fundamental values that we can distill from his legacy include intelligence and learning, the high value of labor, the importance of life, the value of good manners, an avoidance of extremes, and sensitivity in human relations to the principle of reciprocity. In this latter context, Confucius does not endorse the Christian view of returning good for evil. He instead requires that evil be repaid with justice. The Confucian idea of rooting morals and ethics in human interaction and reciprocal relationships is an idea that is also reflected in the African principle of Ubuntu. In effect, people realize their moral value in relation to other people.

## Secular Values in Our Time

Let us fast track from Confucius to the modern age. Modern anthropologists have tended to view values as essentially related to the fulfillment of human existential needs rather than transcendental aspirations. As the social sciences developed, leading figures, using anthropological insights, effactually defined politics as the authoritative allocation of values. And operational politics reflected the objective of dominant interest groups to get the most that they could out of those values. The evolution of human perspectives began to focus on the content of the values, the institutional mechanisms by which they were produced and distributed, and an appraisal of what this actually meant for still higher values that focus on equality, fairness, and dignity. The concept of values and needs was well developed in the psychological literature by Maslow's idea of hierarchy of human needs:

1. Physiological — hunger, thirst, bodily comforts, warmth
2. Safety/Security — out of danger, order, law, stability
3. Belongingness and love — affiliate with others, be accepted
4. Esteem — to achieve, be competent, gain approval and recognition
5. Self-Actualization — realizing personal potential, self-fulfillment, seeking personal growth and peak experiences

During the 1930s, Franklin Roosevelt, the American President, made a critical linkage between the value of liberty and the value of economic deprivation. According to Roosevelt, necessitous human beings have their freedoms diminished by economic necessity. Later, he spelled out his vision in the Atlantic Charter, which Churchill joined in support. In the Charter, he stated the values implicated in the war aims for which the allies were fighting.

He brilliantly couched this in terms of four aspects of liberty: freedom of speech and expression (political freedom), the freedom of conscience and belief (confessional freedom), the freedom from want (economic freedom), and the freedom from fear (basic security).

From a global point of view, the needs-based focus of the anthropologists and the values-ideas of the social scientists came to be expressed in the form of a political morality for the global community. And these were expressed as values relevant to this earthly life rather than to a subsequent spiritual transcendental existence. It is from these roots that there emerged the United Nations Charter, one of whose specific goals was the commitment to the universality of human rights values, although these values were not defined in the Charter itself. Subsequent to the adoption of the Charter, the UN set up a Committee to draft a Universal Declaration of Human Rights. That draft came in record time, and its values had gravitated from the idea of a non-enforceable moral obligation to the status of a juridically enforceable obligation and a part of the positive law of the global community. The Universal Declaration is formulated in terms of rights, but carried some complexity about the nature of these rights (moral vs. legal). More importantly, however, at the back of the rights on the Declaration are identifiable values and institutions that are specialized in whatever degree of efficacy to the production and the distribution of these values.

## Values and Social Process

The central importance of values to policy-making is highlighted by a perspective which recognizes values as one essential element in an integrated social process, as described by Lasswell and McDougal, both former Fellows of the World Academy of Art and Science. To give values a foundation of social realism, we may describe the Global Social Process as comprising the following:

Social Process = People + Values + Institutions + Resources

Lasswell postulated eight fundamental values driving the social process:

1. Power — The making of decisions enforceable by severe deprivations or high indulgences; making and influencing community decisions.
2. Enlightenment — gathering, processing and disseminating information and knowledge.
3. Respect — Freedom of choice, equality and recognition.
4. Well-Being — Safety, health and comfort.
5. Wealth — Production, distribution and consumption of goods and services; control of resources.
6. Skill — Acquisition and exercise of capabilities in vocations, professions, and the arts.
7. Affection — Intimacy, friendship, loyalty, positive sentiments.
8. Rectitude — Participation in forming and applying norms of responsible conduct.

The above approach may have some value for this discourse because it comes in a form directly related to the policy-making arenas of concern to the World Academy of Art and

Science and the Club of Rome. The approach outlined above provides us with eight value categories and provides us with a marker, which targets the institutions that control and regulate the production and distribution of these values. It has an added element, namely, that rather than isolating economics from society and social realism shows that economics can influence every other value, and every other value may have an influence on economics. That is an important insight for the CoR. Second, the values identified here are those that had emerged from the secular give and take of global politics. These values have extraordinary traction, although in the area of economics this has not been widely recognized in recent decades due to the strenuous but failed attempt of neoliberal economics to mimic the objectivity of natural sciences. According to this perspective, human beings do not invent values; we simply present the formula or the relevant myth and the accompanying narrative relevant to our time. The importance of the categories of values is their clear connection to identifiable institutions whose efficacy may well be questionable at this time. This approach provides a pointer to focus on critical inquiry into institutions crucial to human progress, and with a possibility of recommending reform or improvement.

## Human Rights Values

Finally, we conclude this segment with reference to the secular values expressed in the most recent work by the Nobel Prize winning economist Amartya Sen. Sen conceptualized the basic values in terms of basic human capabilities that are important for a democratic society. These include life, bodily health, bodily integrity, sense, imagination, thought, emotion, practical reasoning, affiliation, other species players, and control over one's environment. Sen's capabilities/values catalog has some overlapping affinity with Maslow's, and the human rights values identified by Lasswell and McDougal. The problem with Sen's categories is the difficulty of identifying fairly precise institutions specialized to the production and the distribution of his capabilities values. For example, if life is valued, then all human institutions are implicated in it. That is too vast. However, Maslow's needs hierarchy and Sen's human rights perspective may serve as the foundation for generating policies and devising institutional mechanisms to implement them on a global basis.

Viewing Maslow, Sen, and the human rights values in the historic context of Confucius' insights, we see that the overriding moral values implicated in all the values and institutions are the dignity and worth of the individual human being on a global basis. The human rights angle with its focus on universal global dignity presents an important challenge for providing the normative guidance for the future of political economy of the world community.

## Other Important Perspectives

It is not possible to do justice to the richness of thoughts exchanged during and after the conference. Important contributions came from Martin Palmer (ARC), Ian Johnson and David Korten (CoR).

Palmer noted that his values are rooted in Christianity, Marxism, Socialism, and Chinese culture. His values seem to suggest the pragmatic side of communication and interaction in which human beings can be persuaded to be responsible choice makers. This means having people examine their own narratives to learn from them and to sometimes liberate from them.

His contribution is a challenge to the fatalism of apocalyptic futures or those that predict an inevitable nirvana. Ian Johnson initiated his discourse by focusing on the pernicious reality of human segmentation and stratification. This compels us to recognize that in society, we still give credence to the ubiquitous symbols of the "we" and the "other." He reminded us that this outcome is reflected in such tragedies as the killing fields of Cambodia. Applying these insights to economics, we emerge with a code of "dog eat dog," driven in part by the corporatization of economics. Current free market ideology conspires to enhance individual interest and depreciate the common good. How can we escape from this dilemma? This brings us to the importance of value clarification.

Johnson stressed the importance of individual roles and responsibilities, the need for a new compassion that is global, the importance of working against the trust deficit, the question of whether our institutions undermine our faith in them, and how we handle diversity. He finds it difficult to provide a priority of values regarding, for example, liberty, equality, and compassion. He sees some importance in human rights and concludes that indeed global values matter.

Korten submitted a more comprehensive paper examining the implications of three alternative cosmologies on humanity and its relationship with nature: cosmos as a grand machine, cosmos as the rule by a distant patriarch, and cosmos as an integral spirit. He projects the third cosmology as more conducive, sustainable to arriving at a harmonious relationship between humanity and nature and cosmos.[6] This view emphasizes the unity between the cosmos, nature, and spirit, the unity of all beings, and the idea of the pervasive action of a conscious intelligence shaping the destiny of the universe.

Korten objects to an exclusive anthropocentric focus on human rights on the grounds that it leaves out a crucial dimension that is currently coming to the fore in the controversies surrounding Rio+20 — the recognition that Earth is sacred and that our survival as a species depends on balancing our concern for human rights, property rights, and corporate rights with a corresponding concern for the rights of nature. The framing challenge before us as a species is to reconcile the rights of nature, human rights, property rights, and corporate rights. He believes that they are properly viewed as a hierarchy of rights and that the rights of nature must come first, because we humans are derivative of and imbedded in Nature. Without Nature, we do not exist. As living beings, our rights are derivative of the rights of nature. Human rights in turn come before property rights because property rights are a human creation and have no existence without humans and no purpose other than to serve the human and natural interest. Corporations are a form of property, and their rights exist only as a derivative of property rights. Stressing the incestuous relationship between corporations and politics, which transcends national boundaries, he argues that our current global civilization gets the order exactly backward. We give corporate rights precedence over the property rights of individuals, property rights precedence over human rights, and human rights precedence over the rights of nature. And we are paying a terrible price.

These ideas do not exhaustively represent the insights drawn from humanity's past development of the plethora of creative suggestions regarding a more viable basis for its future progress. But they do go far to highlight the importance of a serious systematic inquiry into the values that underpin social evolution and the compelling need for an evolution of those

values to keep pace with the rapid strides in technology, globalization and social power. For, all participants agree on one point, that the overall purpose of the global social system must ensure security and support the fulfillment of all human beings in a sustainable manner. The values behind global human rights are an important narrative providing normative guidelines for human progress. This discourse about clarifying the narratives, the myths and the values of global society in the 21$^{st}$ Century is projected to be continued. We, the Fellows of the World Academy, hope that this discourse will attract the interest of many distinguished Fellows of our Academy and that it continues to be a major point of emphasis in our programs and related interests.

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# Economics of Dignity:
## Growing People from Consumers to Members*

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*Abstract:*

*According to Richard Easterlin's paradox, laid out in "The Economics of Happiness," material wealth does not necessarily guarantee and equate with a sense of personal happiness.*[1,2] *This intriguing conclusion challenges researchers to explore a fascinating intersection among Economics, Psychology, and Humanities.*[†] *It is bringing postmodern economic thought to a post mortem of classical economy, whose core measure of economic growth — gross domestic product — will have to be reevaluated as a determinant of people's prosperity in order for us to identify more indicative and reliable value drivers in the 21st century. Along with the GDP, the vital constituent of contemporary capitalism and the modern consumerist society — consumer him/herself — is being reevaluated not by conventional criteria such as personal income and personal consumption, but by personal development and life satisfaction as new benchmarks of people's sense of fulfilment central to the notion of wealth.*

*It is that need for personal development and fulfilment that has caused the economic subjects to gradually shift from the role of mere consumers to that of members, as best registered in the fastest-growing domain of cyber business. The possibilities for membership in the virtual business communities add a note of dignity and freelance entrepreneurship to the old-fashioned consumer. While the internet technology is taking business-making to ever-higher possibilities of global techno-networking, it is, nonetheless, the conventional values such as membership loyalty and the need for belonging to and sharing with a community that inform and define today's most progressive economic relationships.*

We are exploring here the most advanced and the trendiest business-making of the so-called dot com (.com) businesses, network marketing companies, and the culture-based business networks in an attempt to identify the determinants of today's experience of economic wealth both in its intangible as well as in conventionally tangible assets.

The concept of membership is becoming the prevalent mode of doing business, sharing information, as well as participating in communal activities. Whether you are invited to become a valued member of your favorite grocery store, your favorite coffee shop, your favorite airline, bookstore, etc., it is not only about the preferred treatment that you get such as discounts, promotional gifts, having priority service, or first-hand information about the newest products and upcoming sales, but the fact that you are joining a community which

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vies for your participation in communal events. These happenings and gatherings are geared toward *serving* the local or broader community by charitable work, donation drives, and other forms of what is called *giving back to the community.*[‡] The drive here is to move away from the concept of consumer, a "targeted," reactive individual with a choice of goods, towards the concept of a member, a proactive individual with a choice of roles. The key idea is that of *adding value* — not only adding more value for the money you spend but also adding value to your community through the business, and consequently, through the business community you choose to join and partner with, which, in turn, adds value to your life by providing an opportunity to serve others through that partnering. In any case, the issues of value rather than price and the role of a member rather than a consumer are put in the forefront. We were seeking to understand, in particular, the socio-economic and cultural phenomenon of the most advanced of the technological spheres of human economic activity — e-business — only to find out that it is driven by such very traditional values, which are, nonetheless, through that technology realized with a certain twist. Cyber business is of particular interest not only because it is the fastest developing but also because it is socially most interactive and vibrant. This sphere of interactions in the form of *ethereal business* is economically most *graceful*, because it exerts minimal physical effort with maximum reach for its ability to access the entire globe.

An example comes from Starbucks, a chain of coffee shops, which is developing coffee drinking into a communal ritual exactly by emulating the ways of the cultures in which coffee drinking is a way of catching up with the community and getting involved in the lives of others while sharing yours. The Starbucks website (www.starbucks.com) features special categories and links such as Community and Starbucks Shared Planet. The business is also trying to make the site more personalized for the members by adding a link at which you can share your ideas with the rest of the Starbucks community and call that space your own: MyStarbucksIdea.com. And not only does the Starbucks website position itself as a community space but further stresses and caters to the need for greater and broader connectivity by adding links for interface sites such as Facebook, Twitter, as well as YouTube. Our examples come primarily from the Western, developed countries for the reason that they have designed the most extensive virtual outreach to their customers, but also for the reason that exactly those globally-expanding corporations are incorporating and depending on basic traditional values. And while they are co-opting in that sense and incorporating for the sake of self-promotion, they, nonetheless, have to open a space within their organization for input from the local people. Consequently, these corporations can be influenced from within by the multitude of members who do business with them. Most importantly, one of the ways in which the members have been exerting influence in this particular case, has been over the issues of fair trade, organic growing, and healthier nutrition choices.

In order to understand the inner workings of e-business, its marketing driving force as well as its ethos, we turn to the idea of community, as it is the most traditional notion and a human need that is guiding this form of virtual interaction. The traditional need for a sense of belonging is at the core of such modern community, which is, as it has always been, driven by *communion* and *communication*.[3] In these modern cyber communities, communion — the

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[‡] Examples of community-oriented businesses abound and proliferate daily. Coffee shops feature mini art exhibits of local school children. Independent neighborhood shops organize food and clothing drives as well as charitable work. Grocery stores offer matching donations for local schools, charities, hospitals.

sharing of information, ideas, ethereal space, and wealth — is realized via virtual communication that allows for an unprecedented global reach. And while it fulfills the need to connect to other humans on a broader scale, it offers and maintains a loose sense of belonging which preserves one's need for individual freedom at the same time. And that is the twist to the modern sense of bonding and belonging that technology provides — to maintain a sense of potential anonymity, freedom, and mobility that did not exist to that extent in conventional communities. If we visit the website of the worldwide credit card company MasterCard,§ we can see how far the idea of community, communal participation, and member involvement is taken. Among other engaging links, MasterCard website includes one called Corporate Citizenship in which customers and employees are members who can find various significant ways to "make a difference" in the local and global communities.

Thus, a modern economic subject is becoming a *nomadic member* trading, doing business, and working from anywhere on the planet as long as s/he has a computer and a modem or a cell phone (The cell phone magnate, Sprint, features commercials for doing business on a beach with the newest phone technology). Technology is increasingly working on improving mobility and freedom of choice, such as having the option of working from home as an employee; running a whole e-business operation from one's living room; accessing the internet in a private setting for joining e-communities of similar music interests; for philanthropic missions, dating needs, shopping needs, investment searches, medical support and so on. The alienation that the industrial development brought about gave rise to nostalgia for belonging and now technology is gratifying it in new ways by allowing people to cluster around their needs, desires, and interests with other humans from the entire globe rather than just from their immediate surrounding. And it does so by satisfying the push and pull of such modern clustering need — the double-bind of wanting to belong and yet not to be fully integrated but preserve a sense of one's freedom. Virtual Communities are safe that way; they preserve such nostalgic longing while providing a sense of non-committal belonging — a wireless connectivity without rooting.

What about Easterlin's paradox then, with which we started the paper, that says that exactly in developed countries, which have the luxury of utilizing the technological advances on the broadest scale, the sense of personal happiness may not be the highest? We are now using technology in ways that emulate the communal connections of the countries with more sense of communal support that generally consider themselves happier. It is through human relations that we seek fulfillment and gain sense of wealth, and the networking technology is trying to satisfy exactly that need for higher and now broader connectivity among people. Easterlin's paradox is at its core again a communal issue; it is indeed in connection to and in comparison with others that the sense of being well-off / a sense of well-being is constructed and experienced.

Easterlin points out that we increasingly compare ourselves with those with whom we come in closest contact, and asks: "Imagine your income increases substantially while everyone else's stays the same — would you feel better off? The answer most people give is yes. But now, let's turn the example around. Think about a situation in which your real income stays the same, but everyone else's increases substantially — then how would you feel? Most

people say that they would feel less well off, even though their real level of living hasn't, in fact, changed at all."[4] Social relationships as value determinants are particularly important in the Economics of Happiness, which takes off from the fundamental understanding of economics as a set of systematized means of managing and regulating human needs. While Easterlin examines the social practice of comparison and competition as a means of gauging one's sense of being well-off, Amartya Sen foregrounds the importance of interpersonal relations as a means of development of human capital. Sen registers a certain shift in the development of modern economic systems at the turn of 21st century from the hard-core, "blood, sweat, and tears" approach to a more liberal/liberating approach to economic growth.[5] Accordingly, Sen conceptualizes what he calls a *civil* rather than a political economy and arrives at that concept exactly by emphasizing the role of interpersonal relations and importance of expansion of human capabilities. Sen expounds: "The expansion of human capabilities, thus, have both 'direct' and 'indirect' importance in the achievement of development. The indirect role works through the contribution of capability expansion in enhancing productivity, raising economic growth, broadening development priorities, and bringing demographic changes more within reasonable control. The direct importance of human capability expansion lies in its intrinsic value and its constitutive role in human freedom, well-being and quality of life."[6]

In order to address the question of quality of life, E.F. Schumacher was one of the first to oppose GNP as the measure of wealth.[7] He studied village-based economics in Burma based on human needs out of what he witnessed in his research, and developed Humanistic Economics or Buddhist Economics.¶ In his seminal work of radical rethinking of modern economy, *Small is Beautiful*, Schumacher inverts the aggressive capitalist motto of "Big is Better." Countering this materialist slogan, Schumacher countered modern economics that established consumption as the sole purpose of all economic activity. According to his Humanistic Economics, consumption should be a means to human well-being, but the aim would be to achieve maximum well-being with minimum consumption. Schumacher's vision ultimately aims at more time secured for and devoted to personal fulfillment, particularly through artistic creativity.

Expansion of human capabilities (the need for which is answered by the flood of self-empowerment, self-improvement and a wide range of how-to literature) allows one to feel more as an informed economic participant who understands that one is not only a consumer but as well a producer who adds value. Of the highest value are people themselves, human resources and actualization of human potential through and in social relations. On that path of self-empowerment, participation in a business community seems to give the highest sense of value. Ethics of new business-making come not from an institutionally-proscribed code of conduct or interest-based etiquette, but rather come from the place of self-actualization and a sense of responsibility to self and others that creates wealth — investing with people and investing in people — *growing people*. We use the expression 'growing people' to mean simultaneously:

1.   a growing number of people as in rapidly developing numbers

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¶ The studies of village economies have brought about major re-thinking of economics and concepts that had global effect. In addition to Schumacher's economics, Muhammad Yunus' Grameen (meaning "off the village") micro loans could be an example of such a globally effective idea that was conceived on the smallest scale. Indeed, these are economic ideas and plans suitable for what was named by Marshall McLuhan as "global village." See Marshall McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man* (Toronto: Univ. of Toronto Press, 1962). Indeed, it is our understanding that the notion of global village is particularly relevant here for our discussion of traditional values and needs that guide most modern technologies of global reach.

2.  people maturing from *reactive consumers with a choice of goods to proactive members with a choice of roles*

3.  developing human resources and providing conditions of dignity and freedom within which people continue to develop themselves.

Out of this understanding of the importance of growing people rather than growing goods, successful businesses are committed to continually developing their employees by trainings and workshops that exceed the immediate needs of their job responsibilities. Such businesses invest in, for example, motivational and self-development seminars, leadership training, and personality and temperament evaluation workshops. The most prominent business leaders cross over into and become the most prominent motivational speakers, life and success coaches, and educators. Such people are proven business masters who have evolved into prestigious humanistic servants. Theirs is a rather *holistic approach* to developing people, which tries to develop the whole person and starts from the premise that a happy employee, who has a sense of belonging to an enterprise in which s/he feels cared for and valued as a human being, is in every way a more productive employee.**

The notion of *value* is then taken to mean not only the price of goods, their use and worth, but also a set of beliefs that determine not only such value of goods but also the value of human capital and of human relations in economic exchanges. This exactly is the domain of *Economics of Dignity* as that which deals with the priceless; it deals with that which cannot be measured in price and use but is rather that which adds value and meaning to all other values; that which adds value to everything else yet itself is priceless — the human in the fullness of his/her potential. This is the domain of human *esteem*.

MasterCard Corporation understood all too well the notion of priceless value when it launched a series of by-now-very-well-known *Priceless* commercials. In a particular commercial entitled "Lessons", a boy is going through various morning activities with his father. As the two are getting ready for the day and doing grocery shopping, the boy is naming the value of the items they are using or buying. By the end of the commercial, we understand that he was, in fact, pondering the value of their shared moments by concluding: "Helping your dad become a better man — *priceless*!" In this commercial, it is of utmost significance that the transfer of knowledge in the form of life lessons going from son to father is indeed learned poignantly in the traditional context of the father-son relationship, and yet the modern son is the one voicing the message of the lesson, and thus imparting the knowledge onto the broader community.

All humans have an intrinsic need to be respected and to have a sense of significance. The need for esteem is the *belonging need* of a human to be accepted and valued by others. It is through a line of work and activity of one's choice that we gain recognition, a sense of contribution that creates a feeling of significance, acceptance, and value. In Economics of Dignity, we move from consumption to actualization, participation, and contribution, to adding value to self in order to participate, with dignity, in the exchange of values with others. The spirit of reciprocity in adding value is the key focus of, for example, George Fraser's vision for successful networking in the Black Community (www.frasernet.com). Fraser, a businessman,

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** Such approaches to business running and development are directly indebted to Abraham Maslow's work on self-actualization in Transpersonal Humanistic Psychology out of which Leadership Studies and Transpersonal Business Studies evolved.

speaker, educator, and leader of this culture-based on-line networking project sees education, marketable skills, and relationships as the key measuring components of a successful individual whose goal is that of adding value to self and consequently, to his/her African community which, in turn, returns and multiplies the value of its individual members.

Social entrepreneurship, in particular, network marketing businesses (Amway or Nuskin, for example) with affiliate on-line system and profit-sharing revenue model are opening new spaces for individual opportunity; for a self-driven, freedom-based, and yet collectively fulfilling economic interaction and exchange. These collective enterprises offer a sense of communal support system by motivation, encouragement, and training in leadership and networking skills to a freelance fledgling business person. It bridges the consumer to a member and an employee to a small-scale entrepreneur. Unlike in a traditional company, where an employee does not have much control over how fast s/he can get to the top, in the network marketing businesses, there is a sense of the open opportunities for advancement on one's own terms and at one's own pace, directed by one's motivation, all of which create a whole new mentality.†† Additionally, one gets to decide if they will focus solely on their own individual sales and/or their network development as a side job or if the business venture will be their sole focus.‡‡

This possibility for accelerated mobility on the ladder of success and increased physical mobility facilitated by technology contributes to a sense of individual freedom while, at the same time, it enables greater connectivity and promotes a sense of shared mentality in a group of the similar-minded. And while a nomadic aspect to the modern economic participant allows him/her to preserve a sense of freelancing it simultaneously allows him/her to form affiliations with and gain supportive memberships in multiple communities. Thus, this free-associative system caters to the traditional need for belonging, which has caused, in turn, the position of the economic subject to be re-evaluated and to shift gradually from the position of a mere consumer to that of a participating member. Such position maximizes a sense of individual contribution, development of individual skills and productive ability, and equality of opportunities for profit sharing in a system that is starting to walk away from the hard-core mentality of one-upmanship and to turn more towards a communal sense of sharing of wealth in the sense of profit as well as well-being.

The concept of sharing brings us to a paradox, if it is a paradox, with which we would like to address and complement Easterlin's paradox. We posit here that *a happy individual is not a consuming individual but a giving one.* To Easterlin's question: "Imagine your income increases substantially while everyone else's stays the same — would you feel better off?" to which he says most people answered with yes, we would add: yes, but not for very long. There is a unique sense of alienation that arises at the moment when one realizes that one is unable to share events, activities, and a certain way of life with friends and family of lesser means. A giving individual is happier because logically s/he realizes the power in giving and the power in discovering that one is capable of giving. It is in the act of sharing instead of

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†† The new business mentality that comes with a sense of no limit to one's advances can be particularly liberating in the economies which have been government directed and controlled. Network marketing businesses have become a sweeping economic phenomenon in economies in transition as well.

‡‡ Modern marketing networks have their model and prototype in Islamic business-making originating in Al-Andalus, Spain. The Islamic systems were characterized by contracts relied upon by merchants, who would buy and sell on commission, with starting funds loaned by investors or with money invested jointly by merchants, who were often Muslim, Christian and Jewish. Such business partnerships created and promoted bonds of kinship that enabled very effective trade networks to form over huge distances. It is important to note here that not only was a unique trading system created; it also showed the power of commerce to bridge communal divides.

hoarding that deeper satisfaction is found — at the individual as well as any organizational level. It is in and through social relations that our sense of wealth and well-being is reflected back to us and multiplied; it is in the eyes of the other that we see our esteem; it is in a productive community that we grow and prosper.

Consequently, the role of Economics of Dignity is, on the one hand, to record an already-present shift in economic needs and attitudes as well as to track certain development trends. On the other hand, it simultaneously charts, by means of intuitive understanding and creative envisioning of interdisciplinarity, a cutting-edge space of socio-economic interaction and fulfilment by taking into account a whole spectre of economic, social, psychological, and spiritual needs of the individual and the collective in an attempt to honor human potential to its fullest.

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# Returning to Vico:
## The Role of the Individual in the Investigation of the Social Sciences*

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*Abstract:*

*This article deals with the discussion about the extent to which methods of investigation of natural sciences can be cross applied to the social sciences, and takes the point of view of the Italian political philosopher, rhetorician, historian, and jurist Giambattista Vico. In 1708, Vico pointed out key distinctions between what he thought to be appropriate methods of analysis for the social and natural sciences and the role of the individual as an important variable in his book De Nostri Temporis Studiorum Ratione. He believed in the superiority of maieutics to Cartesian logic in the application of the social sciences. To meaningfully investigate the social sciences, Vico explained that reductionist thinking was too limited; he suggested that there ought to be allowance for forms of knowledge beyond which the Cartesian process can surface. This is the path to the verum-factum, which is a form of comprehension achieved through truths held in the human mind as opposed to verum-certum, or certainties achieved through the Cartesian approach of unpacking what is true through empirical observation. Vico's analysis also provides an interesting explanation on where individual investigation fits the absence of credible rule-making institutions. For example, Brazil — a former Portuguese Colony — saw generations of Brazilians avoiding rules and precedents set by the Portuguese authority, which was oppressive and abusive. Human creativity was used to circumvent the rules, and created a culture of informal rules, which were adhered to instead of the rules that were codified.*

There is an old discussion about the extent to which methods of investigation of the natural sciences can be cross applied to the social sciences. There is a universe of argumentation on this question, which we will not attempt to replicate here. Rather, our goal is to highlight an individual point of view on the subject, that of the Italian political philosopher, rhetorician, historian, and jurist GiambattistaVico.

In 1708, Vico pointed to key distinctions between what he thought to be appropriate methods of analysis for the social and natural sciences in his *De Nostri Temporis Studiorum Ratione.* Importantly, he suggested that this process was not necessarily about the sciences themselves; rather, it hinged on the role of individual conception.

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In taking up ways of knowing generally, as well as how we might understand the natural and social sciences in particular, Vico pointed to the role of the individual as an important variable. He reminded us that we ignore the lessons of the ancients at our peril — Vico eschewed reductionist thinking for the Greek and Roman traditions — and encouraged us to rely on rhetoric as a tool which we might use to comprehend the social and natural sciences.

Vico clearly believed in the superiority of maieutics to Cartesian logic in the application of the social sciences. The Cartesian method describes the world through observation, to point to what is systemic and predictable; it comprises precise labels and descriptions that can explain processes and point to results. But Vico argued that this method cannot meaningfully be applied to social sciences.

In the *De Antiquissima Italorum Sapientia* (1710), Vico famously argued that:

> [...] to introduce geometrical method into practical life is 'like trying to go mad with the rules of reason,' attempting to proceed by a straight line among the tortuosities of life, as though human affairs were not ruled by capriciousness, temerity, opportunity, and chance. Similarly, to arrange a political speech according to the precepts of geometrical method is equivalent to stripping it of any acute remarks and to uttering nothing but pedestrian lines of argument.

Vico's masterwork, *Scienza Nuova,* was an extremely forward-thinking treatise which cut across all the social sciences. To meaningfully investigate the social sciences, Vico explained, reductionist thinking is too limited; he suggested that there ought to be allowance for forms of knowledge beyond which the Cartesian process can surface. This is the path to the *verum-factum,* which, Vico explained, is a form of comprehension achieved through truths held in the human mind as opposed to *verum-certum,* or certainties achieved through the Cartesian approach of unpacking what is true through empirical observation.

This is an important distinction; Vico explains that knowledge of the *verum-factum* can only extend to what an individual has him- or herself created, from buildings and computers to math and science. The role of the individual and the importance of individual investigation are thus central to what is a priori truth. This is in sharp contrast to the Cartesian approach of searching out and documenting what is objectively 'true'.

In explaining the process of human investigation and the role of the individual, Vico may have been channeling Aristotle, who in his *Nicomachean Ethics,* draws a line between *phronesis* (practical wisdom, which *cannot* be extrapolated into general laws) and *episteme* (knowledge through scientific method, which *can* be extrapolated into general laws).

To make these notions a bit more palatable, the social sciences prefer designations like 'credible' and 'not-credible' or 'acceptable' and 'unacceptable'. This leaves room for the *sensus communis.* As Aristotle suggested in *Topics,* the consensus consists in "those opinions accepted by everyone, or by the majority, or by the wise and among the wise, by all or most of them, or by those who are the most notable and having the highest reputation."

Consensus is an exercise in aligned individual creativity. It can agree and comport with or disagree and diverge from a rule-making authority. Vico makes the point that individuals have long taken the process of investigation into their own hands to achieve rules that are

more credible and acceptable. Vico recognized this as a pattern across societies: that as individual minds form, a series of similar fundamental priorities for civil life takes shape. His *Sinopsi del diritto universale* — essentially the common denominator of his *De universi juris uno principio et fine uno liber unus* [1720]; *De constantia iurisprudentis liber alter* [1721]; and *Notae in duos libros* [1722] — posits that all law comes from God as *diritto* — essentially a divine meta-architecture of truth and related rules — which is interpreted (either correctly or incorrectly) by individuals, rendering it *legge.* Vico focused on the consistency with which God's providence has surfaced by different individuals' acceptance of natural law and the execution of civil law; he complemented this analysis with a review of how various societies have interpreted these rules.

Vico's analysis also provides an interesting explanation of where individual investigation fits the absence of credible rule-making institutions. For example, Brazil — a former Portuguese Colony — saw generations of Brazilians avoiding rules and precedents set by the Portuguese authority, which was oppressive and abusive. Human creativity was used to circumvent the rules. This divergence from what was then authority became normative, and helped to create a culture of informal rules which were adhered to instead of what was codified. A term of art was even ascribed to this behavior: the *"jeitinho"* (in English, "an untranslatable term that corresponds roughly to a 'knack', 'twist', 'way' or 'fix'," according to Rosenn, 1971). Under the *Diritto universale,* the rules are set by the people, and what their consciences dictate.

Ultimately, Vico's views on the impracticality of Cartesian logic for the social sciences have not dissuaded generations of scholars from attempting to apply reductionist thinking to the field. The human commitment to so-called 'geometric thinking' is indeed strong. A particularly problematic result is legal positivism, which holds that the law is a closed system, logically organized, with hierarchical rules — essentially distilling law into a set of simple concepts to be combined and recombined to suit particular circumstances. Another byproduct is legal realism — a rejection of the positivistic conception of the scientific method — which holds that a legal decision will be made only by the discretionary power of the decision-maker. This approach glosses over the need for rationality, and generally rejects the role of consensus established between participants in a discourse as too close to positivism.

*Virtus in medium est* explained the ancients. Vico saw that the humanist tradition could accommodate logic, but suggested that meaningful investigation by individuals could be achieved through triangulation of theological, philosophical, and philological investigations to surface knowledge given through divine providence, through use of imagination and creativity (as opposed to Cartesian analysis), and by analysis of history, perhaps man's ultimate source of knowledge. This seems like a reasonable middle ground between the dogmatic conceptual approach of the positivists and the hyper-contextual empirical subjectivism of the realists.

Vico was a man centuries ahead of his time whose genius was sadly not recognized by the majority of his contemporaries. In a crushing bit of irony, positivism ruined his funeral: the Marquis of Villarosa (who posthumously published Vico's autobiography) relates that at Vico's funeral, a dispute broke out among attendees as to which group was permitted to carry Vico's coffin to his final resting place; precedent was cited, rules were reviewed, but no clear

answer was ascertained, and so the attendees simply abandoned his corpse.

Thankfully, Vico's genius was eventually recognized, and his insights have since achieved more reverential treatment. His emphasis on the role of the individual in the world — as not just a part of it, but as constantly transforming it — has taken our conceptions of what it means to investigate the social sciences at a far higher level.

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# The Heart of the Humanities

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*Abstract:*

*Having enjoyed a leading academic position, the Humanities have increasingly been on the defensive against the dominant and unified natural sciences. In this situation, what could unify the Humanities and strengthen their social position? An obvious strategy would be to respond to an urgent global need for value discourse. The Humanities are in the perfect position to address those aspects of the human experience that the natural sciences are simply unqualified to handle, such as moral values, human understanding, aesthetics, and ethics. Drawing on their rich heritage and hermeneutic skills, the Humanities could try to identify some important values or principles that seem to have traditionally characterized them, and thus reconstruct their own underlying common core, or "heart" — just as the sciences are seemingly united around a particular (limited) "scientific attitude". This core value would help unite the academically heterogeneous Humanities (or Geisteswissenchaften or "Human Sciences"). Thus united, the Humanities might assume a role as the obvious leader of a needed general social discourse about values (which social goals do "we" want to pursue, and why?), and claim their rightful status as a socially indispensable counterpart to the natural sciences.*

## The Need for a Value Discourse

I believe most people would agree that mankind is facing a major crisis. The crisis has to do with values. Particularly, in the industrialized countries there seems to exist a value gap of sorts, a gap that when discovered is quickly filled with more activity or technological gadgetry or video games. Where is the world going? It seems that as we are being more and more rushed and pushed along by ever emerging technologies, there is less and less time to think and reflect — for everybody. And this is happening on a global scale. Meanwhile, one can really perceive a change of tradition when it comes to things that an earlier generation considered important. The style of media has changed. Strange things are happening now, with people willingly giving up more of their privacy (or not so willingly — think, for instance, of Facebook and its default privacy settings, which need to be actively changed to really make the account private).

In this situation, we need to ask a question about values. What are the basic values important for human existence? Which values should we follow in key decisions on matters that affect groups of people or have a global impact? Which values do we want to emphasize in the education of new generations? Instead of letting things just happen, we need to do something.

I agree with the German social philosopher Jurgen Habermas, who for a long time has observed this kind of phenomenon. He makes an important distinction between two kinds of

rationality: instrumental rationality and value rationality. Our modern societies are functioning mostly at the instrumental rational level — finding means to satisfy certain goals. But what is badly needed is a discussion about what the goals ought to be — what ends do we think are rational from the point of view of human values. It is this kind of discourse that Habermas sees as currently "dominated" by power and politics, and also more indirectly by the instrumental considerations connected to science and technology. To be able to have a free discussion, or "rational discourse", then, what is needed is a situation where different voices can make themselves heard in a democratic way as they are presenting their arguments (which are always expected to be justifiable). No power pressure is allowed; what wins is simply "the better argument". Only with this type of model will we be able to have a fair and open discourse about where the society should be going, or about the values that individuals think ought to guide society.[1]

## Why the Humanities is the right place

Now, is there such a place, even hypothetically, for this kind of discussion? It would need to be a place which is not obviously dominated by social or political power interests, a place where discourse is the typical form of interaction, and where human values in various forms represent an accepted and natural topic of discussion. I would say that on the face of it, the Humanities look like a very good fit! Not only do they have a long tradition of discussion and disputation, but they are a veritable treasure trove when it comes to identifying important candidates for values, since they have the ability to draw on among others the Classical tradition, the Renaissance Humanist tradition, and the Enlightenment.

Right now, however, the Humanities are in their own kind of crisis, both in terms of identity and of legitimacy. What are the Humanities, and why are they classified together under this name? Is it a matter of tradition that certain fields "count" as the Humanities, or is there some shared intellectual approach or agenda? What good are the Humanities? Why do they exist? This latter question was being debated in March this year at a huge forum at Abo Akademi University in Finland where I happened to be visiting giving a crash course for doctoral students in the Human Sciences. The title was (in Swedish), *"Vem behover Humanvetenskaperna?"* Who needs the Humanities? I had expected the speakers to ardently extol the virtues of the Humanities, but I cannot recall many interesting things that were said. The speakers seemed uninspired. The attitude soon became defensive rather than assertive. Some afterwards concluded this had been a real non-discussion. A student later told me that a similar sense of lack of legitimacy is being conveyed by their professors in different subjects, and that the students had internalized this general feeling from them!

*But could this value discourse not take place in some other branch of academia?*

Why, for instance, is science not having one? A big obstacle for sure is that science is concerned with knowledge (episteme) and is dependent on the State and most recently industry for funding. A value discourse is not part of the standard scientific self-perception. What counts in science, and what is rewarded, is a contribution to knowledge. Science's distancing of itself from values has a long tradition. In fact, we know that value concerns were actively eliminated from the discussion in at least one early academy, the English Royal Society founded in the 1660s. In exchange for sponsorship by the King after tumultuous political

times, that society had to promise not to "meddle" with politics, metaphysics, religion, and a whole list of other things.

Being ethical or even careful to correct your own errors before you publish is not formally rewarded in science. The first discoverer gets the credit, not the runner up, even if he/she has taken time to check (for the benefit of all) that his/her product is error-free. So scientists take their chances. Competition does encourage sloppy research, because it is more important to be first rather than a conscientious second. Moreover, science is increasingly being steered from the top — the funding agencies. For example, look at the intense push for nano research recently from the United States' National Science Foundation.

The same goes for the results of the research. There has typically been no Hippocratic Oath for scientists when it comes to the results of their research, which has been at the base of a number of controversies, especially in the United States. Also, until recently, government grants in the United States were given based solely on the intellectual merits of the research proposal. Lately, though, any submitted proposal requires a justification for both intellectual and social merit. Note, however, that the social merits are not typically required to be of the broad "benefit for humanity" type, but rather at the level of giving employment to a few graduate students, or having a particular limited impact. Also, I am not sure that the proposal writer is required to explicitly consider the potential harm his/her research may cause. The situation is getting trickier as the involvement between industry and science becomes increasingly entangled.[2]

## The Responsibility of Scientists – A Recurring Issue

This moral/ethical limitation of science, though, has been keenly felt by some scientists, who have attempted to redefine the situation and actually introduce concerns about the consequences of scientific research. There were, for instance, the atomic physicists after World War II, and those who sought a moratorium on "recombinant DNA" research (the beginning of genetic engineering) in 1974. The consideration of hypothetical consequences resulted in enhanced lab security with regard to E. Coli. Also, after World War II, an earlier generation of human geneticists practiced self-censorship in the form of a UNESCO statement in 1952, which discouraged the pursuit of anything but medical genetics. (Before the war, various traits of human groups and races had been compared).[3]

The "nature-nurture" controversies in the second part of the 20th century, again, were interesting examples of some scientists attempting to actively introduce moral/political concerns into science. It was done, however, in the form of individual scientists accusing other scientists of racism and sexism. The critics said that sociobiology, IQ research and similar fields ideologically influenced "bad science"; they saw themselves as weeders. Additionally, weeders felt that they had to personally weed out bad science so that it would not cause harm merely by being around. Planters, traditional scientists, responded by just dismissing these critics as "Marxists" and went on doing what they saw as useful research.[4]

This general division of scientists into two camps seems to be continuing. In 2011, a philosopher, Heather Douglas, suggested in an article in The Scientist that when it comes to foreseeable consequences of their work, scientists ought to be held responsible for the same standards of responsibility as ordinary citizens. Some liked what she said, but others severely

attacked her in an online "blog" exchange about her article. Her point was, in fact, seen as "illegal" self-censorship by some traditional scientists. For them, science was supposed to produce useful knowledge, while the responsibility lay with the user of this knowledge.[5]

## Science Out of Bounds

Now, the question is who made this point about useful knowledge? That was the Englishman Francis Bacon, who in the 1600s imagined an idealized international scientific community, where scientists would be accumulating useful knowledge together. He was the one who coined the expression "knowledge is power". But this "father of empirical science" (at least in the English tradition) was not a naïve inductivist — he also warned about a set of "idols" that may corrupt the scientific mind: idols of the cave, idols of the tribe, idols of the market place, and idols of the theater. He had in mind natural science, which equals "science" in the Anglo-Saxon tradition, and largely saw science as fact-gathering, based on which more universal statements could be made and laws and theories developed.[*]

Bacon may have worried primarily about distorting the mind of the individual scientist, but he, in fact, addressed some basic problems that science as a community has later tried to cope with by establishing a set of "scientific control systems": peer review of grant applications, referee review of submitted journal manuscripts, and the ultimate control over the replication of results. These systems are supra individual and agreed upon by scientists. They do help clear out some potential garbage (but not all), and therefore, help guarantee relatively reliable knowledge. These systems, combined with the implicitly shared system of norms for science, as well as the reductionist method and the very nature of the studied material ("it doesn't speak back"), make for a shared sense of science for natural scientists. (It is not perfect or shared in detail, but perhaps one could say, for instance, that most scientists would have little difficulty agreeing that a particular piece of research would not count as science). Most importantly, scientists believe that there are underlying, universal patterns or laws, and are set to finding them. This ambition is an important part of the scientific attitude, as is the confidence that the production of useful knowledge is a socially important and justly rewarded activity.[†]

In fact, science is so important today that it is used as an arbiter also with regard to issues that go far beyond it. In the minds of many people, factual statements are taken as automatically implying value judgments. This was seen, for instance, in the sociobiology debate that raged in the last quarter of the 20th century with regard to biological facts about humans. (For instance, findings about sex differences between males and females have created and continue to create great upheaval in the United States, largely because it is

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[*] In books such as *Novum Organum*. Incidentally, although I am here using the terms 'science' and 'scientists', nobody did so in the 1600s. Science was called 'natural philosophy' and scientists 'natural philosophers'.

[†] Part of the scientific attitude involves what the "father of sociology of science", Robert Merton, called the "ethos" of science. This is an interesting model of an attempt to extract from the historical material about an academic field and its underlying values. Merton derived his famous four basic norms through reading primarily such things as various documents, letters, and autobiographies. Sociologically, scientists are described as if they followed a set of four principles keeping them on the right course. These form the acronym CUDOS: Communalism (public sharing of information, not keeping things private), Universalism (paying attention solely to the merit of someone's science, not considering nationality, sex, or other characteristics), Disinterestedness (dedication only to finding the truth, not considering other interests of various kinds), and, finally, Organized Skepticism (willingness to abandon cherished views in favor of new scientific evidence). (R. Merton: "The normative structure of science". In R. Merton, *The Sociology of Science*. The University of Chicago Press. Chicago.1973. pp. 267-278). In practice, of course, scientists do not always follow these norms; they act more as general guidelines. Still, there is something to these principles. At the very least one might claim that if norms of this nature were not followed, science as we know it might have a hard time existing. Today, however, it seems that these norms are being increasingly deviated from or modified as science gets more involved with industry, patenting, and proprietary knowledge, see reference in Note [2].

believed that any suggested sex differences will have dangerous social implications — at the psychological, moral or policy level).[6]

But even more ironically, even when it comes to such obviously humanistically relevant questions as "What does it mean to be human?" the initiative today seems to be with the sciences. This question is being examined in relation to a number of different research topics today, for instance, such things as "Can robots have human feelings?" or "What types of human enhancement are acceptable for us to still call something human?" When the genome project was finished in 2000, lots of people were led to believe that humanity had found out "the very essence of humanity" (or however James Watson and other promoters formulated it at the time). But the question is rather, what does it mean to be human? What is really the human essence? These are the kinds of things that humanists have been pondering about for a long time. (In this case, a political scientist of the old school, youngish Francis Fukuyama, in his *Our Posthuman Future,* tried to tackle these and other matters of technological progress in relation to humans).[7]

And the value discourse about human nature continues today, promoted by scientists! Much has been made recently of such things as altruism and cooperation as being behaviors that are deeply grounded biologically and evolutionarily — say, based on hypothetical "altruistic genes", or through the physiological mechanisms of empathy and mirror neurons — and demonstrable, say, by comparative primate studies and laboratory experiments. This has been argued by scientists for the last forty years or so.[‡]

## Regaining the Initiative

OK, so altruism and cooperation are possible, and now we know the infrastructure or mechanism for it, too. Good. But their biological basis does not necessarily point to the value of these behaviors, or legitimize them. This must be done on other grounds, and those grounds lie outside the sciences. Today, however, we may have veered into treating natural explanations as important value arguments because of the power of science ("it has been scientifically proven"), and the relative weakness — or unassertiveness — of the Humanities and of organized religion, and perhaps because of our tendency to take science over-seriously as a guideline for action.

My point is that it is the Humanities, not science, that would seem to be the natural place for discussion about what kinds of issues and values, society should have (and impart to the next generation). In fact, I believe this is exactly something that should be recognized and socially rewarded as an important social function of the Humanities (in addition, of course, to the traditional scholarly research of the Humanities).

So, I would like to say: "Hey, Humanities, get your act together and figure out how you can speak together with a strong voice! You are part of an academic institution which is not yet totally dominated by government funding agencies or private industry (unlike science),

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‡ In the 1960s, the British evolutionist William D. (Bill) Hamilton ("Darwin of the 20th century") was able to mathematically demonstrate that altruism as a behavioral trait could in fact be a product of evolution. (This would happen if the beneficiary of an altruistic act had genes in common with the donor - in other words, typically, but not necessarily, a relative. This was explained in a popular manner in *The Selfish Gene* by Richard Dawkins, a book that was much misunderstood and even thought to be advocating human selfishness!). Since the 1980s, "evolutionary game theory", beginning with Robert Axelrod and William Hamilton's "The Evolution of Cooperation" (Science.vol. 211. 1981. pp. 1390-1396) has explored various situations under which cooperation would be the natural chosen "strategy" both for humans and animals. For more details on Hamilton and his scientific quest, see U. Segerstrale, *Nature's Oracle: The Life and Work of William D. Hamilton* (Oxford: Oxford University Press, 2013). For a recent discussion of empathy and the role of mirror neurons, see Frans De Waal, *The Age of Empathy: Nature's Lessons for a Kinder Society* (New York: Three Rivers Press, 2009).

and you have a long tradition of deep thought and self-reflection. Don't forget that Humanities is the place science emerged from. It was only later that science became more specialized and deliberately shed its connection to ethics and social values (a connection still visible, for instance, during the scientific movement in early modern England)." The Humanities need to regain their rightful place as equal partners with the natural sciences. They possess and can generate knowledge and discourse that are complementary to the natural sciences — in other words, furnish the part of the social discourse about the human experience that is currently missing.

## Abandoning the "Two Cultures" Talk

All this "Two Cultures" talk, existing ever since 1959 and C. P. Snow's famous book *The Two Cultures,* has been particularly detrimental to the Humanities. This kind of talk has only re-emphasized the socially favored position of the natural sciences after the Second World War and, conversely, led to various protests and "anti-science" movements and attempts to undermine science (e.g., the Ideologiekritik of the Critical School of the 1960s and 1970s, and later various postmodernist, constructivist and relativist criticisms). More recently in the "Science Wars" in the mid-1990s, some declared science as nothing but a myth, comparable to tribal beliefs, not having any special epistemological status. This treatment of science actually made some natural scientists nervous with regard to research funding and students' interest in science, but also because a deep belief was being threatened.[8]

I believe that this Two Cultures talk has to stop. It was probably something of a flip statement already from the beginning and ever since, it has invited wrong attitudes on both sides. Snow may or may not have seriously suggested that the Humanists should learn thermodynamics; in any case, the Humanities should simply stop comparing itself to the natural sciences because it can't win or assert itself that way. The situation is pre-rigged from the beginning. Humanists should instead be doing what they ought to be doing, and what they can do well, and that is to assert themselves in an area that is legitimately their own. And that area has to do with the human experience and with values — especially those values that we consider important and wish to perpetuate and promote. Those need to be identified and agreed upon, and the Humanities can help in this regard.

The Two Cultures talk just leads to silly one-upmanship or one-downmanship, such as Humanists saying that science cannot function without relying on language and agreement about the meaning of words. See! Language and hermeneutics are prior to science! (I know how great some humanists and social scientists felt listening to a guest lecture by Karl-Otto Apel in Helsinki in the 1970s). Or because Kuhn said that paradigms change, science has no foundation but is just a Colossus on clay feet! See! This means they are not more scientific than the social sciences! (This was the reaction of many humanists and social scientists in the 1970s against the smugness of the natural sciences). And later there was the postmodern claim that science is nothing but a story. And so on, in every new attempt to put down natural science.

## The Humanities in charge

When it comes to proposing potential candidates for values to consider for the future social discourse, the Humanities have a treasure trove of resources: all the heritage from the

Classics to the Renaissance to the Enlightenment — and more, including important teachings from other cultures and the great religions. The Humanities are, in principle, able to draw on so many traditions. One way to go might be to collect examples from literature, say, and stories from history — maybe in a form similar to Biblical parables. Because the human mind indeed seems particularly receptive to story-telling (as cognitive scientists have found). Story-telling works as a mnemonic. Also social psychology knows the worth of a single vivid example, because it sticks in the mind much better than any "scientific-seeming" statistical overview.

Is there within the humanities some tradition similar to the one in the natural sciences, that is, one striving for unity around some common principles? I believe that finding universal principles and values would be important for two reasons. Not only could this be the subject of discussion in a further social discourse (as suggested above), but they would also be important for the Humanities themselves, helping them present a unified front in their attempt to reclaim their academic status in relation to the natural sciences. The answer is yes. I am thinking in the first place of the Enlightenment tradition and the idea of Reason — which of course is typically regarded as the thing that makes us uniquely human in the first place. There is the idea of value rationality. As mentioned, the Humanities could help foster a type of rational discourse, which would lead to the identification and selection of a set of core values that we want to pursue and implement in such things as education. Maybe another set of values could be identified, relating to things that we do not appreciate and that we find harmful and want to discourage? This may, in fact, be easier to agree with.

I believe that the Humanities needs to organize itself as a complement to natural science and speak with a wise voice when it comes to such things as what it means to be human. The sciences are currently making inroads into the human sciences, "explaining" everything — even the understanding that is going on among people (empathy, mirror neurons). All this is fascinating, but it cannot compensate for the feelings and experiences that individuals have and can describe, and which lie by definition outside science, because they are subjective and individual.

We cannot leave the initiative to the natural scientists, because the scientists are simply not trained to take on all types of discussion about what it means to be human. As noted, scientists are by definition operating in an explanatory, universal law-seeking mode.

At the same time, because scientists are so visibly successful in their own realm, the debate may easily end up taking place completely within the scientific realm between "liberal" and "conservative" scientists rather than between scientists and humanists (or completely within the realm of the Humanities), and this may easily be regarded as the discussion.

## A Small Excursion: The Problem of Terminology

Incidentally, what is the reason for certain fields to be classified as belonging to the Humanities? Is it stemming from some now obsolete old tradition? Is it merely a convenient administrative category for "everything that is NOT natural science or engineering"? And what is the reason for certain fields to be counted as belonging to the Humanities, rather than the social sciences? (History, for instance, sometimes counts as a social science. In any case, the social sciences are typically mixed up with Humanities by many natural scientists

and engineers…). But to take things further — and this is important — Wissenschaft in German and 'science' in Europe has a much broader meaning than 'science' in the English/ Anglo-Saxon tradition, where 'science' means exclusively Natural Science. In that tradition, there is no place in 'science' for the Geisteswissenschaften, which in Europe counts as part of science. And how do we translate Geisteswissenschaften? 'Human Sciences', perhaps, or Humanities? In England and America, social science, which is sometimes partly admitted to the scientific club, is in its own category, 'Social Science' — that is, not part of 'science', which is strictly natural science. Also, what does it actually mean to be a humanist? Is it only someone who studies the Humanities or the Human Sciences? Would it be possible to count as a humanist anybody who calls him/herself a humanist — from whatever academic field he/she happens to come (including science)? I believe that there needs to be a serious parallel discussion about terminology — enough to clarify what one is talking about. Still, the important thing here is the discussion about values, which I will now return to.

## Values for the Humanities

The Humanities have quite a menu of potential values to pick from. Are there perhaps some major types of values that one can identify? Well, there is the value of individuality, creativity and initiative — this is a celebration of the uniqueness of individuals and their expression of that uniqueness. Then there is the value that comes from belonging to some kind of entity — the value of identity (actually necessary for supporting the strong sense of self that can lead to the independent individual expression just mentioned). And then there are values that have the capability of being "universalizable" and agreed upon, in principle, by all. For instance, Christianity has a set of such values, codified as the Ten Commandments.

I realize that it may seem difficult for some humanists to imagine working on value iden- tification and value consensus. Many humanists may be attracted to the Humanities rather than the natural sciences exactly for the reason that these are not like the natural sciences. These persons would not be thrilled by universal patterns or truths, but rather take a delight in the opposite — the out-of-the ordinary, the unique. They would emphasize the multi- facetedness of human nature, human creativity, and the power of the unique individual. To the extent they could agree about these kinds of general criteria, it would seem however that a set of general principles could emerge.

I have suggested that the Humanities would consider taking on the momentous task of helping humanity identify its most important and enduring values by providing suitable value candidates and potential criteria for selection and other preparatory measures for a serious discourse about values. How can such a discourse be conducted in practice? One of the aims for sure would be to reach a broad consensus. Is this possible for people in such a widely disparate area as the Humanities? What gives me hope that some fundamental values (for the Humanities, for humankind) can actually be agreed upon is a recent study by Harvard Professor Michelle Lamont of the consensus forming process on peer review panels for grant proposals. She has documented how there in these complicated discussions emerges a wish to reach consensus and how an interesting moral type of spirit appears to prevail (as a comple- ment to the discussion about the proposals' technical merit). I myself have had a very similar experience from sitting on a number of interdisciplinary grant review panels at the National Science Foundation in Washington.[9]

## An Invitation to Academic Activism

There is an interesting suggestion for reforming the social sciences that could be adapted for the Humanities. Bengt Flyvbjerg, a Danish social scientist, has suggested that the trouble started with the very wish to imitate the natural sciences. The social sciences should never have been brought into this losing proposition! He goes one interesting step deeper, all the way back to the ancient Greeks and their view of virtue. The natural sciences initially chose to pursue a quite limited perspective — Plato's idea of episteme (theoretical knowledge), which they saw as the most important virtue, rather than valuing the broader set of virtues suggested by Aristotle — episteme, techne, and phronesis — that is, a wider spectrum of what it takes to lead one's life as a human (techne is know-how, the set of skills possessed by artists, architects, engineers, etc.; phronesis is sometimes translated as "prudence" — social know-how, how to go about things to achieve a certain goal).[10]

Since under the current model the social sciences will really never be able to measure up to the natural science model because they deal with unpredictable human beings, Flyvbjerg suggests that they reconsider what model they should actually be following. What do the social sciences want to accomplish, and how can they get there? Flyvbjerg suggests that the social sciences choose Aristotle's virtue of phronesis instead of Plato's limited episteme, that is, reflexive and strategic goal-oriented action. Phronesis can be defined as "deliberation about values with reference to praxis". It considers all kinds of factors, including the very practical question of how to achieve one's goal in the view of prevailing power relations, which is the typical problem for social scientists wanting to affect society. As it is now, their research may just be ignored.

This idea is rather militant and I like it. It may also be applicable to at least part of the Humanities. And to those younger humanists who want to do something, but have so far been caught up in the postmodern trend, I would like to say the following: you have taken on a very difficult and challenging task, which is largely epistemological. You of course want to be radical and innovative, but you are, after all, following in the footsteps of your postmodern mentor. How much more radical can you be? How would it be to start a new paradigm instead, a paradigm emphasizing values and ethics rather than epistemology, and try to tackle this huge challenge of helping identify candidates for values, leading a social discourse, and engaging in consensus building around fundamental values? You would help the Humanities rise to their rightful place as complementary to the natural sciences, and re-emerge as not only socially useful but socially indispensable. How about that, Francis Bacon? Eat your hat, C. P. Snow.

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