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The vision of the Journal complements and enhances the World Academy's focus on global perspectives in the generation of knowledge from all fields of legitimate inquiry. The Journal also mirrors the World Academy's specific focus and mandate which is to consider the social consequences and policy implications of knowledge in the broadest sense. The vision of the Journal encompasses major challenges facing global society and seeks to examine these issues from an interdisciplinary, multi-method and value guided perspective.

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In This Issue

Gerald Gutenschwager has written a profound piece in a short compass, which is additionally sweeping in its reach. I would suggest that “[Determinism and Reification: The Twin Pillars of the Amoral Society](#)” should be read by as many Fellows of the World Academy as possible. Gutenschwager has looked at two concepts that have constrained human thought. These are the concepts of Determinism and Reification. When these forms of restraint on thinking are dominant as they have been throughout the course of human history, they have a profound effect on the role of human thought in the business of human-choice-making in terms of fundamental interests and rights. The most insidious effect of these limits on thought is that they in effect expropriate the capacity for the full development of human-centered ethics and morals. Gutenschwager sagaciously points out that a segment of society benefits from these restraints while the rest is largely victimized by it. He draws attention to the notion of the role of the bully in human social processes historically and contemporaneously. The bully can’t function without regard to the restraints of morality and ethics. In short, the bully thrives on an atmosphere of amorality. There is an obvious analogy here regarding Lasswell’s development of the power-oriented personality, which he described in terms of private motives displaced on public objects and rationalizing the public interest. The role of the bully in whatever guise ultimately undermines the development of democracy. Gutenschwager explores the anthropological dimensions of these developments as well as the role of positivism in shaping and giving effect to both reification and determinism. Gutenschwager quotes Nietzsche that those who benefit from reification or determinism “prefer a handful of certainty to a whole cartload of beautiful possibilities”. Gutenschwager provides a powerful critique of the role of economics in the generation and sustaining of an amoral society. In this regard, his giving attention to predatory capitalism, whose contemporary outcomes represent oligarchy and plutocracy, is extremely timely. His critique of Adam Smith is especially insightful. The profoundly important point in Gutenschwager’s contribution is the salience of human thinking and the importance of the freedom of thought for the human future. This is a highly intelligent and compelling contribution.

“[Breaking Free: Bringing the Overview Effect to Work and Life](#)” is an important compliment and amplification of Gutenschwager’s article summarized above. In this article, **Charles Smith** starts with an insight called “the overview effect” appropriated from Frank White, author of *The Overview Effect: Space Exploration and Human Evolution*. In viewing the earth from the vantage point of space, those observers undergo fleeting moments of transcendence in that they see themselves and the complex communities inhabiting the Earth in a pattern of complete interdependence from top to bottom and bottom to top. This reminds one of the foundations of configurative thinking explored by former WAAS president Harold Lasswell. Configurative thinking requires the vantage point of an observer with a capacity to observe the whole and the multitude of its parts and particulars connected to the whole. The challenge of configurative thinking is that such an approach commits the exploration of any phenomenon at mercurial levels of particularity, and yet extrapolated in the context of the

larger whole. This is similar to Smith's idea that such a vantage point observes "the whole of a system as greater than the sum of its parts". Additionally, Smith grapples with the idea that those who experience the overview effect are involved in the rest of the community. In Smith's words, "they experience themselves as fully connected to the world around them, not separate from it... they and the system are made of one whole cloth, even though this experience is far too complex to explain, the experience infuses the participator with energy, vitality and creativity, which is infectious." There is a profound sense of responsibility in this. In short, the process of thinking generated in this experience requires not linear thinking, but configurative thinking. Smith goes on to explore the elements that facilitate the breaking-free process of the overview effect. These are matters of cognitive dissonance, energetic awareness, escape velocity and collective intelligence. The central feature of Smith's exploration is that it involves deliberation of the mind and the expansion of the boundaries of consciousness. The expansion of these boundaries represents an important step in the potential and possibilities of human capital for the improvement of the human prospect. This is a profoundly important and brilliant article.

Federico Mayor's "[Higher Education, Cornerstone of the New Era](#)" is a brilliant and far reaching challenge to the future of higher education and the formidable challenges of social responsibility that its future must inevitably embrace. Mayor has provided us with a powerful insight into the interdependence of higher education values and human rights. It is surprising that over 50 years after the adoption of the UN charter and the sterling work of UNESCO, the commitment to human rights and higher education is not yet universally embraced. This is a brief but compelling and brilliant statement of the challenge and its importance to the improvement of world order.

John Avery's article, "[The Future of International Law](#)," is an important contribution to an interesting topic that seeks to engage non-technical intellectuals who are not jurists or lawyers. What he has done is to provide us with a historical gloss on some of the most important events that have inspired the modern international law concept. Unfortunately, the editor is an international lawyer, and realizes that there is a necessity for a broader and non-technical appreciation of the role of law in the evolution of society. This therefore is not for the technical legal expert but for the fellows who are not trained in this way. In this sense, it is an excellent introduction to the field.

Winston P. Nagan

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Determinism and Reification: The Twin Pillars of the Amoral Society

Gerald Gutenschwager

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Ο δρόμος προς την αρετή ήταν δύσβατος για τον Ηρακλή
The road to virtue was long and difficult for Hercules

Abstract

The history of ethics is a troubled one. It is often plagued by the twin pillars of determinism and reification. The first is the belief that all things in the universe, both social and physical, are determined by the laws of God and/or nature and that humans merely discover these laws. The second refers to the tendency of human beings to forget the subjective human origins of all thoughts, beliefs, theories, etc. and to treat them as if they were objective 'things' (res) that then have control over all those entities, including humans, to which they refer. For thousands of years ruling systems of thought have based themselves on these deceptive practices. This has simplified the task of rulers and others who have benefited from these beliefs, as it has relieved them of any personal moral responsibility for their thoughts and actions. But it has also served the common people who, along with the rulers, were relieved from the onerous process of constantly examining their ontological beliefs, this being especially true if the actual systems of control in society seemed to leave little opportunity to alter the actual circumstances of life in any case. The current situation is particularly depressing, given the widespread absence of any moral awareness in science, especially economic science, during the widespread crisis gripping the Western world, especially destructive to the young people who appear to have so little hope for their future.

1. What is an Amoral Society?

By amoral (value-free) society we mean a society of people who have no moral sense and who cannot, or do not want to recognize the difference between good and evil and who may not even *be able* to recognize this difference, as an expression of sociopathology. It is a society of people who are not aware and do not care if they do evil to their fellow humans or to the environment in which they live. Essentially it is a society that has come to distinguish humans as a species without the emotional and ethical values and moral institutions that characterize human existence. Today's amoral society is the result of many years of war by the economy against human society (Polanyi 2001). The economy has an overwhelming dominance in today's society. Given the basic premise that only money matters to humans, along with the implementation of the 'free market' and its infinite growth ideology, almost all human concepts have now been replaced by commercial values, as we shall see below.

2. How has the Amoral Society come into being?

How and why we live in an amoral society today is a long and complicated story. One could say that it started the moment humans acquired private property along with the invention of agriculture and the domestication of animals, a process that began roughly 10,000 years ago. At that time people began leaving the small communities where they, themselves, had created a system of social control and organization following hundreds of thousands of years of biological and anthropological evolution. In those prehistoric communities, social organization was based on the **recognition of the dependence of each person on the others in the group, as well as on nature, understood as necessary for survival.** This recognition was (and is) expressed as a sense of morality, something that unfortunately has been slowly eroded as a result of the increasing size of the population and inevitable increasing complexity of society, accompanied by an increase in anonymity. In addition to this, the rise of private property gave a different ethos to society generally (Engels 2010 [1884]). Riane Eisler (1987) has also suggested that invasions by male dominated herders into the early agricultural societies of ‘Old Europe’ and the Middle East destroyed the egalitarian social order that had apparently survived the transformation from the earlier hunter and gatherer societies that had preceded them. She cites Minoan Cretan society as the best example of these still egalitarian forms, forms which were gradually eroded by the invasions of the Mycenaeans, with the volcanic eruption and tidal wave on the island of Santorini also apparently playing a role. The philosopher Aristotle tried to address this problem when he wrote about ‘Ethics’ and ‘Politics’. At the same time, art, especially theater, helped the ancient Greeks to understand the importance of ethical and cultural dilemmas, which demonstrates that the issue was still part of the larger social discussion at that time.

3. The Role of Religion in the Evolution of Moral Consciousness

The dialectical spirit of philosophy and art in ancient Greece appears to have been lost with the rise of monotheistic religion. That is, the church gave its own interpretation of morality, albeit in a very dogmatic way, with a code that has been important, at least for those, either within or outside the church, *who have been guided by it.* Under the new doctrine of religion people were asked to believe that moral rules come from extraterrestrial sources and that they should follow them without debate, without doubt: “Blessed are those who have not seen and yet have believed”. At the same time, the price of sin, i.e., eternal damnation, was a heavy burden for the poor human being. Perhaps for this reason confession was added in order to ease this burden. The system of religious moral principles was quite good for its time and even for today, for that matter, if and whenever people actually adhere to it. Unfortunately, however, the church did not recognize, and to a large degree prevented the development of human knowledge, especially with regard to nature, but also concerning the organization of society, and along with that the evolution of moral needs. But, perhaps more important is the fact that moral consciousness and discipline are diminished when humans lose the sense that they are **participating** in the creation of the system of controls over their personal and collective or social life.

As a perhaps unintended consequence of this highly centralized definition of morality through organized religion was the problem of corruption from time to time, a problem that is likely to occur whenever there is a lack of democracy in the social hierarchy and generally

when excessive power is exerted over society, even in the name of religion. This corruption in the Church was sufficiently pronounced in the early 16th century, that it produced a movement for reform, with the resulting Lutheran schism and the birth of Protestantism throughout northern Europe. Among the Protestants, morality was (and is) a matter between the individual and his or her God, not unlike the ancient Gnostics, before Paul, who together with the leaders of the Eastern Roman Empire, organized the church hierarchy for better control of the populace (Koutoulas 1997).

This direct relationship between humans and their God required a different moral system, not one based on honor and shame with its necessary social monitoring. It required a more esoteric sense of good and evil. It required a sense of **guilt**. The feeling of guilt must be embedded in early childhood during the first years of socialization, so that it will remain forever in the subconscious and last throughout one's life. It is for this reason, plus the fact that the environment in the North is so much more unforgiving, that individual discipline appears to be very important in northern Europe. Unfortunately, however, when the burden of guilt becomes unbearable, people have a tendency to unload it onto anyone else they can, both near and far, a practice that is often accompanied by the hope that they themselves would then appear more righteous. Also, this often results in a tendency to authoritarianism and to a strong need to seek revenge for any breach in the rules by others, or even oneself, for that matter, a problem that apparently irritated Nietzsche all of his life! On the other hand, in such circumstances people are much more willing to trust their fellow human beings, something which promotes more coherence and cooperation in large-scale societies. For this reason the subsequent evolution of religious morality was somewhat different in the North, although the rise of amoral science would, along with its quantitative siblings, the monetary ethos and the belief in infinite economic growth, ultimately produce some of the same negative effects as in the South.

4. What are the findings of Anthropology?

It appears from the work of anthropology that the emotional instinct of morality has become genetically embedded in humans and the higher apes that live in groups with a consciousness that their survival depends on that group (Hauser 2006, Boehm 2012). On a practical level, moral control in small groups depends upon the almost complete knowledge that everyone has concerning the behavior of others within the group, along with the pressure that can be exercised by the group on the delinquent person, for example, interruption of communication with the offender (shunning), or expulsion from the group, or, in extreme cases such as a murder, their execution. These techniques have been used successfully, for example, in relation to common problems such as stealing and freeloading, as a necessary means of maintaining the integrity of the group.

As mentioned above, the **lack of participation** that characterized the social world after the invention of agriculture and the domestication of animals, along with the resulting growth of population, reduced individual involvement in social control. Religion transferred this control to a metaphysical level, with the hierarchy of the church as the author and enforcer of the rules. That is, moral consciousness remained, but decisions about what is moral versus immoral behavior were taken from the collective hands of the people directly involved.

Meanwhile, one of the most serious, though apparently somewhat rare, moral problems that the hunters and gatherers in small communities had (and have) to deal with are the tyrants, the powerful ‘alpha males’, who sought to intimidate and control their fellow humans (Boehm 2012). These types appear to be increasingly common in the secondary schools of today’s crisis-ridden society, where they are labeled with the term ‘bullies’. This is something that, since even before the ancient Romans up to and including the present day, characterizes only certain types of men. With the development of agriculture, the acquisition of private property and the growing inequality among people, the number of bullies began to increase, with the inevitable result that they, themselves, would designate what was good and bad. The hunters and gatherers had the means to control these types, typically by organizing the more egalitarian majority in order to rein in the bullies. Over the last 8000 years, however, this form of bullying behavior has been extended to a larger and larger scale, up to and including the international level, where it has been transformed into imperialism. This anthropologically recent, though still sufficiently lengthy history of bullying, has given the impression that predatory aggression is innate in man, when in fact it may for the most part be an (unintended?) consequence of a new environment created by him. Here, again, participation by the common people in creating the social order is absent, in spite of the myth of participatory democracy that is propagated from time to time. Naturally, in this case the sense of morality is even more diluted, *even while the people themselves continue to be dependent on one another!*

As a result of this recent history there is now a tradition in the West that wants us to believe that all humans, especially men, are characterized by what Nietzsche has called the “Will to Power”. This is something that Marshall Sahlins (2008), in his book, *The Western Illusion of Human Nature*, suggests is a tradition that leads us to believe that bullies, tyrants, oligarchs, dictators, etc., should be regarded as something natural, something inherent in our biology. Again, according to Sahlins, this illusion has been expressed by many philosophers and historians including Thucydides, Thomas Hobbes, Adam Smith, and many others, as well as by many positivist social scientists. If, however, we consider this concept of “Will to Power” in the context of the hierarchy of needs theorized by Abraham Maslow (1970)—a conceptual framework unavailable to Nietzsche during his time—it might be more appropriate to call it the ‘Will to Self-Actualization’, i.e., the need to become everything one is capable of becoming, from perfect mother or father, to poet, athlete, musician, carpenter, or whatever. Thus we would be able to appreciate that self-actualization in the form of a ‘will to power’ characterizes only a few people, especially if we emphasize the difference between predatory and defensive aggression (Peterson and Shane 2004). Indeed, otherwise it would not be so easy for tyrants to seize power. The will to power is, therefore, apparently rare and is to be found mainly in individuals who suffer from psychological disorders. Most people find self-fulfillment in entirely different ways and not through a need to dominate their fellow humans. This ‘naturalizing’ of bullying, in other words, serves more as propaganda than as science, much as (Social) Darwinism has served the interests of the free market system.

Within this historical context Nietzsche (2003 [1913]) named the original system of social control in small communities, the **morality of outcomes** (of actions), the consequences of which were almost always evident in these societies. The Protestant control system using guilt he labeled the **morality of intentions**, something more suitable in a larger society where

the effects of actions are not so obvious. However, with the evolution of mass society we can also now see the need for a **morality of unintended consequences**. That is, it is not enough to have and to carry out good intentions, something that Aristotle had also proposed, but we must observe and judge all the consequences of our actions. As an obligation, this is nearly impossible because of the complexity of mass society and the difficulty of knowing all the consequences of our actions, to say nothing about the difficulty of individuals in social systems controlled by bullies to enjoy any kind of freedom even to judge their deeds, let alone control them. Here science, especially social science, could and should play an important role in revealing these unintended consequences. The frustration and ultimately nihilism of Nietzsche, particularly in relation to the philosophers, was based at least in part, on the inability of a mechanistic and deterministic science during his time (and ours) to fulfill this obligation. Science, in order to play a significant role in the study and evolution of morality, would need to recognize the socio-political theater, the sociodrama (Burke 1959, 1965, 1968a, 1968b, 1969a, 1969b, 1973), (Duncan 1968, 1969), (Lentricchia 1983), (Rueckert 1969), which is an equally important essence of human reality, along with the various mechanistic phases that are observed from time to time.

5. What role has the Culture of Science played in creating the Amoral Society?

The problem is that science and ethics are residents of two completely different worlds, as C.P. Snow (2013 [1959]) argued more than fifty years ago. Science is based upon the five known senses. Thus it ignores and often trivializes the moral sense as an obstacle to proper (rational) thinking, necessary for science. Morality and emotions belong to our biological past and thus are to be found more in the human **subconscious**. Ironically, however, emotions and ethics as phenomena are well known to business and political leaders who use them to implant in individuals the thoughts and actions needed to keep them in power. Here they use art, especially the narrative and the theater where heroes and villains symbolize appropriate versus inappropriate thoughts and behaviors. The irony is that within the sociodrama, which is an essential dimension of social life, science becomes an excellent **device** for the ruling class because it carries great authority and great respect—if a scientist, who is the hero of the current sociodrama, says it, then it must be true!

The current phase of this story starts from the time that science began to replace religion as a source of genuine knowledge. This was an intellectual **and moral** revolution that was long and painful. Its most famous early victims were Galileo and Giordano Bruno, who gave their lives for their faith, (not to mention Hypatia and other ‘pagan’ victims a thousand years earlier). One result of this conflict between science and religion has been that science, until now at least, has been indifferent to the broader **philosophical** framework of ancient Greek science and has left its spiritual and emotional dimensions to the increasingly diminishing influence of religion and to otherwise ‘peripheral’ academic philosophers. Science, since that time, has been required to be ‘value-free’, that is, free from (and not ‘contaminated’ by) moral concerns. It has had to be objective and rational, investigating the laws of nature from a location **outside** that nature (and **outside** of society). As an example of the effect of such attitudes we offer the thoughts of J. Robert Oppenheimer, one of the scientists who helped create the atomic bomb:

When you see something that is technically sweet, you go ahead and do it and argue about what to do about it only after you've had your technological success. That's the way it was with the atomic bomb (Jacobs 2014),

and,

We didn't know beans about the military situation in Japan. We didn't know whether they could be caused to surrender by other means or whether the invasion was inevitable (U.S. Atomic Energy Commission, 1954)

Gar Alperovitz (1994), among many others, has documented in great detail the knowledge about what was going on at that time, for anyone of Oppenheimer's status who might have been interested!

Apart from its rational but necessarily amoral methodology, most scientists believe in the **deterministic** approach of Newton and Descartes (and, therefore, of Adam Smith, of course). Determinism is the belief that all events in the universe are determined by 'natural' laws that apply everywhere and at all times. Newton believed that these laws came from God, while many, if not most, scientists today do not give much importance to religion or to philosophy, and simply believe that these laws are endogenous in the universe and that scientists are only discovering them. From this standpoint there are two advantages for the scientists. First, this gives more authority to these laws and, secondly, it exempts scientists from any sense of moral responsibility for what they say and do as scientists: if these laws come from God or from nature, the scientist is merely an intermediary, a messenger, not their creator.

This deterministic approach appears to be in conflict with the dialectical approach of Heraclitus, which would argue that there are no ecumenical laws in the universe, because the universe is constantly changing due to the conflict among its various elements: "War [conflict] is the father of everything," as he proclaimed, or "thesis - antithesis - synthesis", as Hegel said. Marx, in his doctoral thesis, examined the opposition between determinism and the dialectic, as it was expressed in the conflict of ideas between Democritus and Epicurus. The latter supported the dialectic, as did Marx, of course.

In addition, this may have something to do with a basic human psychological tendency: most people prefer a more deterministic world rather than a more relativistic one. They do not want to have to think all the time about whether their perceived reality is true or not, or whether it works properly or not, a weakness that postmodernism has much dwelt upon, especially in its nihilistic mode. Meanwhile, this deterministic bias appears to include most scientists, as described by Thomas Kuhn (1970) in his book, *The Structure of Scientific Revolutions*. People do not often seek to change their basic ontological beliefs, because this would require that they dig into their subconscious, something very arduous for most people. Heraclitus' maxim that everything flows and changes, remains just that, a saying. Most people prefer to forget Heraclitus' essential meaning, which is why they submit themselves to bullies so often. As Nietzsche said, these people ". . . in their desire for truth . . . prefer a handful of certainty over a whole cartful of beautiful possibilities"!

On the other hand, humanists and phenomenological social scientists believe that humans and the social reality that surrounds them are socially constructed and thus have both a

subjective and an objective aspect (Gutenschwager 2004). The subjective aspect includes the thoughts, theories, images, beliefs, along with the ethical principles, etc., that humans, both individually and collectively, have about reality. The objective aspect includes what actually exists in the environment, using whatever means can be used by science or others to observe and measure it. Positivist science does not recognize to any great extent the subjective dimension; or rather it tries to neutralize it in the interest of rational and value-free (amoral) objectivity. Thus, it has created a way of thinking, a philosophy that avoids the dilemma about the role of humans and their morality in the construction of the social world. It is a philosophy that allows positivist social scientists, in particular, to create the world in their own image, so to speak.

This also brings up the abiding problem of **reification**, or the tendency of people to forget the **human origin** of all the ideas, theories, concepts, and beliefs that they have about the natural and social universe. The word 'reification' has roots in the Latin word 'res' (thing), and it is the process of taking a human idea, a thought, an abstract concept, and converting it into an objective 'thing', outside and for the most part above and beyond human involvement. The phenomenon that often accompanies this illusion, of course, is then to allow this 'thing' to control one's life as if it were an immutable law of nature or of God. All of this is irrespective of any evidence that might be accumulated to prove the truth of the 'thing' *within the context of one's belief system or paradigm*, as described by Thomas Kuhn in his book. This is something that is especially troublesome in the social world when reified scientific ideas are implemented, with their too often unintended consequences.

Thus, some biologists, and many others, for example, believe that the vast majority of what humans believe and do, including egoism and aggressiveness, etc., is inherent and genetically determined, i.e., is the product of the 'survival of the fittest'. This term has been mistakenly interpreted and used by Social Darwinists, in particular, in order to legitimize the behavior of bullies. They have, deliberately, it would appear, distorted the meaning of the English word 'fit'. This word can mean 'good physical condition', though not necessarily 'large and powerful'. But it can also mean 'appropriate or suitable'. Darwin, of course, would have implied the second meaning, i.e., if an organism were compatible or suitable in a changing environment it would survive, regardless of its strength or size (e.g., the dinosaurs).

On the other hand, positivist social scientists, including mainstream economists, believe (as do physicists for nature) that the objective (social) reality is a (Newtonian) mechanism. Thus in both the Darwinian and Newtonian framework human intention plays no important role. What would be the point of moral consciousness in a **deterministic** (social) universe? Humans, including political leaders, and especially the powerful bullies among them, along with most scientists in their work would appear to have no need for morality. In fact, under this deterministic system of belief, **they could not take any moral responsibility for what they do and think, in any case!**

6. What role has the Culture of Economics played in creating the Amoral Society?

The next step in the evolution of science was the attempt by Adam Smith in his book, *The Wealth of Nations*, as well as other positivist social scientists and philosophers in the later

part of the 18th and throughout the 19th and 20th centuries to bring the scientific revolution to the social sciences by using the same principles as those used in the natural sciences. Their purpose was to confer the same authority on the social sciences that has been enjoyed by the natural sciences (with the same status and compensation, of course). Thus they have viewed society within the same mechanistic framework that physicists have viewed nature, without asking whether the consciousness that characterizes human beings would make any qualitative difference in the organization of society in relation to the organization of nature.

In spite of this mechanistic view, Adam Smith and his followers still felt the need to script, theoretically at least, some kind of consciousness in humans and some kind of explanatory model that would incorporate the obvious appearance of social organization. During the time of Smith the socioeconomic order was in the process of transforming from feudalism into mercantilism and industrial capitalism, a change he, himself, supported, of course. In this context Smith proposed rationalism (along with an implicit greediness) as the mode of consciousness, and for social cohesion, the mathematics of physics. Physics included no form of consciousness (at least not then), which forced Smith to formulate additional dimensions for 'economic man'. Hence, he turned to Democritus for the idea of individualism, i.e., the atom, as used by Newton and Descartes in their deterministic physics.

In this context Smith defined individual consciousness and behavior as rationalism, complemented by the idea of motivation, which he defined as a search for personal satisfaction. All of this was fine up to this point, but how would he measure these concepts: science requires quantitative data. It will not surprise anyone if we say that he found **money** to be the perfect **symbol of satisfaction**. It is absolutely quantitative, everyone seems to want it, and most people believe that it will bring great satisfaction and happiness. This may be partly true, but only along with the 'golden (not necessarily mathematical) mean' of Aristotle, something within the ancient philosophical tradition largely overlooked by most scientists, for reasons explained above. Also completely ignored here are the thoughts of Epicurean and all other spiritual philosophies that give emphasis to the **non-materialistic** dimensions of human satisfaction and happiness, once basic survival needs have been met, of course.

Meanwhile, in order to fulfill one's needs for satisfaction and happiness in the social world of the free market, *where everyone else is doing the same thing*, one has to be **predatory, cunning, and generally amoral**, like everyone else. Here is a very serious problem. While Smith called his new system the 'free market' so that people would believe that they were, indeed, free, they were, and are in truth, enslaved in a new form of thinking and behavior, that of **predatory individualism within an amoral society**. Even worse, over time, as the oligarchic and plutocratic system evolved, it is the powerful and wealthy bullies who actually define the living conditions of the people, who then must either succumb to them or die of hunger! It would appear that the only real freedom modern 'rational' humans have is the freedom from moral constraints!

The self-assigned role of Adam Smith was to transfer power to a new ruling class, from the church and the landed nobility in a largely rural society to the merchants and industrialists in an emerging urban society. This was the well-known transformation from a feudalist to a mercantilist and then a capitalist society, something that had begun many years before during the Renaissance in Italy. This transformation was also accompanied by a transfer of

intellectual authority from religion to science, without which the economic transformation, itself, could not have transpired, given the importance of technology to economic growth.

“At some point economists (and all scientists) must begin to perceive society as a mental, spiritual and emotional whole and not as a deterministic mechanism consisting of autonomous units.”

Unfortunately, however, Smith’s ideology and theory were built on only half truths, because his ontological assumptions have not been reexamined since they were put forth more than 200 years ago, given the absence of any philosophical dimension to economic science. His truths are well known, for example: a) investing surplus rather than (conspicuously) consuming it brings development; b) science and technology are indispensable to growth because of their ability to increase productivity; c) economic development improves material well being. But his *untruths* are equally significant: a) unlimited economic growth is not possible because of the tendency to over-accumulate capital (as we see today), and because of the damage it does to the physical environment, to say nothing of the people; b) ever increasing acquisition of material possessions does not ultimately produce happiness, as we now see in our alienated consumer society; c) ever increasing personal wealth does not engender respect, but rather envy and a sense of injustice; d) the improvement in material well being is not universal but is rather acquired at the expense of the many for the benefit of the few; e) individualism and self-interest do not produce the best overall system, in spite of elegant mathematical proofs to the contrary; finally, f) the (unexamined) traditional moral values of economics are not very constructive, consisting of greed, envy and fear, based as they are on predatory individualism.

While this system did succeed in liberating people from the former feudal system of serfdom, they are now trapped in a new kind of slavery, chasing after money and goods at the expense of all other human moral and spiritual values. Of course there has been enormous technological progress over the past 200 years, a progress enjoyed by the people of the first world, though, unfortunately, too often at the expense of those in the third world, to say nothing of the natural environment. And for a while the cornucopia of consumer goods coming from predatory individualism seemed to deserve the sacrifice of other values. Now, however, that the super-cunning bankers and brokers reveal, as they have done so many times in the past, the true face of the ‘free market’, people are becoming increasingly disappointed, without any idea of where to look for new inspiration.

Indeed, as Capra (1982) has so aptly illustrated, we are now at a turning point where we must examine our ontological assumptions and begin to search for a new socio-economic system—a very difficult thing! This applies especially to economists who continue to argue about whether the market should be ‘free’ or controlled by government intervention—as if there hadn’t been massive government intervention to establish and maintain the ‘free market’ from the first moment of its existence, as described by Karl Polanyi (2001[1944]). At some point economists (and all scientists) must begin to perceive society as a **mental, spiritual**

and emotional whole and not as a deterministic mechanism consisting of autonomous units. One cannot (metaphorically) lop off a piece of the human brain while ignoring the rest of that brain along with its heart, its body, its society, its culture and its history and call it ‘economic man’, and then build a whole science upon that mutilated (and reified) thing. We must all understand that any economic policy is at the same time also a **social and moral** policy and that to transform everything into commodities while ignoring the enormous toll on both humans and the environment is pure misanthropy. They don’t call economics the dismal science for nothing—but it’s long past the time for a new start!

7. What effects does the Amoral Society have on its youth?

Those who more than anything must pay the price for all of this, of course, are the young people. The entire socio-economic and political theater bombards children with the need to buy the latest technological ‘gadgets’. The heroes of the consumerist sociodrama projected by the mass media relate only to wealth and consumption. For the children whose parents can buy them whatever they ask for there is cultivated a feeling that they should be very proud, and believe that they are on top of the social world. But when money (yet again) replaces other human values, the emotional vacuum remains and the frustration is expressed in a variety of ways. These children, along with the other children who cannot have the technological goodies, are angry with their parents and with the entire society, a society that does not allow them to participate in the ‘consumer paradise’. This is especially true when the young see the corruption that enables the political and business bullies to enjoy all these goods. If we add to this that they are unlikely to ever find a place in society that will allow them to participate in this ‘paradise’ in the future, one can easily understand the anger and disrespect that the youth have for adults, for their teachers, parents, politicians, etc.

Meanwhile, all the other messages that young people receive are from negative to nihilistic, including those about wars, crimes, frauds, thefts, divorces, suicides, scandals etc. Television, movies and computer games portray mostly sinister police adventures, violence and corrupt behavior. The goal of the master ‘predators’ is to numb and dumb down the people with desperation, while also providing them with ‘bread and circuses’, and the less the bread, the more the (increasingly violent) circuses. The only good thing is that in real life the athlete-gladiators are not (yet) actually killing each other, as they did in Ancient Rome, the grim prototype for today’s decadent society. And for the really desperate, of course, there are always narcotics, a perfect solution for the master predators in a world where technology alone is expected to continue increasing unemployment rates throughout the 21st century and beyond.

And what about conventional scientists and engineers? They rather appear not to want to hear about any of this. In particular, scientists and engineers working in the ‘high tech’, the military and the pharmaceutical companies have even less reason to be concerned. Of course, all this does not mean that we should abolish rationalism. It is simply that there are other dimensions to humanity that must be respected along with rationalism. To suppress and ignore these dimensions prevents even rationality from functioning properly. Both emotions and morality must work alongside rationalism as parts of the living totality that is human existence.

8. What hope is there for the youth at this historic moment?

The situation is desperate. At least, so it appears, superficially. Meanwhile, hidden from the media and popular culture, and from the more conventional academics but available on the Internet are thousands of scientists and others who are looking for solutions to the current problems of alienation and lack of moral principles. Heterodox economists, biologists, physicists, anthropologists, sociologists, archaeologists, homeopathic and alternative physicians, etc., are all looking for new approaches to understanding nature, the human body and human society, within a new context, in particular that of quantum physics and the electric universe. There, perhaps, are hidden the emotions, the instincts, the human ‘vibrations’, the moral principles, and all of the new (ancient?) medicine. This is not to speak of tens of thousands of global human efforts to create small communities based upon cooperation. It would be well worth the effort for today’s youth to investigate and become informed about these efforts, in order to see whether they might also be able to participate in the creation of a new social system for the future. It is for their own benefit to learn that there is something *beyond* the deterministic science, the predatory individualism and the materialistic philosophy that govern our thinking today. There, they may even find the quiet enjoyment of life, close to nature with their fellow human beings. First of all, however, they need to understand what is happening and why, in today’s society. This is necessary in order for anyone, especially the young, to be able to respond creatively and to claim the right to determine for themselves the conditions and limits of their happiness (Ray and Anderson 2000). This would also exempt them from the painful weight of desperate anger and the accompanying random and unproductive acts of vandalism.*

“There is something beyond the deterministic science, the predatory individualism and the materialistic philosophy that govern our thinking today.”

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Bibliography

1. Alperovitz, Gar (1994), 2nd Revised Edition, *Atomic Diplomacy: Hiroshima and Potsdam – The Use of the Atomic Bomb and the American Confrontation with Soviet Power*. London: Pluto Press
2. Boehm, Christopher (2012), *Moral Origins: The Evolution of Virtue, Altruism, and Shame*. New York: Basic Books
3. Burke, Kenneth (1959 [1937], *Attitudes Toward History*. Boston: Beacon Press
4. _____ (1965 [1935], *Permanence and Change*. Indianapolis, IN: Bobbs-Merrill Co. Ltd.
5. _____ (1968a), *Counterstatement*. Berkeley: University of California Press
6. _____ (1968b), *Language As Symbolic Action*. Berkeley: University of California Press
7. _____ (1969a), *A Grammar of Motives*. Berkeley: University of California Press
8. _____ (1969b), *A Rhetoric of Motives*. Berkeley: University of California Press
9. _____ (1973), *The Philosophy of Literary Form*. Berkeley: University of California Press
10. Capra, Fritjof (1982), *The Turning Point: Science, Society and the Rising Culture*. New York: Simon and Schuster
11. Eisler, Riane (1987), *The Chalice and the Blade; Our History, Our Future*. Harper: San Francisco
12. Engels, Friedrich (2010 [1884]), *The Origin of the Family, Private Property and the State*. Penguin Classics. Reissue Edition

* See co-intelligence.org

13. Hauser, Marc D. (2006), *Moral Minds; The Nature of Right and Wrong*. New York: HarperCollins
14. Jacobs, Alan (2014), "The Two Cultures, Then and Now", in *Books and Culture: A Christian Review*, March-April
15. Koutoulas, Diamantis (1997), *Jesus and Paul*. Athens: Dion Publishers (in Greek)
16. Kuhn, Thomas (1970), 2nd Edition, *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press
17. Lentricchia, Frank (1983), *Criticism and Social Change*. Chicago: University of Chicago Press
18. Maslow, A.H. (1970), *Motivation and Personality*. 2nd Edition. New York: Harper and Row
19. Nietzsche, Friedrich (2003[1913]), *The Genealogy of Morals*. Mineola, New York: Dover Publications, Inc.
20. Peterson, J.B. and M. Shane (2004), "The Functional Neuroanatomy and Psychopharmacology of Predatory and Defensive Aggression", in J. McCord (ed), *Beyond Empiricism: Institutions and Intentions in the Study of Crime*. (Advances in Criminology Theory, Vol. 13) (pp. 107-146). Piscataway, New Jersey: Transaction Books
21. Polanyi, Karl ((2001 [1944]), *The Great Transformation: The Political and Economic Origins of Our Time*. Boston: Beacon Press
22. Ray, Paul H., PhD and Sherry Ruth Anderson, PhD. (2000), *The Cultural Creatives; How Fifty Million People Are Changing the World*. New York: Three Rivers Press
23. Rueckert, William (Ed) (1969), *Critical Responses to Kenneth Burke*. Minneapolis: University of Minnesota Press
24. Sahlins, Marshall (2008), *The Western Illusion of Human Nature: With Reflections on the Long History of Hierarchy, Equality, and the Sublimation of Anarchy in the West, and Comparative Notes on Other Conceptions of the Human Condition*. Chicago: Prickly Paradigm Press
25. Snow, C.P. (2013 [1959]), *The Two Cultures and the Scientific Revolution*. Eastford, CT: Martino Fine Books
26. U.S. Atomic Energy Commission (1954), "In the Matter of J. Robert Oppenheimer", p. 34

Breaking Free: Bringing the Overview Effect to Work and Life*

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Abstract

Upon breaking free of Earth's gravity and going to space, some astronauts experienced a surprising change in their perspective of life on Earth. Author Frank White[†] named this phenomenon, "The Overview Effect." Astronauts who experienced this were witness to a message about how to be, with the planet and with each other. Their message about being "in the same boat" together points to an opportunity for many of us to break free of "the way it is" and create moments of transcendence that go beyond identity, individually and collectively. It is about shifting our point of view to see that what needs attention in our companies, communities, and relationships is always greater than the sum of the parts.

In the same way that we must achieve escape velocity to reach space and see the Earth anew, it is possible to identify and generate equivalent escape velocity for breaking free of the cultural and circumstantial gravities that keep us from going for our dreams with courage and conviction.

For example, in the first decade of this century, a large public utility was losing money, had union-management conflict, and was facing the grim prospect of letting people go. Simultaneous with conversations about the Overview Effect and achieving Escape Velocity, the CEO threw his hat over the wall and told every employee, individually and together, that if they performed to certain standards, none would lose their jobs. This expanded people's energy and enthusiasm such that they broke free from their historical culture of distrust and going in different directions, and generated a wildfire of high performance, innovation, cooperation. During the worst of the recent 'Great Recession' the company made its largest profits ever, and over the subsequent five years moved near the top of its industry in terms of every business quality and social measure.

Upon breaking free of Earth's gravity and going to space, some astronauts experienced a surprising change in their perspective of life on Earth. Author Frank White¹ named this phenomenon "The Overview Effect". Some astronauts also discovered a compelling drive within themselves to help make business, government, healthcare, and the world as we know it, a better place.

* This 'stand-alone' article focused on pragmatic applications, was generated in conjunction with multiple conversations between David Norris, Frank White and the author regarding the distinctions of "Bringing the Overview Effect Down to Earth" and is highly related to the article of David Norris and Frank White titled "Breaking Free: Bringing the Overview Effect Down to Earth."

† Frank White, *The Overview Effect: Space Exploration and Human Evolution*, Library of Flight, 2014

Astronauts who experienced the Overview Effect were witness to a message from the universe about how to be with the planet and each other. It's about being "in the same boat" together, and the possibility that many more of us can break free of our own certainty about "the way it is" to create moments of transcendence, individually and collectively at any point in time. It is about shifting our point of view to see that what actually needs attention in companies, communities, and relationships is always greater than the sum of the parts.

In the same way that astronauts must achieve escape velocity to reach space and see the Earth anew, so is it possible for many on Earth to generate an equivalent escape velocity to break free of the gravity of the cultures and circumstances that keep us from going for our dreams with courage and conviction. The challenge and purpose in writing this article is to ally with kindred spirits in learning more and more ways to achieve that escape velocity and bring the Overview Effect down to Earth.

"The "overview" way of being calls for control of emotions so that principles, values, reason, and intuition prevail."

1. Toward an Overview Way of Being

In 1994, Yehezkel Dror² presented a commissioned report to the Club of Rome on the capacity to govern. He analyzed the state of national, local, and corporate governance in the world, and made a number of sensible recommendations. His final word, however, was that when all was said and done, what mattered most was the character of the leaders.

Some leaders and CEOs demonstrate a kind of character that includes a capacity for self-reflection and an ability to see the whole of a system as greater than the sum of its parts. This "Overview" way of being implies a seeking for understanding in almost any circumstance. It calls for control of emotions so that principles, values, reason, and intuition prevail. At their core, these people are predisposed towards inquiry and are unusually open to considering things that may be inconsistent with what they already know or believe. Their search for the truth is coupled with a personal commitment to doing what's right for all involved. They experience themselves as fully connected to the world around them, not separate from it—they and the system are made of one whole cloth, even though this experience is far too complex to explain. They take responsibility for dramatically expanding their own and others' energy, vitality, and creativity. This almost always results in the achievement of escape velocity and breaking free from the limiting effects of culture and fixed beliefs.

When planning to take on something thought to be impossible, a person has to instinctively appreciate something greater than the sum of its parts. It can't be understood through linear, measurement-based analysis. The whole is too complex, with too many elements, relationships, blockages, and co-workers' and colleagues' self-held limitations. You just can't get to the essence of what's really going on and make sense of the whole with linear and convergent approaches.

In observing and working with leaders and groups who have achieved escape velocity, it is clear that they created a "new whole" that's greater than the sum of the parts, and that connects deeply and personally with everyone involved. They achieved unfathomable leaps

in cohesion, energy, and accomplishment. Gradually but dependably, new leaders emerged who were focused on betterment of the whole system. From this place, fresh opportunities appeared for invention, co-invention, and innovation, far beyond what was imaginable from a linear baseline.

We often fail to recognize that our methods of analysis are based on created thought-frameworks that derive from the linear, convergent nature of analysis in the first place. We are tricked by our own mind's need to see things in ordered and sensible ways. As John Stewart³ writes, *"Abstract/ rational thinking is largely incapable of representing complex patterns and processes, transforming systems, emergence and complex relationships."* So much more is available by seeing things from the perspective of the whole than from the perspectives reached by studying one or more of the parts, which are always influenced by our roles, beliefs, commercial imperatives, personal histories, skill sets, and political interests.

2. Essential Elements for Breaking Free and Bringing the Overview Effect Down to Earth

We consider four basic elements essential to Breaking Free. These elements do not necessarily happen one at a time or in a particular order. All are necessary to enable individuals and organizations to bring the Overview Effect Down to Earth. All are necessary to provide life and work with a transcendent, empowering and noble context for solving problems, unleashing creativity, and bringing forth unusually effective ways to operate businesses, governments, educational systems and other public services. These elements are:

- Cognitive Dissonance
- Energetic Awareness
- Escape Velocity
- Collective Intelligence

David Norris and Frank White⁴ describe a powerful instance of Cognitive Dissonance in contrasting astronaut Ron Garan's deeply moving experience of seeing the Earth from a distance with his awareness of the violence and other painful social and political situations happening on the planet. The experience of Cognitive Dissonance is necessary before people will commit to achieving Escape Velocity. Such dissonance is the foundation for an acute experience of the unacceptable contradiction between your dream for something you really care about and the seemingly inescapable truth of the way it actually is for you. We are referring to an intensity that is experienced physically, emotionally, and sometimes spiritually. We all have ways of avoiding this distasteful pain—distraction, focusing on something good, thinking about the future, hoping and coping, and keeping busy are but a few. Deep immersion in this gap makes the existing situation intolerable. It is this powerful Cognitive Dissonance that induces "the final no" to the current state of affairs and "yes" to a vision upon which energy flows and Escape Velocity becomes possible.

Energetic Awareness comes from attending to, sensing and directly working with the patterns of energy present in relationships, teams, organizations, businesses, and communities. It reveals the underlying patterns that directly affect the success of any effort, and helps a leader to:

- Sense the blocks to creating high energy teams, projects, or organizations;

- Understand natural solutions or innovations that “want to emerge” and are consistent with the players’ passions;
- Unlock energy and wisdom that are naturally present;
- Discover ways to heal, create partnerships, and navigate complex situations; and
- Build loyalty and agreement to shared goals.

“In an energetic paradigm, responsibility begins with our willingness to be cause-in-the-matter of energy across the entire system.”

In business and life itself, Energetic Awareness happens in a specific context—a mission-driven or relationship-driven framework. It has the power to mobilize everyone involved. Energetic Awareness occurs in a moment of presence. It propels people, groups, and ultimately systems forward by literally seeing themselves and the related environment at its very core as a field of interacting opportunities and energy flows. Escape Velocity becomes available when leaders observe people’s relationships and work in terms of energy flows between people, groups, and hierarchies. This is consistent with Serge Kahili King’s⁵ insight that, “*Energy flows where the attention goes.*”

Frank Herbert^{6,7} said that, “*... in all the universe there is only the insatiable appetite of matter., that energy is the only true solid..., and energy learns.*” Such learning is always the sum of intellectual, physical, emotional, and spiritual activity. We can get very smart cognitively yet remain stupid emotionally, spiritually, or physically. In an energetic paradigm, responsibility begins with our willingness to be cause-in-the-matter of energy across the entire system.

Victor Sanchez⁸ suggests that, “*... companies and people with the most available energy will prevail*”, and that “*... good ideas, force of will, profit and growth are not enough.*” The pull of the existing culture’s gravity always wins without the Energetic Awareness that enables Escape Velocity and the ability to see, address, and overcome cultural and personality barriers. This requires personally paying attention and addressing it directly when we see that energy is low or missing. It means directing energy where we want it to increase (i.e., it is always our job to enliven a boring meeting and move things forward). This energy expansion is always a momentary event allowing us to Break Free of the current circumstance. In the next moment another set of gravitational forces will need to be contended with—gravity never goes away.

Energetic Awareness is a bridge to Escape Velocity. To go into space, we must achieve Mach 25-17,500 miles per hour. That is the propulsion, energy, vitality, and staying power needed to break free of the gravitational pull of the Earth. In life, enormous gravitational pulls exist in culture, personal identity, dominating relationships, and existing beliefs, which block one’s ability to come to terms with what is possible. In human affairs, escape velocity can be dramatic or subtle. It can come from a great increase in propulsion and velocity, a subtle

or radical change in circumstance, or from a shift in one's way of being, often manifested in action. It can be personal or organizational. It can be technical or counter-intuitive. When it happens, people recognize it and report experiencing freedom, a release of constraint, movement, achievement, and a powerful sense of connection with the world around them.

Many of us have experienced moments of Escape Velocity from the gravity of our own lives or circumstances. One dramatic example from our work occurred at Campbell's Soup of Canada.

In order to prevent Canadian manufacturing plants from being closed and the business from relocating to the United States, the senior management group needed to mobilize the entire workforce to cut costs. They stood bravely as a group in the face of their own fear that the meeting could go out of control, and spoke with uncommon vulnerability in front of half of the company's employees about the situation at hand, knowing that hundreds of people did not trust them.

The moment of vulnerability was magical. The gap was painfully experienced, between the fear-driven existing situation and people's shared dream of a company where everyone thrived. They had paradoxically generated a surge of energy that broke everyone free, as they reached escape velocity from a culture of mutual distrust. The workers involved spontaneously visited other parts of the company to share the opportunity of what had happened. Most of Canadian manufacturing was saved and the company became a place where many people reported being thrilled to come to work.

In an example of Escape Velocity from the most recent Great Recession, a large public utility in the western United States was losing money. They were having union-management conflict and facing the grim prospect of having to let people go. Despite all of this and with the intent to expand people's energy and enthusiasm, the CEO threw his hat over the wall in an act of trust. He told every employee, individually and together, that if they performed to certain standards, none would lose their jobs. In those moments of being "for" one another, they broke free from the gravity of a culture of distrust, goals segmentation, and not 'being in the same boat' that had plagued them for years. A wildfire of innovation, cooperation, and collective action emerged, making a new future real. During the worst of the recession, the company realized its biggest profits ever, and in the following five years moved near the top of its industry against every business, quality, and social measure.

In each case, Escape Velocity from the pull of gravity of culture or identity increased suddenly by imagining and committing to a compelling future that reshaped current perceptions and actions. This was a "Future-Present-Singularity" in which the desired future became the new context of what was happening moment to moment. As with astronauts in the space program, people's energy and commitment to acting as ambassadors from the future took flight. All sorts of things happened that would not have otherwise been possible.

Collective Intelligence is the shared or group intelligence/wisdom that emerges from the collaboration, collective efforts, and competition of many individuals. There is an emerging body of research and application showing great promise in the use of this energetic phenomenon. It's more than conceptual and always consists of more than words and numbers, often also being expressed in emotional form (feelings), spiritual form (nobility of purpose),

or physical form (as in the power to act). However it's expressed, Collective Intelligence possesses, exerts, or displays great increases in individual and collective energy.

“The Overview Effect, in which the world literally changes by changing how we perceive it, could not have been experienced by an astronaut acting alone.”

While the boundary limits of Collective Intelligence are given by the context or fundamental mission of the enterprise, Frank Herbert⁹ cautions us that, *“Most civilization is based on cowardice. It's so easy to civilize by teaching cowardice. You water down the standards that could lead to bravery. You restrain the will. You regulate the appetites. You fence in the horizons. You make a law for every movement. You deny the existence of chaos. You teach even the children to breathe slowly. You tame.”*

We saw this limitation demonstrated in a major corporation where the prime directive to managers and engineers was, “Be aggressive, but don't rock the boat.” In such a circumstance, intelligent individuals only think what they are paid to think, at least in public. This was a teaching of cowardice in areas that were not seen as being in service to boundaries set by hierarchy. If, as Herbert says, *“There is no such thing as rule-driven creativity,”* this accounts for the lack of unbridled innovation in most large organizations, which develop increasing numbers of rules.

Space exploration is a prime example of how Collective Intelligence can be incredibly powerful in the right context. The Overview Effect, in which the world literally changes by changing how we perceive it, could not have been experienced by an astronaut acting alone. Thousands of people, using the tax dollars contributed by millions of people, responded to the stirring vision enunciated by President John F. Kennedy, who vowed to *“... put a man on the moon and return him safely to Earth by the end of the decade.”*

When it comes to Collective Intelligence, there is always a paradox. Glass artist Michael Smith[‡] says, *“Creativity unleashed is a matter of allowing intention and flow, design and freedom, together.”* Collective Intelligence is akin to Energetic Awareness in that it consists of interacting flows of multiple forms of intelligent phenomena.

Collective Intelligence emerges in a search for shared meaning or common ground. Getting a person, pair, or group to join in the search for shared context, and to move from debate to dialogue, makes a vast realm of intelligence available beyond that accessible by the individual mind. Looking from the Gestalt, the whole, rather than from the parts, allows for something new and different to emerge, offering new pathways for effective problem-solving. This contextual, perceptual, intellectual shift opens the way to a greater realm of collective wisdom.

[‡] <http://www.thecreativityunleashed.com/>

3. Conclusion

A remarkable client story captures the basic elements of Breaking Free from the pull of cultural gravity. Woody Beville was Executive Vice President of the Rouse Company during the years the company became famous for pioneering the development of Festival Marketplaces, such as Faneuil Hall in Boston; South Street Seaport in New York City; Harbor Place in Baltimore; and Bayside Marketplace in Miami. Woody was in charge of operations and the expansion and redevelopment of more than 70 malls across United States. Their success bears a remarkable resemblance to what it takes to break free of the pull of gravity, go to the moon and back, and see the Earth from orbit or from the lunar surface.

When President Kennedy made his announcement, NASA had just managed to send Alan Shepard on a brief suborbital hop above the atmosphere. The goal of sending a man to the moon and back appeared to be impossible. No one knew how to do it. With this impossible goal energizing everyone involved in the mission, NASA contractors, flight controllers, scientists, and astronauts came together in a remarkable display of Collective Intelligence. They actually beat the President's deadline by several months! An unexpected but major benefit came with this accomplishment, as the astronauts, and all of us with them, saw the whole Earth for the first time together—as a species we witnessed “Earthrise” as our home planet hung suspended in the lunar sky.

The Rouse Company shift happened during a period when the industry was in complete collapse. Major developers were going bankrupt or being kept alive by banks. Yet during this time, the Rouse Company's earnings escalated continuously, reaching 30 percent improvements each year. During the worst five years of deep recession, 70 percent of the center management teams consistently met self-created “Impossible Goals”.

When we first met, Woody had talked about the absence of “straight talk,” which was destroying the trust on which everything else depended. People were not telling the truth about what was going wrong or slipping, and bosses were doing the same. I heard the pain in Woody's voice when he said, *“I will no longer work in a place where people don't tell one another the truth.”* At the same time, his dream for the center teams, the people, and the company was a perfectly clear statement of a human values-driven and consistently successful business. The Cognitive Dissonance was obvious and painful, and impelled his willingness to “shoot for the moon.”

As with the Apollo moon landing program, the goal appeared to be impossible, and no one knew how to do it. The big question for Woody was, *“How do we create a set of goals based on the deep personal energy of every team member; in service of three missions—team and team-member growth, the contribution of every team to the community it serves, and taking care of our shareholders?”*

Escape Velocity came from decisively turning on its head everything in the culture that was contradictory to the best in human nature. Employees, management, communities, shareholders, and team members melded with one other. Shopping center management teams were told that from now on they would set their own goals without interference. All levels were told that bosses were no longer controllers, gatekeepers, and boundary managers. Bosses were told not to intercede to get their own way, but to engage through helping the teams achieve their self-set “impossible objectives.” These impossible objectives were defined

to have less than a 30 percent probability of success. The teams were told to put together operating budgets as usual, and then set them aside, totally going for their objectives, rising and falling together as a team in terms of year-end awards, salary adjustments and bonuses.

With an enormous release of personal, team and collective energy, the company achieved Escape Velocity. Individually and together they established goals they cared about, personally and deeply. Leaders could walk freely into team meetings and feel the success and passion of people working toward goals they themselves had set. It became clear how compelling it was for people to be taking on and achieving the Impossible Objectives they had conceived and committed to, individually and together. They had broken free of the suppressive impact of hierarchical rule, and the tyranny embedded in an assumption that a higher intelligence resides only in the bosses.

Despite a background awareness that in complex systems Collective Intelligence is usually smarter than individual intelligence, the cost of ignoring this became demonstrably clear. Prior to this change, 70 management teams full of intelligent individuals had been behaving in ways that were collectively inept. Through addressing Cognitive Dissonance and recontextualizing their way of working, they tapped into the enormous well of Energetic Awareness that is nearly always available. They put that energy into the service of company, team and individual visions they really cared about, rather than buying into or going along with goals simply because an authority wanted them to want it.

Breaking free of the pull of Earth's gravity was once considered impossible, yet it has now become a matter of practice and technology. Similarly, it has also become possible to systematically break free of the gravity of culture and identity, in the service of critical business and social concerns. This capacity to "Bring the Overview Effect Down to Earth" is as much a practical matter as it is a human and spiritual necessity.

British consultant and colleague John Caswell§ points out, "*Billions of dollars are spent by companies and governments trying to solve the wrong problems.*" Perhaps our ability to break free of the gravitational pull of culture and limiting identity will finally give companies and governments a path to solving the right problems.

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Notes

1. Frank White, *The Overview Effect: Space Exploration and Human Evolution* 2nd edition (Reston: AIAA, 1998).
2. Yehezkel Dror, *The Capacity to Govern: A Report to the Club of Rome* (London: F. Cass, 2001).
3. John Stewart, *The Evolutionary Manifesto: Our Role in the Future Evolution of Life* 2008.
4. David Norris & Frank White, *Breaking Free: Bringing the Overview Effect Down to Earth*.
5. Serge Kahili King, *Mastering Your Hidden Self* (Wheaton: Quest Books, 1985).
6. Frank Herbert, *Dune* (New York: Chilton Books, 1965).
7. Frank Herbert, *God Emperor of Dune* (New York: Putnam, 1981).
8. Victor Sanchez, *The Toltec Path of Recapitulation: Healing Your Past to Free Your Soul*, (Vermont: Bear & Company, 2001).
9. Herbert, *Dune*

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Higher Education: Cornerstone of the New Era

Federico Mayor

Chairman, Foundation for a Culture of Peace;
Fellow, World Academy of Art & Science

“Many things are to be done and everything is possible,... But who, if not all?”

Miquel Martí i Pol

Abstract

For the first time in history, because of digital technology, human beings are able to express themselves freely and participate in society: they have turned from passive spectators to actors. They are not silent, obedient and fearful anymore. They know what happens on planet Earth on the whole, becoming world citizens in the process. And, above all, women, the cornerstone of the new era, are able to progressively take part in decision-making. Every human being, with the distinctive faculty of creativity, will contribute to invent the future, in which humanity will be guided by “democratic principles”, as enshrined in the UNESCO’s Constitution, the only context in which human rights can be fully exercised. Education for all throughout life is a necessity to become “free and responsible” at a higher level.

The difference between education and training must always be endured in mind. The neoliberal economy is permanently pushing to have and not to be, when what matters is to be and to have the “human tension” needed to act and to dare. In order to develop exclusive human capacities (think, imagine, discover, anticipate, innovate...), the crucial aspects we should consider are the philosophical, humanist and artistic dimensions of higher education, having always in mind a dignified life (food, water, health) and sustainable development for all.

Universities will not only efficiently contribute to be, to know, to do, to live together and to undertake, but they will be at the forefront of the general mobilization needed in order to pave the way for the transition from a culture of force to a culture of word, the “new beginning” envisaged in the “Earth Charter”.

Each human being is unique and has the ability to create. This is a great hope for humanity. Until recently, they were only glimmers in the trajectory of mankind dominated by absolute masculine power, in which people were invisible, anonymous, silent, fearful, submissive... But now, for the first time in history, mankind has a global conscience, is able to contemplate Planet Earth in all of its dimensions as a whole, and has realized that the future has yet to be written. And it is possible to invent it, as President John Fitzgerald Kennedy underscored in his extraordinary speech in Washington on June 23, 1963: “They say that disarmament and peace are unachievable goals. I will show that they are feasible, because *there is no challenge that cannot be resolved through the creative capacity of the human species*”.

Citizen participation has always been very weak and the voice of the people, generally barely audible, was neither listened to nor heard. In contrast, today there are many who are capable of making the transition from subjects to citizens and becoming visible, identifiable, bold and unbound. *The fundamental mission of universities is to pave the way for this new era, the era of the people.*

Higher education means to be fully—and at a higher level—“free and responsible”, as it was so masterfully defined in Article 1 of the UNESCO Constitution. Free and responsible people are those who act upon their own reflections and not upon the dictates of others; who are aware of their rights and obligations, and who fully apply “democratic principles” at the personal, local, regional and global levels, which is the only context in which human rights may be freely exercised.

During the 1990s as Director General of UNESCO, I had the opportunity to organize global conferences on higher education, which provided me with first-hand knowledge of the characteristics and what is essential and must be maintained as our principal reference, the values that are common to all universities of the world. This process culminated in the World Conference on Higher Education held in Paris in 1998, the conclusions of which are still entirely applicable as models for the highest academic institutions at the dawn of this new century and millennium.

A few years ago, the Regional Conference for Latin America was held in Havana. It was evident from the conference proceedings that the Latin American continent both seeks and finds political, economic, academic and cultural alternatives, perhaps due to having so greatly suffered dominance and humiliation during the 1960s. Since 2000, with the new technologies now at the service of great principles, the regional conferences in Latin America and the Caribbean have continued to define fundamental criteria for determining how to best achieve the universities’ mission, strengthen their autonomy and co-governance, access and relations with society...

It was underscored at the conference that *“it is essential that we all be autonomous, while being interrelated and interactive,”* so that universities may play their role as intellectual, academic, scientific and cultural leaders, enabling them to achieve universal recognition and to implement human rights within a genuinely democratic framework.

In effect, universities must tirelessly promote justice, gender equality, sustainability and democracy. Adequate treatment and financing of life-long higher education, always considered as an investment and accessible to all citizens from the age of emancipation, is—as it was so lucidly defined in the Declaration of the Regional Conference on Higher Education in Latin America and the Caribbean—*“an irreplaceable element for social progress, the generation of wealth, the strengthening of cultural identities, social cohesion, the struggle against poverty and hunger, the prevention of climate change and the energy crisis, as well as for fostering a culture of peace”*.

Concerning universities as a vital instrument, point C.6 of the Declaration of the 2008 Regional Conference on Higher Education is quite significant: *“Moving toward the goal of generalized, life-long higher education requires demanding and providing new content for principles of active teaching, according to which learners are individually and collectively*

the principal protagonists. Active, permanent, and high-level teaching is only possible if it is closely and innovatively linked to the exercise of citizenship, active performance within the workplace, and access to the diversity of cultures”.

We must read and reread the Declaration because it contains essential recommendations, particularly in Chapters D (Social and Human Values of Higher Education) and E (Scientific, Humanistic and Artistic Education and Comprehensive Sustainable Development).

In the early 1990s, I commissioned the European Community President Jacques Delors to produce a Report on Education for the Twenty-first Century which was drafted by a committee of prominent professors at all levels, as well as educators, sociologists, philosophers, etc. The Report defined the four principal pillars of the educational process: learning to know, learning to do, learning to be and learning to live together. Among the four, I would like to underscore the principle of “learning to be”. A century ago, Francisco Giner de los Ríos affirmed that “education is the capacity to sensibly manage one’s own life”. Yes, learning to use the distinctive and infinite powers of the human species: thought, imagination, foresight, creativity! To the Delors Committee’s pillars I added “learn to undertake”. I remember that after a long stay in the Biochemistry Department at Oxford University whose county coat of arms reads “Sapere aude”! (dare to know!), I returned to Spain and thought that *while daring to know, one must also know how to dare*, since risk without knowledge is dangerous, and knowledge without risk is useless. Learn to dare, to learn to undertake, to innovate! I remember some mountaineers who once said, “We did it because we didn’t know it was impossible”.

We must *always bear in mind the difference between education and training*. Training may vary at times substantially, reflecting progress made in the acquisition of new knowledge. In contrast, education isn’t based on aptitudes, but rather on attitudes, that is, following unchanging principles that derive from abilities that are exclusive to the human condition.

Neither has any other common or permanent characteristics, other than quality and accuracy, where there is no room for partisanship, bias or political agendas.

A few words now about the production and dissemination of knowledge. When some focus on commercial aspects, centering mainly or even solely on technology, I feel I need to remind them what I read in 1965 in the Biochemistry Department of the Argentine Nobel Laureate Bernardo Houssay: “*There is no applied science if there is no science to apply*”. Professor Hans Krebs said, “Science exists to prevent or lessen human suffering”. Science that results from discovery, from looking at life from a different perspective. Krebs used to repeat, “*Research is seeing what others also see and thinking what no one has ever thought*”, underscoring the role of imagination in developing research hypotheses.

“*For a socially responsible university*” was the excellent theme of the 9th International Conference on Higher Education “University 2014”, which was renewing its commitment to the university and to our times, while continuing the on-going discussions and debates in the area of higher education.

Among the major questions to be addressed on the social responsibility of universities, I would like to underscore the following:

1. Policies and perspectives of higher education for a socially responsible university.
2. *Educational and teaching challenges in training highly qualified professionals who are committed to society. Universities with socially responsible management of environment, energy and sustainable development.*
3. *Use of information technologies to support the social mission of universities.*
4. Improvement in the training of educational and health professionals in universities as an expression of social responsibility.
5. *Food Security: the responsibility of universities toward society and its food sufficiency.*

“With few exceptions, universities haven’t fulfilled their role as catalysts for social change.”

At this point I believe it would be interesting to examine what were considered the great challenges for higher education 25 years ago and the solutions that were proposed at that time. Here are some of the points that I addressed and the recommendations that I made at the Europe-Latin America University Conference held in 1987 in Buenos Aires:

- *“The genuine wealth of a country has its expression in its capacity for creativity, innovation, and in its capacity to respond to challenges both personally and collectively”.*
- *“The unwavering reason for the university’s existence is to bring culture to all citizens”.*
- *“New dimensions and change require an attitude of permanent learning”.*
- *“Universities can and must play a fundamental role in providing an accurate analysis of the present and in predicting the future”.*
- *“The quality of its teaching staff is the indisputable essence of a university”.*
- *“If you really believe that institutions of higher education are the motors of society on whose actions future progress depends, then new national priorities must be established so that education and science receive the financial and social support that they so urgently need”.*
- *“With few exceptions, universities haven’t fulfilled their role as catalysts for social change”.*
- *“The only requirement for choosing professors should be their qualifications. And as for students, access to higher education shouldn’t be based on their families’ economic standing, but rather on their duly accredited efforts and abilities”.*
- *“We cannot expect universities to be rebuilt or renewed in a context that is anachronistic and indifferent to any change”.*

- “Transformation of our universities can only be achieved with the necessary daring and lucid political, social and economic changes. It is stimulating and supporting that universities can play a fundamental role in the transformation process”.
- “Universities must become permanent centers for higher learning, and institutions capable of mobilizing all of their intellectual potential”.
- “If universities lead the never-ending rebellion against ignorance, and if they still have the strength required to implement the previously mentioned transformations, then universities will provide the life blood of all educational activities”.

‘Socially responsible universities’: Universities that can seek support from a society which is now aware, because it is progressively awakening from the apathy in which it has lived for centuries. In December 1948, the United Nations General Assembly passed and proclaimed the Universal Declaration of Human Rights... asking all member states “to publicize the text of the Declaration and to cause it to be disseminated, displayed, read and expounded principally in schools and other educational institutions, without distinction based on the political status of countries or territories”. The Preamble reads: “Whereas recognition of the inherent dignity and of the *equal and inalienable rights of all members of the human family* is the foundation of justice and peace in the world... the advent of a world in which human beings shall enjoy freedom of speech and belief and freedom from fear and want has been proclaimed as the highest aspiration of the common people”...

It is fundamental to underscore the idea of “freedom from fear and want”. And the fact is that, confined both territorially and intellectually, the world’s inhabitants have always lived and died in extremely limited spaces. And they have lived in fear, without points of reference, without the capacity for comparison or to seek answers to essential questions. For that reason, the third paragraph of the Preamble of Universal Declaration affirms that, “if man is *not to be compelled to have recourse, as a last resort, to rebellion*,... human rights should be protected by the rule of law”. *Overcoming inertia, to facilitate evolution and avoid revolution, universities must fully implement the theme of this International Conference: they must be socially responsible*, devoting themselves to “the Peoples”, as the Preamble of the United Nations Charter so wisely insists. It doesn’t mention states or government, but rather the “Peoples”. People who have decided to “save succeeding generations from the scourge of war”. This means that they assume that supreme commitment—so often evoked by President Nelson Mandela—should be the primary characteristic of future generations. *It is the duty of each generation to take the next one into account*. And, for once and for all, *to enable peace to prevail over war, and words to prevail over force*. From the beginning of time, the powers have always followed that perverse adage: “If you want peace, prepare for war”. And thus, at the end of World War I the Republican Party prevented the United States from joining the League of Nations that President Wilson had created to implement his ‘Covenant for Permanent Peace’.

President Roosevelt’s magnificent plan at the end of World War II placed “the Peoples” at the forefront of history. And the Constitution of UNESCO, as the United Nations’ intellectual institution, proclaimed that the educated people must be “free and responsible”, that they must be guided by the “democratic principles” of justice, equality and “intellectual and

moral” solidarity. But all these, as well as the “free flow of ideas by word and image...,” were all too soon ignored and forgotten by the great powers that invariably had security as their supreme concern.

Let us now review the content of Article 26 of the Universal Declaration of Human Rights, “distributed, exhibited, read and discussed” in all educational institutions: “higher education shall be equally accessible to all on the basis of *merit*”. The reference at this point is to adult citizens. Obligatory or compulsory provisions are excluded. The basis is merit, with respect to all members of the academic community, both professors and students. Merit, dedication, effort and imagination are required in order to be fully “free and responsible”.

The second paragraph of Article 26 reads, “Education shall be directed to the *full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms*. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace”. The Universal Declaration and the aforementioned text are especially pertinent at this time when we observe that biased definitions are so often being offered by institutions specializing in other areas, such as economics, and which should not be interfering in education to promote their own interests.

In the late 1940s and early 1950s the key words were “sharing” and “international cooperation.” Sharing what we have with others and distributing wealth adequately were the essence of those “*democratic principles*” that had to be observed in order to put an end to an era of absolute power. “Unity is strength” and it was necessary for all countries to unite (“United Nations”) to achieve the overall and proportional development that would enable peaceful coexistence at the national and international levels. I recall incessant deliberations about the nature of “development”: it should be integral, that is, not limited to economic aspects but rather including, above all, those of a social and cultural nature; it should be *endogenous*; it should be “*sustainable*,” according to the definition suggested by the committee chaired by Gro Harlem Brundtland; and in the late 1980s and at the behest of UNICEF’s Assistant Director Richard Jolly, development should above all be *human* (“Development with a Human Face”).

While these debates concerning the nature of development ensued, the great superpowers were fully devoted to the arms race, raising the stakes to stratospheric levels: I recall with horror the “Star Wars” in which the United States and the Soviet Union were then engaged. “Star Wars!”... While the majority of the rest of the world were engaged in “star-vation”, as I saw it written in large letters in a street in New York. International cooperation became exploitation; subsidies and loans were granted in draconian conditions; the Nation-State was progressively weakened in favor of large multinational corporations. And it was precisely educational institutions, research centers and universities that maintained the flame of human progress and ethical values alive.

To provide the current inhabitants of the earth with the strength they require, now that they may finally cease to be invisible, anonymous, and to have the stimuli to enable them to work tirelessly for equal human dignity and world governance encompassing all human beings and not only a privileged few, it is essential to always bear in mind the episodes that I personally or from the perspective of the university have experienced or witnessed:

the Ku Klux Klan and racial segregation in the United States; the lack of freedom and excesses of power in the Soviet Union; *apartheid* in South Africa; the abominable practices of “Operation Condor” in Latin America; the economic and technological colonialism imposed without hesitation in so many countries of Africa; the craving for domination of the Republican Party, led by Ronald Reagan and seconded by UK Prime Minister Margaret Thatcher, who replaced the United Nations with groups of plutocrats and democratic principles for the rules of the marketplace. Although it would appear unthinkable, based solely on their wealth and military power,

“The unexpected is our hope. The unexpected is the best that can be expected of human beings endowed with creativity”

6-8 countries intended to govern the other 193 countries existing at that time. Unthinkable, but true. And, nevertheless, the unexpected happened. *The unexpected is our hope.* The unexpected is the best that can be expected of human beings endowed with creativity. Suddenly, a dark-skinned prisoner called Nelson Mandela, after 27 years in prison, emerged from incarceration without seeking revenge. Contrarily, he emerged with open arms and, complicity with another great figure, President Frederik de Klerk, ushered in the downfall of racial *apartheid* in a few months. He became the first black president, marking the course of a “new beginning” in South Africa and on the African continent as a whole.

Likewise, thanks to Mikhail Sergeyevich Gorbachev’s radical change in the manner of exercising power which was unexpected. With the fall of the Berlin Wall, the vast Soviet empire fell and its members formed the Commonwealth of Independent States which thus commenced their long march toward building regimes based on public liberties and pluralism.

A system based on equality but had forsaken liberty has finally fallen. But the alternative, based on liberty but forsaking equality, failed to learn its lesson. It was just the opposite; it intensified and imposed rules and standards of conduct on the West, in a very peculiar manner.

Nevertheless, in the late 1980s everything pointed to peace: with the end of the Cold War and racism in South Africa, thanks to initiatives supported by UN Secretary General Javier Perez de Cuellar, in a few years peace finally came to Mozambique with the wise intervention of President Joaquim Chissano and the Community of Saint Egidio; the civil conflict in El Salvador was resolved at Chapultepec; and the peace process was renewed in Guatemala. Yes, in the late 1980s everyone demanded peace, a demand that was ignored by those who thought that the moment had come to achieve their dreams of dominance.

The West, and particularly Europe, is experiencing the collapse of a system based on an economy of speculation, delocalization of production—which, above all, has converted China into a huge communist capitalist—and war, whose tragic balance may be summarized in 3 billion dollars invested daily in military spending and weapons. At the same time, more than 50,000 people die of hunger and neglect daily, the majority of whom are children under five years of age.

However, beyond the confusion gripping Europe, the effects of emerging citizen power are being felt: Latin America, Africa, a few Arab and Asian countries—including India, both qualitatively and quantitatively—are taking a new course and applying original models.

Previously, only twenty years ago, it was unimaginable that institutions using socially responsible policies could decisively influence the attitudes and lives of the majority of people. *But now, with a global conscience, the growing participation of women in decision-making processes and the new digital technologies, it is now possible to initiate the great transitions capable of transforming this era of changes into a change of era.*

These are the urgent transformations that must be implemented worldwide:

- the transition from an economy with the characteristics described above to *an economy based on knowledge, for global sustainable and human development,*
- *the transition from a culture of imposition, violence and war to a culture of consensus, dialogue, conciliation, alliance and peace,*
- in short, *a historical transition from force to word.*

Today only 20% of humanity lives in the wealthy neighborhoods of our global village. The other 80%, in progressive degrees of scarcity, survives in conditions that cannot support human dignity. Thus it is *absolutely necessary that we establish priorities that take into account all of the Earth's inhabitants and their ecological environment.*

These priorities, which universities can greatly influence with their intentions and demands, may be summarized as:

- Food
- Water
- Health
- Environment
- Education

In reality, it is a matter of ensuring not only existence, not only life, but rather a *dignified life* for all human beings. A recent Oxfam publication revealed that 85 people have the same wealth as 3,500 million human beings, approximately half of all mankind. *This can't be the case. This daily genocide of hunger and neglect can't continue. These intolerable inequalities in the distribution of all types of resources just can't exist.*

Now that the voice of the people can be heard, we must ensure that everyone understands that *implementing human rights benefits all of us equally.* Everyone must understand that accumulating immense fortunes adds nothing to an already comfortable life. I would like to repeat a simple observation that I read one day in a small chapel in the south of France: "Les linceuls n'ont pas de poches" ("funeral shrouds have no pockets"). Whether we are born to wealth or poverty, death is a great equalizer. Thus, it is essential that the *scientific, academic, intellectual, and artistic communities become the true protagonists of this change* and achieve now what in 1945 was impossible: cooperation, working together, adequately sharing in a context of democratic principles that subject other dimensions of coexistence to social justice and the conditions inherent in a life of dignity for all.

In view of the foregoing points, these are the great objectives that universities should pursue, using all of their influence and capacity for mobilization, both in the classroom and in cyberspace:

1. *A re-founding of the United Nations System* making “We, the peoples” a reality in the General Assembly—which is already the case in the International Labor Organization, the “relic” of the League of Nations—in which 50% of the delegates would be representatives from the member countries and 50% from civil society, with a *Security Council in which veto rights would be replaced by weighted votes and with the addition of the Environmental Council and a Socioeconomic Council*.

This has all been well planned: it is now a matter of ensuring that they (especially the Republican Party in the United States) realize that the time for silence and passive citizens in the world is over. It is essential to return to the concept of a “United Nations” so that all of us, together, may achieve the great transformations previously mentioned, especially the power of words to demand equal dignity for all human beings.

2. *Nuclear disarmament*: it is madness for the world to continue under the sword of Damocles of nuclear weapons. No excuses can be made for reasons of security, because that would contradict all norms. Thus, use of these weapons must immediately cease. If the great majority of the world’s universities were to demand that we usher in the post-nuclear era in war scenarios, this would be a giant step toward achieving that other world which we all desire.
3. *Strengthening genuine democracy* as the only context in which it is possible to implement human rights. Universities should familiarize themselves and offer their observations on the *project for a Universal Declaration on Democracy*.^{*} This Declaration, in addition to ethical, social and cultural aspects, also includes economic and international ones.
4. There are already *associations of institutions of higher education at the global and regional levels*. But especially now that new digital technologies enable us to “come even closer” even while remaining at a distance, it would be wonderful if we could collaborate so that institutions of higher education could not only be places for life-long learning (especially important given our present rates of longevity), but could likewise take actions to support or reject options that would ultimately and rapidly *usher in the previously mentioned transformations, including fulfilling our obligations to future generations, both from a social perspective as well as with respect to protecting the environment*.

The World University Consortium,[†] a project of the World Academy of Art and Science, includes as members the International Association of University Presidents, the Inter-University Centre at Dubrovnik, Library of Alexandria among others.

In my opinion, one of the current activities related to the World Academy of Art & Science that is particularly relevant is the “*new paradigm*”, which seeks to formulate alternatives to the present neoliberal system and in which Green Cross Foundation, the Club of Rome and Foundation for a Culture of Peace, among others, are participating.

Here are a few lines from the Earth Charter, one of the most lucid documents from the last decade: “We stand at a critical moment in the Earth’s history, *a time when humanity*

^{*} Drafted with contributions from Karel Vasak, Juan Antonio Carrillo Salcedo, Mario Soares and other persons who have distinguished themselves for their knowledge of this essential matter. See Universal Declaration on Democracy: http://www.fund-culturadepaz.org/democracia_esp.php

[†] See <http://www.wunicon.org/>

must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace... We must realize that when basic needs have been met, human development is primarily about being more, not having more. We have the knowledge and technology to provide for all and to reduce our impact on the environment. The emergence of a global civil society is creating new opportunities to build a democratic and humane world’.

“We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace....”

– The Earth Charter

Today, for the reasons previously set forth, there is no doubt that universities, united to reach these great objectives, can have an extraordinary impact on the great changes that could really *make the 21st century the century of the peoples, the century that can offer a life of dignity for all.*

- Another matter that I would like to address is one that is being promoted by the Rector of the University of Oslo, “Universities against the Death Penalty”.[‡] Professor Lill Scherdin, of Oslo University, is the head of this initiative. In just a few years the number of countries that have abolished or have implemented a moratorium on the death penalty has risen from around thirty to over 150. In that regard, all Latin American countries have abolished the death penalty, either by law, or *de facto* (as is the case in Guatemala and Cuba in which not only have executions been abolished, but death row has likewise been eliminated). The movement to abolish the death penalty in Africa has likewise made extraordinary progress in the last few years. However, bad examples still exist, headed by the United States where, despite reductions in six states over the last few years, capital punishment is still prevalent in 34 states. And let’s not even mention China, Iran or Saudi Arabia. It is essential that we address this major objective with the support of all intellectuals, academics, scientists and artists.

A new era now lies on the horizon. A new era, thanks to universities and the scientific and creative communities, will bring a transition that will turn subjects to citizens, passive spectators to actors, witnesses to actual agents of change.

With the active and enthusiastic participation of socially responsible universities, civil society will soon be mobilized. And universities will undoubtedly be at the forefront of this great process.

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[‡] Universities against the Death Penalty: <http://www.uio.no/english/about/collaboration/universities-against-death-penalty/>

The Future of International Law

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“With law shall our land be built up, but with lawlessness laid waste.”

– Njal’s Saga, Iceland, c 1270.

Abstract

After the invention of agriculture, roughly 10,000 years ago, humans began to live in progressively larger groups, which were sometimes multi-ethnic. In order to make towns, cities and finally nations function without excessive injustice and violence, both ethical and legal systems were needed. Today, in an era of global economic interdependence, instantaneous worldwide communication and all-destroying thermonuclear weapons, we urgently need new global ethical principles and a just and enforceable system of international laws.

1. What is Law?

The principles of law, ethics, politeness and kindness function in slightly different ways, but all of these behavioral rules help human societies to function in a cohesive and trouble-free way. Law is the coarsest. The mesh is made finer by ethics, while the rules of politeness and kindness fill in the remaining gaps.

Legal systems began at a time when tribal life was being replaced by life in villages, towns and cities. One of the oldest legal documents that we know of is a code of laws enacted by the Babylonian king Hammurabi in about 1754 BC. It consists of 282 laws, with scaled punishments, governing household behavior, marriage, divorce, paternity, inheritance, payments for services, and so on. An ancient 2.24 meter stele inscribed with Hammurabi’s Code can be seen in the Louvre. The laws are written in the Akkadian language, using cuneiform script.

Humanity’s great ethical systems also began during a period when the social unit was growing very quickly. It is an interesting fact that many of history’s greatest ethical teachers lived at a time when the human societies were rapidly increasing in size. One can think, for example of Moses, Confucius, Lao-Tzu, Gautama Buddha, the Greek philosophers, and Jesus. Muhammad came slightly later, but he lived and taught at a time when tribal life was being replaced by city life in the Arab world. During the period when these great teachers lived, ethical systems had become necessary to overwrite raw inherited human emotional behavior patterns in such a way that increasingly large societies could function in a harmonious and cooperative way, with a minimum of conflicts.

2. Magna Carta, 1215

2015 marks the 800th anniversary of the Magna Carta, which is considered to be the foundation of much of our modern legal system. It was drafted by the Archbishop of Canterbury to make peace between the unpopular Norman King John of England and a group of rebel barons. The document promised the protection of church rights, protection for the barons from illegal imprisonment, access to swift justice, and limitations of feudal payments to the Crown. It was renewed by successive English sovereigns, and its protection against illegal imprisonment and provisions for swift justice was extended from the barons to ordinary citizens. It is considered to be the basis for British constitutional law, and in 1789, it influenced the drafting of the Constitution of the United States. Lord Denning described the Magna Carta as “the greatest constitutional document of all times: the foundation of the freedom of the individual against the arbitrary authority of the despot.”

3. The English Bill of Rights, 1689

When James II was overthrown by the Glorious Revolution, the Dutch stadholder William III of Orange-Nassau and his wife, Mary II of England were invited to be joint sovereigns of England. The Bill of Rights was originally part of the invitation, informing the couple regarding the limitations that would be imposed on their powers. Later the same year, it was incorporated into English law. The Bill of Rights guaranteed the supremacy of Parliament over the monarch. It forbade cruel and unusual punishments, excessive bail and excessive fines. Freedom of speech and free elections were also guaranteed, and a standing army in peacetime was forbidden without the explicit consent of the Parliament. The Bill of Rights was influenced by the writings of the Liberal philosopher, John Locke (1632-1704).

4. The United States Constitution and Bill of Rights, 1789

The history of the Federal Constitution of the United States is an interesting one. It was preceded by the Articles of Confederation, which were written by the Second Continental Congress between 1776 and 1777, but it soon became clear that the Confederation was too weak a form of union for a collection of states.

George Mason, one of the drafters of the Federal Constitution, believed that “such a government was necessary as could directly operate on individuals, and would punish those only whose guilt required it”, while another drafter, James Madison, wrote that the more he reflected on the use of force, the more he doubted “the practicality, the justice and the efficacy of it when applied to people collectively, and not individually.”

Finally, Alexander Hamilton, in his Federalist Papers, discussed the Articles of Confederation with the following words: “To coerce the states is one of the maddest projects that was ever devised... Can any reasonable man be well disposed towards a government which makes war and carnage the only means of supporting itself, a government that can exist only by the sword? Every such war must involve the innocent with the guilty. The single consideration should be enough to dispose every peaceable citizen against such government... What is the cure for this great evil? Nothing, but to enable the... laws to operate on individuals, in the same manner as those of states do.”

* See http://en.wikipedia.org/wiki/Magna_Carta

In other words, the essential difference between a confederation and a federation, both of them unions of states, is that a federation has the power to make and to enforce laws that act on individuals, rather than attempting to coerce states (in Hamilton's words, "one of the maddest projects that was ever devised.") The fact that a confederation of states was found to be far too weak a form of union is especially interesting because our present United Nations is a confederation. We are at present attempting to coerce states with sanctions that are "applied to people collectively and not individually." The International Criminal Court, which we will discuss below, is a development of enormous importance, because it acts on individuals, rather than attempting to coerce states.

"Our best hope for the future lies in gradually reforming and strengthening the United Nations, until it becomes a federation."

There are many historical examples of successful federations; but in general, unions of states based on the principle of confederation have proved to be too weak. Probably, our best hope for the future lies in gradually reforming and strengthening the United Nations, until it becomes a federation.

In the case of the Federal Constitution of the United States, there were Anti-Federalists who opposed its ratification because they feared that it would be too powerful. Therefore, on June 8, 1789, James Madison introduced in the House of Representatives a series of 39 amendments to the Constitution, which would limit the government's power. Of these, only amendments 3 to 12 were adopted, and these have become known collectively as the Bill of Rights.

Of the ten amendments that constitute the original Bill of Rights, we should take particular notice of the First, Fourth and Sixth, because they have been violated repeatedly and grossly by the present government of the United States.

The First Amendment requires that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances." The right to freedom of speech and freedom of the press has been violated by the punishment of whistleblowers. The right to assemble peaceably has also been violated repeatedly and brutally by the present government's militarized police.

The Fourth Amendment states that "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized." It is hardly necessary to elaborate on the U.S. Government's massive violations of the Fourth Amendment. Edward Snowden's testimony has revealed a huge secret industry carrying out illegal and unwarranted searches and seizures of private data, not only in the United States, but also throughout the world. This data can be used to gain power over citizens and leaders through blackmail. True democracy and dissent are thereby eliminated.

The Sixth Amendment requires that "In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the

crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defense.” This constitutional amendment has also been grossly violated.

In the context of federal unions of states, the Tenth Amendment is also interesting. This amendment states that “The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.” We mentioned above that historically, federations have been very successful. However, if we take the European Union as an example, it has had some problems connected with the principle of subsidiarity, according to which as few powers as possible should be decided centrally, and as many issues as possible should be decided locally. The European Union was originally designed as a free trade area, and because of its history commercial considerations have trumped environmental ones. The principle of subsidiarity has not been followed, and enlightened environmental laws of member states have been declared to be illegal by the EU because they conflicted with free trade. These are difficulties from which we can learn as we contemplate the conversion of the United Nations into a federation.

The United States Bill of Rights was influenced by John Locke and by the French philosophers of the Enlightenment. The French Declaration of the Rights of Man (August, 1789) was almost simultaneous with the U.S. Bill of Rights.[†]

We can also see the influence of Enlightenment philosophy in the wording of the U.S. Declaration of Independence (1776): “We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness – That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed...” Another criticism that can be leveled against the present government of the United States is that its actions seem to have nothing whatever to do with the consent of the governed, not to mention the violations of the rights to life, liberty and the pursuit of happiness implicit in extrajudicial killings.¹

5. Kellogg-Briand Pact, 1928

World War I was a catastrophe that still casts a dark shadow over the future of humanity. It produced enormous suffering, brutalization of values, irreparable cultural loss, and a total of more than 37 million casualties, military and civilian. Far from being the “war to end war”, the conflict prepared the way for World War II, during which nuclear weapons were developed; and these now threaten the existence of the human species and much of the biosphere.

After the horrors of World War I, the League of Nations was set up in the hope of ending the institution of war forever. However, many powerful nations refused to join the League, and it withered. Another attempt to outlaw war was made in 1928 in the form of a pact named after its authors, U.S. Secretary of State Frank B. Kellogg and French Foreign Minister Astrid Briand. The Kellogg-Briand Pact is formally called the General Treaty for the Renunciation

[†] See http://en.wikipedia.org/wiki/Natural_and_legal_rights, http://en.wikipedia.org/wiki/John_Locke and http://en.wikipedia.org/wiki/Declaration_of_the_Rights_of_Man_and_of_the_Citizen

of War as an Instrument of National Policy. It was ultimately ratified by 62 Nations, including the United States (by a Senate vote of 85 to 1). Although frequently violated, the Pact remains in force today, establishing a norm which legally outlaws war.

6. United Nations Charter, 1945

The Second World War was even more disastrous than the First. Estimates of the total number of people who died as a result of the war range between 50 million and 80 million. With the unspeakable suffering caused by the war fresh in their minds, representatives of the victorious allied countries assembled in San Francisco to draft the charter of a global organization which they hoped would end the institution of war once and for all.

The Preamble to the United Nations Charter starts with the words: “We, the peoples of the United Nations, determined to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind; and to unite our strength to maintain international peace and security; and to ensure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest; and to employ international machinery for the promotion of the economic and social advancement of all peoples, have resolved to combine our efforts to accomplish these aims.”

Article 2 of the UN Charter requires that “All members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state.” This requirement is somewhat qualified by Article 51, which says that “Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security.”

Thus, in general, war is illegal under the UN Charter. Self-defense against an armed attack is permitted, but only for a limited time, until the Security Council has had time to act. The United Nations Charter does not permit the threat or use of force in preemptive wars, or to produce regime changes, or for so-called “democratization”, or for the domination of regions that are rich in oil.[‡]

Clearly, the United Nations Charter aims at abolishing the institution of war once and for all; but the present Charter has proved to be much too weak to accomplish this purpose, since it is a confederation of the member states rather than a federation. This does not mean that our present United Nations is a failure. Far from it! The UN has achieved almost universal membership, which the League of Nations failed to do. The Preamble to the Charter speaks of “the promotion of the economic and social advancement of all peoples”, and UN agencies, such as the World Health Organization, the Food and Agricultural Organization and UNESCO, have worked very effectively to improve the lives of people throughout the world. Furthermore, the UN has served as a meeting place for diplomats from all countries, and many potentially serious conflicts have been resolved by informal conversations behind the scenes at the UN. Finally, although often unenforceable, resolutions of the UN General Assembly and declarations by the Secretary General have great normative value.

When we think of strengthening and reforming the UN, then besides giving it the power to make and enforce laws that are binding on individuals, we should also consider giving it an

[‡] See <http://www.un.org/en/documents/charter/preamble.shtml>

independent and reliable source of income. As it is, rich and powerful nations seek to control the UN by means of its purse strings: They give financial support only to those actions that are in their own interests.

“The voting system of the United Nations General Assembly needs to be reformed, and the veto power in the Security Council needs to be abolished.”

A promising solution to this problem is the so-called “Tobin tax”, named after the Nobel Laureate economist James Tobin of Yale University. Tobin proposed that international currency exchanges should be taxed at a rate between 0.1 and 0.25 percent. He believed that even this extremely low rate of taxation would have the beneficial effect of damping speculative transactions, thus stabilizing the rates of exchange between currencies. When asked what should be done with the proceeds of the tax, Tobin said, almost as an afterthought, “Let the United Nations have it.”

The volume of money involved in international currency transactions is so enormous that even the tiny tax proposed by Tobin would provide the United Nations with between 100 billion and 300 billion dollars annually. By strengthening the activities of various UN agencies, the additional income would add to the prestige of the United Nations and thus make the organization more effective when it is called upon to resolve international political conflicts. The budgets of UN agencies, such as the World Health Organization, the Food and Agricultural Organization, UNESCO and the UN Development Programme, should not just be doubled but should be multiplied by a factor of at least twenty.

With increased budgets the UN agencies could sponsor research and other actions aimed at solving the world’s most pressing problems: AIDS, drug-resistant infectious diseases, tropical diseases, food insufficiencies, pollution, climate change, alternative energy strategies, population stabilization, peace education, as well as combating poverty, malnutrition, illiteracy, lack of safe water and so on. Scientists would be less tempted to find jobs with arms-related industries if offered the chance to work on idealistic projects. The United Nations could be given its own television channel, with unbiased news programs, cultural programs, and “State of the World” addresses by the UN Secretary General.

In addition, the voting system of the United Nations General Assembly needs to be reformed, and the veto power in the Security Council needs to be abolished.

7. International Court of Justice, 1946

The International Court of Justice (ICJ) is the judicial arm of the United Nations. It was established by the UN Charter in 1945, and it began to function in 1946. The ICJ is housed in the Peace Palace in The Hague, a beautiful building constructed with funds donated by Andrew Carnegie. Since 1946, the ICJ has dealt with only 161 cases. The reason for this low number is that only disputes between nations are judged, and both the countries involved in a dispute have to agree to abide by the Court’s jurisdiction before the case can be accepted.

Besides acting as an arbitrator in disputes between nations, the ICJ also gives advisory opinions to the United Nations and its agencies. An extremely important judgment of this kind was given in 1996: In response to questions put to it by WHO and the UN General Assembly, the Court ruled that “the threat and use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and particularly the principles and rules of humanitarian law.” The only possible exception to this general rule might be “an extreme circumstance of self-defense, in which the very survival of a state would be at stake”. But the Court refused to say that even in this extreme circumstance the threat or use of nuclear weapons would be legal. It left the exceptional case undecided. In addition, the World Court added unanimously that “there exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict international control.”

This landmark decision has been criticized by the nuclear weapon states as being decided “by a narrow margin”, but the structuring of the vote made the margin seem more narrow than it actually was. Seven judges voted against Paragraph 2E of the decision (the paragraph which states that the threat or use of nuclear weapons would be generally illegal, but which mentions as a possible exception the case where a nation might be defending itself from an attack that threatened its very existence.) Seven judges voted for the paragraph, with the President of the Court, Mohammed Bedjaoui of Algeria casting the deciding vote. Thus the Court adopted it, seemingly by a narrow margin. But three of the judges who voted against 2E did so because they believed that no possible exception should be mentioned! Thus, if the vote had been slightly differently structured, the result would have been ten to four.

Of the remaining four judges who cast dissenting votes, three represented nuclear weapons states, while the fourth thought that the Court ought not to have accepted the questions from WHO and the UN. However, Judge Schwebel from the United States, who voted against Paragraph 2E, nevertheless added, in a separate opinion, “It cannot be accepted that the use of nuclear weapons on a scale which would, or could, result in the deaths of many millions in indiscriminate inferno and by far-reaching fallout, have pernicious effects in space and time, and render uninhabitable much of the earth, could be lawful.”

Judge Higgins from the UK, the first woman judge in the history of the Court, had problems with the word “generally” in Paragraph 2E and therefore voted against it, but she thought that a more profound analysis might have led the Court to conclude in favor of illegality in all circumstances.

Judge Fleischhauer of Germany said, in his separate opinion, “The nuclear weapon is, in many ways, the negation of the humanitarian considerations underlying the law applicable in armed conflict and the principle of neutrality. The nuclear weapon cannot distinguish between civilian and military targets. It causes immeasurable suffering. The radiation released by it is unable to respect the territorial integrity of neutral States.”

President Bedjaoui, summarizing the majority opinion, called nuclear weapons “the ultimate evil”, and said, “By its nature, the nuclear weapon, this blind weapon, destabilizes humanitarian law, the law of discrimination in the use of weapons... The ultimate aim of every action in the field of nuclear arms will always be nuclear disarmament, an aim which is no longer utopian and which all have a duty to pursue more actively than ever.”

8. Nuremberg Principles, 1947

In 1946, the United Nations General Assembly unanimously affirmed “the principles of international law recognized by the Charter of the Nuremberg Tribunal and the judgment of the Tribunal”. The General Assembly also established an International Law Commission to formalize the Nuremberg Principles. The result was a list that included Principle VI, which is particularly important in the context of the illegality of NATO.

Principle VI: The crimes hereinafter set out are punishable as crimes under international law:

a) Crimes against peace:

1. Planning, preparation, initiation or waging of a war of aggression or a war in violation of international treaties, agreements or assurances;
2. Participation in a common plan or conspiracy for accomplishment of any of the acts mentioned under (I).

Robert H. Jackson, who was the chief United States prosecutor at the Nuremberg trials, said that “To initiate a war of aggression is therefore not only an international crime; it is the supreme international crime, differing from other war crimes in that it contains within itself the accumulated evil of the whole.”

Furthermore, the Nuremberg principles state that “The fact that a person acted pursuant to order of his Government or of a superior does not relieve him from responsibility under international law, provided a moral choice was in fact possible to him.” The training of soldiers is designed to turn the trainees into automatons, who have surrendered all powers of moral judgment to their superiors. The Nuremberg Principles put the burden² of moral responsibility squarely back where it ought to be: on the shoulders of the individual.

9. The Universal Declaration of Human Rights, 1948

On December 10, 1948, the General Assembly of the United Nations adopted a Universal Declaration of Human Rights. 48 nations voted for adoption, while 8 nations abstained from voting. Not a single state voted against the Declaration. In addition, the General Assembly decided to continue work on the problem of implementing the Declaration. The Preamble to the document stated that it was intended “as a common standard of achievement for all peoples and nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms.”

Articles 1 and 2 of the Declaration state that “all human beings are born free and equal in dignity and in rights”, and that everyone is entitled to the rights and freedoms mentioned in the Declaration without distinctions of any kind. Neither race, color, sex, language, religion, political or other opinion, national or social origin, property or social origin must make a difference.

The Declaration states that everyone has a right to life, liberty and security of person and property. Slavery and the slave trade are prohibited, as well as torture and cruel, inhuman or degrading punishments. All people must be equal before the law, and no person must be subject to arbitrary arrest, detention or exile. In criminal proceedings, an accused person must

be presumed innocent until proven guilty by an impartial public hearing where all necessary provisions have been made for the defense of the accused.

“Education must be directed towards the full development of the human personality and to strengthening respect for human rights and fundamental freedoms.”

No one shall be subjected to interference with his privacy, family, home or correspondence. Attacks on an individual’s honor are also forbidden. Everyone has the right of freedom of movement and residence within the borders of a state, the right to leave any country, including his own, as well as the right to return to his own country. Every person has the right to a nationality and cannot be arbitrarily deprived of his or her nationality.

All people of full age have a right to marry and to establish a family. Men and women have equal rights within a marriage and at its dissolution, if this takes place. Marriage must require the full consent of both parties.

The Declaration also guarantees freedom of religion, of conscience, and of opinion and expression, as well as freedom of peaceful assembly and association. Everyone is entitled to participate in his or her own government, either directly or through democratically chosen representatives. Governments must be based on the will of the people, expressed in periodic and genuine elections with universal and equal suffrage. Voting must be secretive.

Everyone has the right to the economic, social and cultural conditions needed for dignity and free development of personality. The right to work is affirmed. The job shall be of a person’s own choosing, with favorable conditions of work, and remuneration consistent with human dignity, supplemented if necessary with social support. All workers have the right to form and to join trade unions.

Article 25 of the Declaration states that everyone has the right to an adequate standard of living, including food, clothing, housing and medical care, together with social services. All people have the right to security in the event of unemployment, sickness, disability, widowhood or old age. Expectant mothers are promised special care and assistance, and children, whether born in or out of wedlock, shall enjoy the same social protection. Everyone has the right to education, which shall be free in the elementary stages. Higher education shall be accessible to all on the basis of merit. Education must be directed towards the full development of the human personality and to strengthening respect for human rights and fundamental freedoms. Education must promote understanding, tolerance, and friendship among all nations, racial and religious groups, and it must further the activities of the United Nations for the maintenance of peace.

A supplementary document, the Convention on the Rights of the Child, was adopted by the United Nations General Assembly on the 12th of December, 1989. Furthermore, in July 2010, the General Assembly passed a resolution affirming that everyone has the right to clean drinking water and proper sanitation.

Many provisions of the Universal Declaration of Human Rights, for example Article 25, might be accused of being wishful thinking. In fact, Jean Kirkpatrick, former US Ambassador to the UN, cynically called the Declaration “a letter to Santa Claus”. Nevertheless, like the Millennium Development Goals, the Universal Declaration of Human Rights has great value in defining the norms towards which the world ought to be striving.

It is easy to find many examples of gross violations of basic human rights that have taken place in recent years. Apart from human rights violations connected with interventions of powerful industrial states in the internal affairs of third world countries, there are many cases where governmental forces in the less developed countries have violated the human rights of their own citizens. Often minority groups have been killed or driven off their land by those who coveted the land, as was the case in Guatemala in 1979, when 1.5 million poor Indian farmers were forced to abandon their villages and farms and to flee to the mountains of Mexico in order to escape murderous attacks by government soldiers. The blockade of Gaza and extrajudicial killing by governments must also be regarded as blatant human rights violations, and there are many recent examples of genocide.

Wars in general, and in particular, the use of nuclear weapons, must be regarded as gross violations of human rights. The most basic human right is the right to life; but this right is routinely violated in wars. Most of the victims of recent wars have been civilians, very often children and women. The use of nuclear weapons must be regarded as a form of genocide, since they kill people indiscriminately, babies, children, young adults in their prime and old people, without any regard for guilt or innocence.

10. Geneva Conventions, 1949

According to Wikipedia, “The Geneva Conventions comprise four treaties, and three additional protocols, that establish the standards of international law for the humanitarian treatment of war. The singular term, Geneva Convention, usually denotes the agreements of 1949, negotiated in the aftermath of the Second World War (1939-1945), which updated the terms of the first three treaties (1864, 1906, 1929) and added a fourth. The Geneva Conventions extensively defined the basic rights of wartime prisoners (civilians and military personnel); established protection for the wounded; and established protections for civilians in and around a war-zone. The treaties of 1949 were ratified, in whole or with reservations, by 196 countries.”

In a way, one might say that the Geneva Conventions are an admission of defeat by the international community. We tried to abolish war entirely through the UN Charter, but failed because the Charter was too weak.

Under the Fourth Geneva Convention, collective punishment is war crime. Article 33 states that, “No protected person may be punished for an offense that he or she did not personally commit.” Articles 47-78 also impose substantial obligations on occupying powers, with numerous provisions for the general welfare of the inhabitants of an occupied territory. Thus, Israel violated the Geneva Conventions by its collective punishment of the civilian population of Gaza in retaliation for largely ineffective Hamas rocket attacks. The larger issue, however, is the urgent need for lifting of Israel’s brutal blockade of Gaza, which has created what Noam Chomsky calls “the world’s largest open-air prison”. This blockade

violates the Geneva conventions because Israel, as an occupying power, has the duty of providing for the welfare of the people of Gaza.

11. Nuclear Non-Proliferation Treaty, 1968

In the 1960s, negotiations were started between countries that possessed nuclear weapons, and others that did not possess them, to establish a treaty that would prevent the spread of these highly dangerous weapons, but which would at the same time encourage cooperation in the peaceful uses of nuclear energy. The resulting treaty has the formal title ‘Treaty on the Non-Proliferation of Nuclear Weapons’ (abbreviated as the NPT). The Treaty also aimed at achieving general and complete disarmament. It was opened for signature in 1968, and it entered into force on the 11th of May, 1970.

190 parties have joined the NPT, and more countries have ratified it than any other arms limitation agreement, an indication of the Treaty’s great importance. Four countries outside the NPT have nuclear weapons: India, Pakistan, North Korea and Israel. North Korea had originally joined the NPT, but it withdrew in 2003.

The NPT has three main parts or “pillars”: 1) non-proliferation, 2) disarmament, and 3) the right to peaceful use of nuclear technology. The central bargain of the Treaty is that “the NPT non-nuclear weapon states agree never to acquire nuclear weapons and the NPT nuclear weapon states agree to share the benefits of peaceful use of nuclear technology and to pursue nuclear disarmament aimed at the ultimate elimination of their nuclear arsenals”.

Articles I and II of the NPT forbid states that have nuclear weapons to help other nations to acquire them. These Articles were violated, for example, by France, which helped Israel to acquire nuclear weapons, and by China, which helped Pakistan to do the same. They are also violated by the “nuclear sharing” agreements, through which US tactical nuclear weapons will be transferred to several countries in Europe in a crisis situation. It is sometimes argued that in the event of a crisis, the NPT would no longer be valid, but there is nothing in the NPT itself that indicates that it would not hold in all situations.

The most blatantly violated provision of the NPT is Article VI. It requires the member states to pursue “negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament”, and negotiations towards a “Treaty on general and complete disarmament”. In other words, the states that possess nuclear weapons agreed to get rid of them. However, during the 47 years that have passed since the NPT went into force, the nuclear weapon states have shown absolutely no sign of complying with Article VI. There is a danger that the NPT will break down entirely because the majority of countries in the world are so dissatisfied with this long-continued non-compliance.

Looking at the NPT with the benefit of hindsight, we can see the third “pillar”, the “right to peaceful use of nuclear technology”, as a fatal flaw of the treaty. In practice, it has meant encouragement of nuclear power generation, with all the many dangers that go with it. The enrichment of uranium is linked to reactor use. Many reactors of modern design make use of low enriched uranium as a fuel. Nations operating such a reactor may claim that they need a program for uranium enrichment in order to produce fuel rods. However, by operating their ultracentrifuge a little longer, they can easily produce highly enriched (weapons-usable) uranium.

The difficulty of distinguishing between a civilian nuclear power generation program and a military nuclear program is illustrated by the case of Iran. In discussing Iran, it should be mentioned that Iran is fully in compliance with the NPT. It is very strange to see states that are long-time blatant violators of the NPT threaten Iran because of a nuclear program that fully complies with the Treaty.

I believe that civilian nuclear power generation is always a mistake because of the many dangers that it entails, and because of the problem of disposal of nuclear waste. However, a military attack on Iran would be both criminal and insane. Why criminal? Because such an attack would also violate the UN Charter and the Nuremberg Principles. Why insane? Because it would initiate a conflict that might escalate uncontrollably into World War III.

12. Biological Weapons Convention, 1972

During World War II, British and American scientists investigated the possibility of using smallpox as a biological weapon. However, it was never used, and in 1969 President Nixon officially ended the American biological weapons program, bowing to the pressure of outraged public opinion. In 1972, the United States, the United Kingdom and the Soviet Union signed a Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction. Usually this treaty is known as the Biological Weapons Convention (BWC), and it has now been signed by virtually all of the countries of the world.

However, consider the case of smallpox: A World Health Organization team led by D.A. Henderson devised a strategy in which cases of smallpox were isolated and all their contacts vaccinated, so that the disease had no way of reaching new victims. Descriptions of the disease were circulated, and rewards offered for reporting cases. The strategy proved to be successful, and finally, in 1977, the last natural case of smallpox was isolated in Somalia. After a two-year waiting period, during which no new cases were reported, WHO announced in 1979 that smallpox, one of the most frightful diseases of humankind, had been totally eliminated from the world. This was the first instance of the complete eradication of a disease, and it was a demonstration of what could be achieved by the enlightened use of science combined with international cooperation. The eradication of smallpox was a milestone in human history.

It seems that our species is not really completely wise and rational; we do not really deserve to be called “Homo sapiens”. Stone-age emotions and stone-age politics are alas still with us. Samples of smallpox virus were taken to “carefully controlled” laboratories in the United States and the Soviet Union. Why? Probably because these two Cold War opponents did not trust each other, although both had signed the Biological Weapons Convention. Each feared that the other side might intend to use smallpox as a biological weapon. There were also rumors that unofficial samples of the virus had been saved by a number of other countries, including North Korea, Iraq, China, Cuba, India, Iran, Israel, Pakistan and Yugoslavia.

13. Chemical Weapons Convention, 1997

On the 3rd of September, 1992, the Conference on Disarmament in Geneva adopted a Convention on the Prohibition of Development, Production, Stockpiling, and Use of

Chemical Weapons and on their Destruction. This agreement, which is usually called the Chemical Weapons Convention (CWC), attempted to remedy some of the shortcomings of the Geneva Protocol of 1925. The CWC went into force in 1997, after Hungary deposited the 65th instrument of ratification.

The provisions of Article I of the CWC are as follows:

1. Each State Party to this convention undertakes never under any circumstances:
 - (a) To develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone;
 - (b) To use chemical weapons;
 - (c) To engage in any military preparation to use chemical weapons;
 - (d) To assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party in accordance with the provisions of this Convention.
2. Each State Party undertakes to destroy chemical weapons it owns or possesses, or those located at any place under its jurisdiction or control, in accordance with the provisions of this Convention.
3. Each State Party undertakes to destroy all chemical weapons it abandoned on the territory of another State Party, in accordance with the provisions of this Convention.
4. Each State Party undertakes to destroy any chemical weapons production facilities it owns or possesses, or those located at any place under its jurisdiction or control, in accordance with the provisions of this Convention.
5. Each State Party undertakes not to use riot control agents as a method of warfare.

The CWC also makes provision for verification by teams of inspectors, and by 2004, around 1,600 such inspections had been carried out in 59 countries. It also established the Organization for the Prevention of Chemical Warfare. All of the declared chemical weapons production facilities have now been inactivated, and all declared chemical weapons have been inventoried. However, of the world's declared stockpile of chemical warfare agents (70,000 metric tons), only 12% have been destroyed. One hopes that in the future the CWC will be ratified by all the nations of the world and that the destruction of stockpiled chemical warfare agents will become complete.

14. Mine Ban Treaty, 1999

In 1991, six NGOs organized the International Campaign to Ban Landmines, and in 1996, the Canadian government launched the Ottawa process to ban landmines by hosting a meeting among like-minded anti-landmine states. A year later, in 1997, the Mine Ban Treaty was adopted and opened for signatures. In the same year, Jody Williams and the International Campaign to ban Landmines were jointly awarded the Nobel Peace Prize. After the 40th ratification of the Mine Ban Treaty in 1998, the treaty became binding international law on the 1st of March, 1999. The Ottawa Treaty functions imperfectly because of the opposition of several militarily powerful nations, but nevertheless it establishes a valuable norm, and it represents an important step forward in the development of international law.

15. International Criminal Court, 2002

In 1998, in Rome, representatives of 120 countries signed a statute establishing an International Criminal Court (ICC), with jurisdiction over the crime of genocide, crimes against humanity, war crimes and the crime of aggression.

Four years were to pass before the necessary ratifications were gathered, but by Thursday, April 11, 2002, 66 nations had ratified the Rome agreement, 6 more than the 60 needed to make the court permanent. It would be impossible to overstate the importance of the ICC. At last, international law acting on individuals has become a reality! The only effective and just way that international laws can act is to make individuals responsible and punishable, since (in the words of Alexander Hamilton), “To coerce states is one of the maddest projects that was ever devised.”

At present, the ICC functions very imperfectly because of the bitter opposition of several powerful countries, notably the United States. U.S. President George W. Bush signed into law the American Service-Members’ Protection Act of 2002, which is intended to intimidate countries that ratify the treaty for the ICC. The new law authorizes the use of military force to liberate any American or citizen of a U.S. allied country being held by the court, which is located in The Hague. This provision, dubbed the “Hague Invasion Clause,” has caused a strong reaction from U.S. allies around the world, particularly in the Netherlands.³

Despite the fact that the ICC now functions so imperfectly, it is a great step forward in the development of international law. It is there and functioning. We have the opportunity to make it progressively more impartial and to expand its powers.

16. Arms Trade Treaty, 2013

On April 2, 2013, a historic victory was won at the United Nations, and the world achieved its first treaty limiting international trade in arms. Work towards the Arms Trade Treaty (ATT) began in the Conference on Disarmament in Geneva, which requires a consensus for the adoption of any measure. Over the years, the consensus requirement has meant that no real progress in arms control measures has been made in Geneva, since a consensus among 193 nations is impossible to achieve.

To get around the blockade, British U.N. Ambassador Mark Lyall Grant sent the draft treaty to Secretary-General Ban Ki-moon and asked him on behalf of Mexico, Australia and a number of others to put the ATT to a swift vote in the General Assembly, and on Tuesday, April 3, 2013, it was adopted by a massive majority.

Among the people who have worked hardest for the ATT is Anna MacDonald, Head of Arms Control at Oxfam. The reason why Oxfam works so hard on this issue is that trade in small arms is a major cause of poverty and famine in the developing countries. On April 9, Anna MacDonald wrote: “Thanks to the democratic process, international law will for the first time regulate the 70 billion dollar global arms trade. Had the process been launched in the consensus-bound Conference on Disarmament in Geneva, currently in its 12th year of meeting without even being able to agree on an agenda, chances are it would never have left the starting blocks...”

The passage of the Arms Trade Treaty by a majority vote in the UN General Assembly opens new possibilities for progress on other seemingly intractable issues. In particular, it gives hope that a Nuclear Weapons Convention might be adopted by a direct vote on the floor of the General Assembly. The adoption of the NWC, even if achieved against the bitter opposition of the nuclear weapon states, would make it clear that the world's peoples consider the threat of an all-destroying nuclear war to be completely unacceptable.

17. We can pass a Nuclear Weapons Convention in the UN General Assembly

A convention banning nuclear weapons could be adopted by a majority vote on the floor of the UN General Assembly, following the precedent set by the Arms Trade Treaty. Indeed, this is the path forward advocated by the International Campaign to Abolish Nuclear Weapons (ICAN). In the case of a Nuclear Weapons Convention, world public opinion would have especially great force. It is generally agreed that a full-scale nuclear war would have disastrous effects, not only on belligerent nations but also on neutral countries. Mr. Javier Pérez de Cuéllar, former Secretary-General of the United Nations, emphasized this point in one of his speeches:

“I feel”, he said, “that the question may justifiably be put to the leading nuclear powers: by what right do they decide the fate of humanity? From Scandinavia to Latin America, from Europe and Africa to the Far East, the destiny of every man and woman is affected by their actions. No one can expect to escape from the catastrophic consequences of a nuclear war on the fragile structure of this planet...”

“Like supreme arbiters, with our disputes of the moment, we threaten to cut off the future and to extinguish the lives of innocent millions yet unborn. There can be no greater arrogance. At the same time, the lives of all those who lived before us may be rendered meaningless; for we have the power to dissolve in a conflict of hours or minutes the entire work of civilization, with the brilliant cultural heritage of humankind.”

18. Racism, Colonialism and Exceptionalism

A just system of laws must apply equally and without exception to everyone. If a person, or, in the case of international law, a nation, claims to be outside the law, or above the law, then there is something fundamentally wrong. For example, when U.S. President Obama said in a 2013 speech, “What makes America different, what makes us exceptional, is that we are dedicated to act”, then thoughtful people could immediately see that something was terribly wrong with the system. If we look closely, we find that there is a link between racism, colonialism and exceptionalism. The racist and colonialist concept of “the white man’s burden” is linked to the Neo-Conservative self-image of benevolent (and violent) interference in the internal affairs of other countries.[§]

19. The Oslo Principles on Climate Change Obligation, 2015

The future of human civilization and the biosphere is not only threatened by thermonuclear war, it is also threatened by catastrophic climate change. If prompt action is not taken to

§ See <http://www.countercurrents.org/avery101013.htm>, <https://www.youtube.com/watch?v=eFl6T8lovqY>, and <https://www.youtube.com/watch?v=ldB-DRbjx9j0>

curb the use of fossil fuels, and if the presently known reserves of fossil fuels are not left in the ground, then there is a great danger that we will pass a tipping point beyond which human efforts to stop a catastrophic increase in global temperatures will be useless because feedback loops will have taken over. There is a danger of a human-initiated 6th geological extinction event, comparable with the Permian-Triassic event, during which 96 percent of marine species and 70 percent of terrestrial vertebrates became extinct.

“Together, we have the power to choose a future where international anarchy, chronic war and institutionalized injustice will be replaced by democratic and humane global governance, a future where the madness and immorality of war will be replaced by the rule of law.”

Recently, there have been a number of initiatives which aim at making the human obligation to avert threatened environmental mega-catastrophes a part of international law. One of these initiatives can be seen in the proposal of the Oslo Principles on Climate Change Obligations; another is the Universal Declaration of the Rights of Mother Earth; and a third can be found in the concept of Biocultural Rights. These are extremely important and hopeful initiatives, and they point towards the future development of international law for which we must strive.^{4,5}

20. Hope for the Future, and Responsibility for the Future

Can we abolish the institution of war? Can we hope and work for a time when the terrible suffering inflicted by wars will exist only as a dark memory fading into the past? I believe that this is really possible. The problem of achieving internal peace over a large geographical area is not insoluble. It has already been solved. There exist today many nations or regions within each of which there is internal peace, and some of these are so large that they are almost worlds in themselves. One thinks of China, India, Brazil, the Russian Federation, the United States, and the European Union. Many of these enormous societies contain a variety of ethnic groups, a variety of religions and a variety of languages, as well as striking contrasts between wealth and poverty. If these great land areas have been forged into peaceful and cooperative societies, cannot the same methods of government be applied globally?

Today, there is a pressing need to enlarge the size of the political unit from the nation-state to the entire world. The need to do so results from the terrible dangers of modern weapons and from global economic interdependence. The progress of science has created this need, but science has also given us the means to enlarge the political unit: Our almost miraculous modern communications media, if properly used, have the power to weld all of humankind into a single supportive and cooperative society.

We live at a critical time for human civilization, a time of crisis. Each of us must accept his or her individual responsibility for solving the problems that are facing the world today. We cannot leave this to the politicians. That is what we have been doing until now, and the

results have been disastrous. Nor can we trust the mass media to give us adequate public discussion of the challenges that we are facing. We have a responsibility towards future generations to take matters into our own hands, to join hands and make our own alternative media, to work actively and fearlessly for better government and for a better society.

We, the people of the world, not only have the facts on our side; we also have numbers on our side. The vast majority of the world's peoples long for peace. The vast majority long for abolition of nuclear weapons, and for a world of kindness and cooperation, a world of respect for the environment. No one can make these changes alone, but together we can do it.

Together, we have the power to choose a future where international anarchy, chronic war and institutionalized injustice will be replaced by democratic and humane global governance, a future where the madness and immorality of war will be replaced by the rule of law.

We need a sense of unity of all mankind to save the future, a new global ethic for a united world. We need politeness and kindness to save the future, politeness and kindness not only within nations but also between nations. To save the future, we need a just and democratic system of international law; for with law shall our land be built up, but with lawlessness laid waste.

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Notes

1. "The Declaration of Independence: A Transcription" *National Archives* http://www.archives.gov/exhibits/charters/declaration_transcript.html
2. John Scales Avery, "The future of International Law," *Transcend Media Service* 20 April 2015 <https://www.transcend.org/tms/2015/04/the-future-of-international-law-2/>
3. "U.S.: 'Hague Invasion Act' Becomes Law," *Human Rights Watch* 3 August 2002 <http://www.hrw.org/news/2002/08/03/us-hague-invasion-act-becomes-law>
4. "Oslo Principles on Global Climate Change Obligations," *Transcend Media Service* 13 April 2015 <https://www.transcend.org/tms/2015/04/oslo-principles-on-global-climate-change-obligations/>
5. "Universal Declaration of Rights of Mother Earth" *Global Alliance for the Rights of Nature* 22 April 2010 <http://therightsofnature.org/universal-declaration/>

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