

E-Journal of the World Academy of Art & Science

ERUDITIO

"A multidisciplinary forum focused on the social consequences and policy implications of all forms of knowledge on a global basis"

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Eruditio Vision

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

"The Role of Academies" is a brief history of the Academies and one of the most concise and insightful commentaries on the role of Academies in the march of civilization and progress. It is concise, densely packed, and loaded with challenging historical insights. Ivo Šlaus' overview of Global Academies is brief, but rich in insight. Šlaus has been a world leader in seeking not only to advance the agenda of the World Academy of Art and Science, but in reaching out to all sister Academies, world-wide, in seeking to forge a global web of connections to confront the great problems and challenges of our times.

"The Struggle for Justice in the Civil Rights March from Selma to Montgomery" is re-printed from an article that the author has published in the Faulkner Law Review. It was based on a key-note address he gave to commemorate the Civil Rights March from Selma to Montgomery, a march that highlighted the civil rights quest for social justice. In this article, Winston Nagan locates the dynamics of the claim for justice by the civil rights marches in the Magna Carta and the evolution of the rule of law idea in the common law system of justice. The article highlights the fact that the Magna Carta, although written for a community steeped in futile values, nonetheless contained concepts and ideas critical to the notion of justice that continued to endure over 1,000 years after the Magna Carta was imposed upon the English Sovereign. From the perspective of the World Academy the central message of the Magna Carta was its repudiation of Sovereign Absolutism. In various forms this remains a great challenge for a new paradigm of global governors. The article highlights the importance of judges who were professionally skilled, independent and competent in permitting the endurance of the rule of law as a challenge to sovereign absolutism. The march from Selma to Montgomery was a celebration of the idea of protest by non-violent strategies of action. In this regard, change came about from the top, from the middle and from the bottom. A crucial element in the change was a brave federal judge Frank Johnson ruled that the marchers had a right to march and petition for a redress of grievances. The article draws attention to the inspiration given by religious values and draws on the insights of physicist David Bohm. Bohm addresses that meaning is also being human.

John Scales Avery has provided us with a useful, short and punchy overview of the multitude of serious crises that confront humanity and contain the seeds of a possible extinction of human species in his article, "Institutional and Cultural Inertia". He attributes global failure to adequately respond to these crises and sees the lack of response as rooted in a form of institutional inertia. He also hints at the reasons for inertia which are partly related to sovereign absolutism and the growth of a global plutocracy. This suggests that enlightened thinkers such as those in the World Academy of Art and Science must be more realistic in their responses to the dangers of institutional inertia. Avery also suggests, that religious conservatism conspires to strengthen an inertia resistant to change and he also draws attention to the Santa Claus culture of high consumption which does not enhance more reflective human expectations about the crises we face. Avery's focus on factors that strengthen inertia is an important arena for further and informed discourse.

Donato Kiniger-Passigli & Anna Biondi have written an important paper about the role of human responsibility collectively, as humanity approaches the looming crisis that could promise a disastrous extinction of life as we know it. In their article, "A People-centered, Preventive Approach to Disaster Risk," they particularly look at the importance of more collaborative relationships between workers and employers and review the toolkit within the International Labor Organization (ILO) process to facilitate an inclusive person-centered cooperative approach to human intervention to save the planet from itself.

"Priming Political Leaders for Fateful Choices" is a short piece, but its fundamental message cuts to the heart of the reason for being in the World Academy of Art and Science. What drives Yehezkel Dror is that the impact of science on our environment will soon be giving us unprecedented challenges, huge opportunities and even catastrophic dangers. And here, the World Academy with its commitment to exploring the policy implications and social consequences of all forms of knowledge is challenged. What Dror wishes to explore is how knowledge and scientific advances with their promises and threats may be brought to the attention of political leaders and highly-placed civil servants. This remains a challenge because the political culture still seems to be insulated from the intellectual and scientific culture and its important knowledge base.

The article, "Social Capital and the New Paradigm Thinking" is from a presentation given by Winston Nagan at the Almaty Conference, Kazakhstan last year. In this article, Nagan explains the importance of human capital seen from the perspective of the individual in the global community. The exploration of the foundations of human capital permits the exploration of human capital in terms of social capital. The central issue of social capital is that it reproduces value beyond the limiting frames of cognition of conventional economic theory. Nagan identifies nine fundamental values that are a function of human interaction and involve both the shaping and the sharing of such values in the aggregate. The critical challenge then, for a new paradigm, is the social weight and value that is attached to the nine values represented in the model that it presents.

"Value Creation: The role of values in improving organizational performance" by Leon Miller approaches the problem of social capital from a more conventional economic perspective. Miller argues that there is now an emerging perspective of value theory in economic discourse that sees an important relation between economic and social value. The insights that emerge from this development come from a sub-field, organizational theory and organizational theory stresses the idea of the co-creation of value. This brings at least, partly, a social process component although somewhat limited, to organizational behavior. Essentially, these developments seek to move economic theory from the heartless world of the market to the more empathetic dimension of human relationships. Among the issues recognized are the salience of humanistic psychology and the importance of creating shared value. These developments are highly promising and much of this should be integrated into the new paradigm thinking theory.

In "Saint Catherine and the Free Market System: The (Historic) Roots of the Current Crisis", Gerald Gutenschwager has provided us with a creative and perhaps novel way to examine the endurance of market reification. He does this in part by looking at the historical memorial that is the legacy of St. Catherine and whether St. Catherine did or did not exist, there exist a store of reified beliefs which have sustained the myths surrounding St. Catherine's life and death. Gutenschwager is particularly interested in the way in which humanistic impulses in human social process have tended to be divorced from the culture of capitalism. Hence, the market conspires to give a society driven by loneliness, greed and fear. To the extent that market theory is mechanistic in the Newtonian sense it represents values that undermine human capacity for a range of other values that make us truly human. Gutenschwager challenges social science to recognize that we are not only studying society as it is but our very studies are an instrumental act of recreating social process. Painful as this analysis is, it points to the important thinking barriers that undermine the cooperative capacity of human beings and the importance of cooperation in social relations.

Janani Harish has written a thoughtful and insightful piece titled "Challenges and Opportunities." She explores the notion that the communication of bad news or unhappy events can stimulate good and innovative responses to them and this can happen in multiple spheres of human relations. The editor suspects that this is an implicit gloss on the idea promoted by John Dewey that learning begins with a problem and reflective thinking, stimulated by the problem, generates solutions to the challenge posed by the problem. In short, a crisis necessarily provokes action in the form of problem solving. The article provides useful illustrations of her perspective.

Federico Mayor in his essay, "Urgent: A New Era, New Solutions" combines realism with an acute sense of grasping those opportunities that move humanity in a constructive direction. As in his earlier essay he is particularly concerned that every opportunity be explored for the universalization of democracy at every level of social organization. Central to the evolution of a democratic global political culture is the importance of the promotion and defense of human rights on a universal basis. Mayor strongly supports the efforts of WAAS and likeminded organizations to actively endorse the critical importance of citizen participation and by implication a recognition of the salience of human capital inherent in this. This essay by Mayor is a powerful expression of the possibilities and the necessities of a new paradigm agenda.

Naomi Klein is a deep thinker who generates profound insights and unsettling contributions to the state of well-being on a planetary basis. Her most recent book, "This Changes Everything: Capitalism vs. the Climate" is reviewed in "What Could Change Everything?" by Michael Marien, who himself has a masterful knowledge of the cascade of literature touching on climate change and its implications for humanity. Klein's new book takes a frontal look at the implications of the dominant version of capitalism and its effects on climate change. Her position is far reaching and challenging, and indeed unsettling. Her approach in fact lends credence to the assumptions behind the Academy's new paradigm thinking.

Antonio Machado has given us an impressively insightful article titled "The Relevance of Infodynamics: From the Biosphere to the Psychosphere". He challenges us with the prospect that the intellectually separable mind, the psychosphere, is a matter that has implications that go beyond nature as we now understand it [the Biosphere]. The implications of this view are suggested in the piece and imply an important future discourse at least, within the World Academy.

John Scales Avery has given us a timely reminder of the intellectual and moral roots that went into the founding of the World Academy. Clearly, issues of war and nuclear weapons greatly influenced the founders of the Academy. "Remember your Humanity" also gives us a timely reminder when the threats of war and a nuclear catastrophe are as real today as it was at the time that the Academy was founded. Avery reminds us how great wars may start with insignificant operations, he also reminds us of the lethality of technological advances such as the machine gun. Finally, he draws our attention to the tragedy visited on Marshall Islands and others which served as nuclear weapons test sites. He draws our attention to the current state of litigation and it appears that it will continue before the International Court of Justice. The implications here seem to be that perhaps the World Academy should be involved in pressing these matters legally.

Thaddeus C. (Ted) Trzyna has provided us an interesting piece, <u>"Integrating Ideas and Organizations toward a New Paradigm"</u> on the concerns with excessive disciplinary specialization and the imperatives of interdisciplinary communication as essential to the shaping of humanity's vision for the future. He fruitfully explores the practical implications of knowledge integration.

In "Peace on Earth at last", Federico Mayor has given us a powerful endorsement of the idea that humanity might progress to a world of universal peace. He recognizes the factors which have changed conditions for ordinary people and that the information revolution provides us with an information base that permits us to generate challenges in real time. Mayor provides us with a strong endorsement of the role and responsibility for mobilizing scientific, academic and artistic leadership that is to say the role of an intellectual responsibility of seizing the defense and promotion of the possibilities of progressive change on a global basis. Mayor draws attention to lost opportunities, which obviously we can learn from and underscores the importance of vigilance in limiting the forces of reaction who appear to promote a dismal objective for humanity. The realism of his approach is married to the identification of real opportunities for a peaceful, progressive future. Fundamental to his approach is the universalizing of democracy and even more importantly, visualizing a new paradigm for a new world order.

Pieter J.D. Drenth explores the question of the obligation of scientists in "Institutional Dealing with Scientific Misconduct". This is a matter of recognizing the importance of non-state regulatory codes of conduct, rooted in agreed upon principles of ethics and morality.

Drenth provides us with a thoughtful overview of factors that contribute to cases of scientific misconduct and he also gives us an indication of how to responsibly respond to this from the perspective of the learned academies. In a sense we are not only dealing with misconduct, but we are dealing with the responsibility of the entire scientific and intellectual community and its responsibility for providing thoughtful, fair and well- understood standards of appropriate professional conduct.

Michael Marien has given us a rich anlagen of works of important scholarship in his "Book Briefs". The reader is encouraged to review these works and consider their contributions to new paradigm studies. Items that I found particularly interesting are books that talk of measuring economic sustainability and progress and the *Thinking Person's Guide to Climate Change*. Another area of interest are the contributions related to interdisciplinarity: a reconfiguration of the social and natural sciences. On the specific issue of global values, the entry dealing with human dignity and the future of global institutions is important. On the theme of sustainability, the entry, *State of the world in 2014: Governing for Sustainability and Sustainably: A History* are worth noting. On the more challenging side, *The Insect Cookbook: Food for a Sustainable Planet*, should be challenging to some of our fellows. And the important entry *The Collapse of Western Civilization: A View from the Future*, is another important warning signal about the global future. Additional entries of importance include, *Theories of Globalization, The Global Development Crisis* and in the area of human rights, *Responding to Genocide: The Politics of International Action*.

Winston P. Nagan Chairman of the Board, World Academy of Art & Science Chair, Program Committee Editor-in-Chief, *Eruditio*

The Role of Academies*

Ivo Šlaus

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Abstract

Brief history of academies is presented, and the current role of academies is outlined.

1. Introduction

Contemporary world is global, interdependent and rapidly changing. These features are occurring for the first time in human history. All of these features are science and technology generated. Present time can be best described by Charles Dickens' opening sentence of his novel "The Tale of Two Cities" describing the times encompassing the French Revolution: "It was the best of times, it was the worst of times, it was the age of wisdom and it was the age of foolishness, it was the spring of hope, it was the winter of despair..." The world is currently facing economic, political and moral crises. The only inexhaustible resource is knowledge. The most valuable capital is human (including social) capital, as shown by Sir Partha Dasgupta and his collaborators (see Table 1). The second column lists the real total capital of each nation and HC indicates the percentage due to human capital. Human capital includes health, education, freedom, creativity and activity of human beings, and once again science and curiosity-driven research play essential roles.

Table 1: Real Wealth of Nations²

USA (2008)	=	\$ 117.8 trillion	(HC = 75%)
UK	=	\$ 13.4	(HC = 88%)
Saudi Arabia	=	\$ 4.9	(HC = 35%)
Brazil	=	\$ 7.4	(HC = 62%)
Russian Federation	=	\$ 10.3	(HC = 21%)

"All men by nature desire to know" wrote Aristotle in his *Metaphysics*. The curiosity-driven research is one of the essential human characteristics and needs. Notwithstanding enormous progress in all scientific disciplines, our knowledge is still quite rudimentary. Whenever we hope we have attained the Standard model we realize that it accounts for possibly just less than 5% of one particular universe (as we know in physics). Facing the complex world we live in, opportunities, threats, dangers, weaknesses and strength as well as overcoming crises – each one and all of them demand research and understanding!

^{*} The article was presented at the Opening of the Round Table "The Role of Science and Academy in the Development of Society", Banja Luka, September 19, 2014

Schools, universities, research centers and academies are components of an intertwined system generating and maintaining research and understanding. Here we will concentrate on one: academies. Academy is an institution of higher learning, research and honorary membership.

2. Brief History

The archaic name of an area containing a sacred grove of olives outside of Athens' wall dedicated to goddess Athena was Εκαδημια. The name later evolved into Ακαδημια (and became linked with the name of an Athenian hero Akademos). This was a sacred place from the Bronze Age (cult possibly associated with hero-gods Castor and Polydeuces, and with Akademos, Theseus and Helen). When he was 30 years old Plato (424-348 BC) acquired this grove and lectured there (estimated to be mid 380 BC). The Plato's Academic Club was exclusive, but – at least during Plato's time – there was no charge. Two women were part of the Academy: Axiothea and Lasthenia. According to a legend originated 700 years later the phrase "Let none except geometers enter here!" was inscribed above the entrance of the Academy. A famous member of Plato's Academy was Aristotle who later founded his Lyceum. Though it is often said that Plato's Academy was a school for future politicians, the evidence is not convincing. The last head of the Plato's Academy was Philo of Larissa (154-83 BC). In 86 BC Lucius Cornelius Sulla conquered Athens and destroyed Plato's Academy and Aristotle's Lyceum. The destruction was so complete that the new academy had to be opened in a different place. After a lapse of an early Roman occupation, the Academy was re-founded including many international scholars. The last head of the Academy was Damascius of Syria. Emperor Justinian closed the Academy in 529 AD. Some members of the Academy went to Harrar near Edessa and it seems that the part of the Academy survived to reemerge during the Islamic Golden Age as the House of Wisdom and the Academy of Gundishapur (6th to 12th AD) in Sassanid Persia. In parallel with Plato's Academy numerous research centers developed from 6th century BC till about 12th century AD, e.g.: Taksasila (near Islamabad, Pakistan), Nalanda (Bihar, India), Varanasi (India), Kanchipuram (near Chennai, India), Guozijian (located in the capitals of China during Han, Sui and Ming dynasties). Famous scholars and scientists mark these activities: Panini (4th century BC India, known for his Sanskrit grammar), Atreya (great Hindu sage and physician, 6th century BC) and Kautilya (Chanakya – 370-283 BC, author of Arthashastra considered to forebode Il Principe).

While the oldest universities in Europe were founded from the 11th century (Bologna 1088, Oxford 1096-1167, Salamanca 1134, Paris 1160, Cambridge 1209, Padua 1222, Naples 1224, and Schola Medica Salernitana even in 9th century), academies were established much later. Cosimo de' Medici founded an academy in 1439, and the Accademia di Belle Arti was established in Firenze in 1563. Accademia della Crusca founded in 1582 and devoted mainly to language studies inspired Richelieu to establish Académie Française in 1635. Accademia dei Lincei was founded in 1603 in Rome, and Accademia del Cimento by Galileo's students in 1657.

Origin of the Académie Française was in informal literary group meetings at Hotel de Rambouillet since early 1620. In 1635 at Richelieu's urging Louis XIII granted "to labor with all the care and diligence possible, to give the exact rules to our language, to render it capable of treating the arts and sciences." Académie Française was suppressed in 1793 during the French Revolution and restored under Napoleon in 1803. In 1795 all French academies

were replaced by Institut de France with classes. Louis XVIII in 1816 restored the name Académie. The President of France is the "protector" of Académie Française numbering 40 immortals (total 719, 6 women, first elected Marguerite Yourcenar in 1980). 20 members have been expelled: Auger de Moléon de Granier in 1638 because of theft, Ph. Petain and three others because of Vichy). Académie Française included

"Politics, science and research are strongly but strangely intertwined."

politicians (5 heads of France, e.g.: A. Thiers, R. Poincaré and V. Giscard d'Estaign, one foreign L.Sedar Senghor). Among the members of Académie Française were Voltaire, H. Poincaré, V. Hugo, L. Pasteur, but not J.J. Rousseau, J. P. Sartre, H. De Balzac, R. Descartes, D. Diderot, M.Proust.

Academia Naturae Curiosorum was founded by four physicians in 1652. In 1677 Leopold, emperor of the Holy Roman Empire recognized it and in 1699 gave the name Leopoldina. On Nov 28, 1660 a group of twelve scientists from the Invisible College announced the formation of "College for the Promoting of Physico-Mathematical Experimental Learning" and in 1662 Charles II signed a Royal Charter for Royal Society, and since then every monarch is a patron of the Royal Society. In 1666 Colbert gathered a group of scientists to found a scientific society of Paris, and in 1699 Louis XIV established Académie royale des sciences. Brandenburg Academy was initiated by Leibnitz who was its first president in 1700. Russian Academy of Sciences was established in 1724 by Peter the Great, and it was initiated by Leibnitz. Swedish Academy of Sciences was founded in 1739.

Academia Scientiarum et Artium Slavorum Meridionalium (Jugoslavenska akademija znanosti i umjetnosti) was initiated by Bishop J. J. Strossmayer (his proposal in the Croatian Parliament in 1861 was unanimously approved. Emperor and King Franz Joseph approved it in 1866 originally appointing 14 members). Bulgarian academy was founded in 1869 and Serbian in 1886.

Act of Incorporation of the National Academy of Sciences (NAS) was signed by A. Lincoln on March 3, 1863 and nominated 50 charter members. First president of NAS was A. D. Bache, and second Joseph Henry. Institute of Medicine was established in 1970, National Academy of Engineering in 1964, while the National Research Council was founded in 1917.

Several observations can be made from the history of academies and research centers. First, academies, research centers and universities are closely intertwined and they represent one of the earliest and most important aspects of human civilizations. Second, spectrum of their activity is very broad – from astronomy and physics to languages, political sciences and spirituality, thereby being the essence of human development. Third, all academies are associated with sovereign states, but frequently political power destroyed academies: Sulla destroyed Plato's Academy in 86 BC, then Justinian closed it in 529 AD, Library of Alexandria was destroyed several times (attack of Aurelian in AD 270-275 [it was during his reign that the title *dominus et deus* referring to him was used on official documents], order of Patriarch Theophilus of Alexandria in 391 AD, murder of Hypatia in 415 AD and destruction by Caliph Omar in 642 AD) and Mamluk dynasty destroyed Nalanda in 1200 AD.

Politics, science and research are strongly but strangely intertwined. It was realized already by Aristotle who refers to politics as *master science*, but considers political system

to be an organism where all parts cannot exist without others, and the best form of government is that where every man, whoever he is, can act best and be happy.³ Though research and science are the main engines of current development, political structure still maintains its odd relationship with researchers and universities and academies. Apparently, French President G. Pompidou said "There are three roads to ruin: women, gambling and technicians. The most pleasant is with women, the quickest is with gambling, but the surest is with technicians." It is not clear what he meant by "technicians", but it is likely he thought of scientists. Lisbon Strategy of the EU, European Council, March 23-24, 2000 aims

"In a global world it is necessary that educational, research and political structures do have global aspects also."

to make the EU "the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion" by 2010. 3% of the national GDP devoted to R&D was a guarantor of achieving sustainable economic growth. None of these goals were achieved, 5 actually now the national average for research and innovation spending by all member states is 2.06%. "The applied and hard sciences are at risk. EU research funding in general is currently threatened by massive budget cuts of up to one billion euros, which Christian Ehler, Member of the European Parliament Industry, Research and Energy Committee has condemned as completely unacceptable." In addition, President Jean-Claude Juncker has abolished both the Chief Scientific Adviser position and Bureau of European Policy Advisers.⁶

3. Global Academies

In a global world it is necessary that educational, research and political structures do have global aspects also. Pontificia Insigne Accademia di Belle Arte e Letteratura dei Virtuosi al Pantheon was founded in 1542, the title Pontifical was conferred by Pope Pius IX in 1861 and Accademia was added in 1928 by Pope Pius XI. Accademia delle Scienze has its roots in Accademia dei Lincei founded in 1603, and then Pope Pius IX reestablished it in 1847, and then Pius XI in 1936. Pontifical Academy of Science has up to 80 members. These are the first global academies. There are now 11 pontifical academies (e.g. Pontificia Accademia della Teologia founded in 1718 and of Archaeology founded in 1810, as well as Pontifical Academy of Social Science and Pontifical Academy for Life both founded in 1994, the second one devoted to promote the life ethics consistent to the Roman Catholic Church).

On the initiative of Albert Einstein, John A. Fleming (former president of ICSU), Richard Montgomery Field (former chairman of International Committee on Social Value of Science), Sir Ian Clunies Ross and Homer Le Roy Schantz and following the International conference on Science and Human Affairs organized in October 1956 in Washington scientists established the World Academy of Art and Science (WAAS) in 1960. One of its Charter fellows Hugo Boyko emphasized in his talk in Washington: "Mankind has become a whole and undividable unit... We have all become neighbors. ... We are starting to trespass the accepted border of earth, space, matter and energy... If already these decisive dividing lines of nature seem to disappear before our very eyes and in our comprehension, how small and insignificant and negligible seem the political frontiers.... We need farseeing statesmanship in cooperation with leading scientists." WAAS had 40 founding members: 14 from the USA, 6 from France, 6 from the Netherlands, 5 UK, 3 Israel, 2 Belgium, and one from Italy, India

Canada and Denmark each. Among them were: Pierre Auger, <u>John Boyd Orr</u>, H. Boyko, G. Brock Chisholm, H. Lasswell, <u>H. J. Muller</u>, R. Oppenheimer, <u>J. Rotblat</u>, <u>B. Russell</u>, <u>H. Urey</u>. Among famous Fellows are: <u>John Eccles</u>, Buckmister Fuller, <u>A. M. Lwoff</u>, <u>A. Myrdal</u>, <u>G. Myrdal</u>, A. Maslow, Y. Menuhin, H. Moore, <u>L. Pauling</u>, <u>P. Noel-Baker</u>, F. Seitz, J. Salk, A. Tiselius. (Nobel Prize laureates underlined)

The Article III of the Statues of WAAS declares its objective and purposes:

- to contribute to the progress of global civilization, human welfare, evolution of global governance, peace, sustainable development and the realization of human dignity through transnational studies, projects, appraisals and recommendations; and
- to function as a transnational forum for interdisciplinary discussion of art and science and the social consequences and policy implication of knowledge.

And the motto of the WAAS is: Leadership in Thought that Leads to Action.

Presently, WAAS has 730 fellows from all continents. In addition to full fellows, WAAS has associate and junior fellows. The first president of WAAS was Lord John Boyd Orr, Nobel Prize winner and President of FAO. He was followed by ecologist Hugo Boyko, and then microbiologist Stuart Mudd, President of National Academy of Sciences Detlev Bronk, Harold Lasswell, A. Schweitzer professor of law, economist Walter Isard, professor of law R. St. John McDonald, microbiologist Carl-Goran Heden, Harlan Cleveland - diplomat, educator and former US Ambassador to NATO, Walter T. Anderson, political scientist, J. H. Schwartz, archaeologist, Ivo Šlaus, physicist and Heitor Gurgulino de Souza, physicist and former director of UN University. Currently, the main focus of WAAS is developing a new paradigm of human centered development. WAAS is a member of InterAcademy Panel and it closely collaborates with many international organizations, e.g. Pugwash Movement, The Club of Rome, Club de Madrid, European Leadership Network, World Future Council, Partnership for Change as well as other national and regional academies.

The Global Young Academy (GYA) has been established in 2010 following the 2008 and 2009 Summer Davos conferences and with the support of the InterAcademy Panel (IAP). GYA focuses on science and policy, education and outreach, and the research environment. Members of GYA are those of average age of 35 years and at the beginning of their independent academic careers. Its office is at the Berlin Brandenburg Academy. As of 2014 GYA has reached its full capacity of 200 members from 58 countries elected for a period of 5 years, and it has 63 alumni.

In addition to these two truly global academies, in 1983 TWAS – The World Academy of Sciences for the advancement of science in developing countries was founded by Abdus Salam in Trieste. In 1985 the UN Secretary General gave TWAS UN support and the 2004 Italian law assures financial support to TWAS. Currently, TWAS has almost 1100 members from 90 countries.

Islamic World Academy of Science (IAS) was founded in 1986, and now has almost 100 members.

ACAL – Latin American Academy of Sciences was founded in 1982 with Pontifical Academy's initiative, and currently has 154 members.

"Can science help to guide citizens and guide leaders?"

African Academy of Sciences (AAS) was founded in Trieste at TWAS conference in 1985. It was supported by Carnegie Corp. and Rockefeller Foundation, and now by Government of Kenya. In 2011 AAS had 162 members.

European Academy of Sciences, Arts and Humanities was founded in 1979 in Paris. Among its founders are: I. Prigogine, L. Leprince-Ringuet and R. Huygens, and its first president was Raymond Daudel.

Academia Europaea was founded in 1988 in Cambridge. There were 110 founding members from Europe: Sir Arnold Burgen (first president), H. Curien, U. Colombo, B. Flowers, R. Mössbauer, E. Seibold, R. van Lieshout and D. Magnusson. Among 110 founding members there were two from former Yugoslavia. Academia Europeae included scientists from all European countries as well as scientists from other countries, notably the USA and Israel. Today it numbers over 2000 members from 35 European and 8 non-European countries.

European Academy of Sciences and Arts was founded in 1990 in Salzburg, and its founders were F. Unger (president), P. Klaus, and E. Gornik. Currently it has over 1500 members, and presidents of several European countries act as its protectors.

Several associations of academies have been established: ALLEA – All European Academies, founded in 1994, includes 52 academies from over 40 countries. Its first president was P. Drenth (Netherlands), followed by Jüri Engelbrecht (Estonia) and now Günter Stock (Germany).

IAP – InterAcademy Panel, founded in 1993, includes 106 national academies, and now includes WAAS. It is operated by TWAS and located in Trieste. IAP co-chairs are Volker ter Meulen and Mohamed Hassan. In 2000 IAP established InterAcademy Council (IAC) governed by a board of 15 academies' presidents from around the world. InterAcademy Medical Panel (IAMP) includes academies that have medical members. IAMP is also located in Trieste and currently includes 69 academies. The mission of IAP, IAMP and IAC is to reach out to society and to participate in essential discussions. This task is accomplished by issuing statements and IAP has issued statements since its beginning in 1993. One of the recent (Nov 2014) IAP and IAMP Statement is on Antimicrobial Resistance: A call for Action.

4. Academies and Politics

More than 200 years ago Friedrich Schiller wrote "Our century has given birth to a great epoch. But the great moment finds a stunted generation. And even more stunted rulers." This is today even more so – since the contemporary world evolves much more rapidly and it is interdependent and global. As we stressed already this great epoch is generated by science and causes politicians to be stunted. Can science help to guide citizens and guide leaders? This is a crucial issue since Plato and now again re-addressed by Y. Dror in his recent book "Avant-garde Politician – Leaders for a New Epoch". Research is mainly done

at universities and research institutes (in some countries research institutes are affiliated with academies), hospitals and industrial and agricultural complexes. What is the role of academies, of national, regional and of global academies? Certainly, it cannot be only to do research, since that is much better done by universities and research centers. Are missions of national academies different from those of international academies? Maybe a hint can be found in several important numbers characterizing our world and these are: 7 billion increasing rapidly to ten billion human beings, about 5,000 different cultures, about several million different species and one global world, superimposed on about 200 sovereign states and numerous international organizations and association of organizations and states, e.g. UN system. It is maintenance, resilience and strengthening of all of them and these tasks are simultaneously scientific (i.e. research and understanding) and political (facing ambiguity, uncertainty and urgency).

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The Struggle for Justice in the Civil Rights March from Selma to Montgomery:

The Legacy of the Magna Carta and the Common Law Tradition

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Abstract

This article is based on a keynote address that the author gave in Montgomery, Alabama, last year, celebrating the anniversary of the famous Civil Rights March in Selma. It is being reprinted with the kind permission of the editors of the Faulkner University Law Review. The article introduces the reader to the idea that justice involves social action and struggle. It then shifts the perspective to the struggle for justice in historic memory. The author focuses on the struggle to limit sovereign absolutism, the outcome of which is reflected in the Magna Carta. The Magna Carta was not a gift of the sovereign, it represented a political struggle to obtain it. The article then traces the evolution of law in the common law tradition and the importance of casuistic legal methods to ground the specific rights of citizens. The article draws reference to the struggle between judges and the sovereign to secure justice under the common law. A pivotal feature of the Selma March was the critical role of a brave federal judge, Frank Johnson, who ruled that the marchers had a constitutional right to march. The article then examines the religious influences on marching for justice ideals and the deeper meaning this represents existentially and spiritually.

1. Introduction*

In March 1964, as the march from Selma to Montgomery was gaining strength in the face of threats of violence, repression and intimidation, Sister Pollard, a 70-year-old African-American woman in the march was offered a ride because of her age. She replied, "No," and she added, "my feets is tired, but my soul is rested." Sister Pollard's response captured the quintessence of a Christian, and perhaps more generally, a religious view of the struggle for justice and the religious idealism embodied in the idea of a rested soul that sustains the struggle. It is also a testament to the idea that struggle for the highest ideals of religious consciousness will embody sacrifice and courage.

The march on Montgomery was a momentous event of national and global significance. It was essentially an aspect of a larger struggle nationally and of global importance about the improvement of the human prospect, and, I think, today would be rightly regarded as a powerful symbol for the interdependence of human rights and legal justice. The idea of justice in human history is often grounded in and expanded by events whose times have come

^{*} Speech delivered at Faulkner Law Review's Fall Symposium on September 12, 2014 titled From the Magna Carta to the Montgomery March: The Career of Rights in the Anglo-American Tradition. The author wishes to thank his Research Assistant, Christy Lopez, for assistance in writing the speech.

and these events generate a powerful symbology of the progress of justice. The march from Selma to Montgomery was just such an event.

2. Magna Carta, Justice, and the Rule of Law

I now want us to step back in time to another momentous historical event in England. In 1215, King John, the monarch of England, signed the Magna Carta. The Magna Carta was the outcome of momentous events. These events resulted in the compulsion or coercion generated by the conspicuous classes in England and imposed upon a king steeped in the belief of sovereign absolutism. The central idea in the Magna Carta was to stipulate, and publicize in writing the specific limitations on the sovereign, vis-à-vis the nobility and freemen. The principle of establishing a great Charter limiting arbitrary abuse of power represented an idea that even the sovereign could not violate Magna Carta prescriptions or those elements of the common law derived from those prescriptions. The most important clause for historical posterity was the 39th clause of the Magna Carta. This clause provided, "no man shall be arrested or imprisoned... except by the lawful judgment of his peers or the law of the land." The word "or" was meant to mean "and". The habeas corpus prescription in the Magna Carta was included in the Constitution of the United States.* Indeed, this ancient writ included in the Magna Carta continues to form one of the foundations of the modern rule of law concept. Most recently, the Supreme Court of the United States again recognized that the "writ of habeas corpus is the fundamental instrument for safe-guarding individual freedom against arbitrary and lawless state action." The quote continued that the writ must be, "administered with initiative and flexibility to insure that miscarriages of justice are surfaced and corrected." Indeed, Chief Justice Marshall wrote in 1830 that the "great object" of the writ, "is the liberation of those who may be imprisoned without sufficient cause." In Boumediene v. Bush, the Supreme Court ruled that Guantanamo detainees have the right to file habeas corpus petitions.

The Writ of Habeas Corpus has been a part of the development of the common law and the idea of the supremacy of the common law in defining the rights and duties of the citizen. In the development of the common law and its procedural practices, including the forms of action, the leading English jurists determined that the foundations of the modern rule of law were to be found in the interstices of the common law itself. Establishing the supremacy of the law, although deeply influenced by the Magna Carta, was a major historical challenge, which required courage and bravery from both judges and practitioners.

The common law, which developed in England in the aftermath of the Magna Carta, is in many ways a legal system that improved the rights and the duties of the subjects of the kingdom. It is important to note, an obvious datum that when the citizen's rights and obligations are matters that are publically ascertainable and enforced by an independent judicial system, the law provides the citizen with a zone, which secures both his freedom and the scope of his obligations. The common law empowered the citizen with an opportunity to

^{* &}quot;The privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it."

U.S. Const. art. 1, § 9.

^{† &}quot;The writ of habeas corpus is a high prerogative writ, known to the common law, the great object of which is the liberation of those who may be imprisoned without sufficient cause. It is in the nature of a writ of error, to examine the legality of the commitment." Ex Parte Tobias Watkins, 28 U.S. 193, 202 (1830).

[‡] Boumediene v. Bush, 553 U.S. 723 (2008).

request from the King a writ. The writ was a requirement for the plaintiff to avail himself of the Royal or King's Court. The writ represented the command of the King, which enabled him to do so. Although writs originally were exceptional, by the time of Henry II, they became routinized. It was from the writs that the forms of action developed. Ultimately, there was resistance to creating new forms of action and lawyers were generally confined to the recognized categories or forms of action, which formed the common law formulary system. The importance of the forms of action was that they were very specific. Hence, a decision based on the forms of action would also be very case specific. This meant that rights and duties created were very concrete and formed the basis for the application of those rights to similar situations. Therefore, the forms of action generated a fidelity to the role of precedent. Here we see the fact-specific detail in legal development that is difficult to change by arbitrary executive action. The applications of the forms of action are highly technical and professionalized, an added buffer to the experience of arbitrary executive action. It is in this detailed professional sense that we see an important domain in the development of freedom based on the rule of law. Although the forms of action were abolished, the great historian, Maitland, suggested that they still rule the legal culture from their graves.* It should be noted that in the practice of law in the United States today, a multitude of writs still survive, such as: the Writ of Habeas Corpus [Article 1, Section 9, Clause 2, U.S. Constitution], the Writ of Certiorari, the Writ of Prohibition, the Writ of Error Coram Nobis, the Writ of Mandamus, the Writ Warranto, and a number of other writs.

The importance of the Magna Carta for the enduring relationship of law and the ideal of justice is found in the principle that the sovereignty of the monarch is limited by law. Hence, we have the establishment in the great charter of the principle of the supremacy of law. The text of the Magna Carta is a text largely concerned with the complex rights of the various social classes in a feudal system. Notwithstanding, the principle of Habeus Corpus which emerges from this system continues to endure today as a central principle of the modern rule of law. Additionally, the specification and detailing of rights and obligations in the feudal context reflects the deep concern for the normative salience of the principle of human liberty. The Magna Carta stipulates not only the liberty of the Christian faith but also the liberties of all free men. Thus, liberty, including religious liberty, is a restraint on sovereign absolutism. Additionally, many of the rules specified in the Magna Carta are rules that deal with human security and hence represent the principle that free men should be free from fear under law. Many of these rules deal with the complexities of fair management of economic entitlements and in particular suggest a sensitivity that the law provide protections for the freedom from want. Finally, in the concern for the liberty of the English Church we see a sensitivity to the freedom of conscience and belief. In this sense, although the Magna Carta is a document that deals with the exigencies of the appropriate management of feudal life in England, it contains the seeds of justice that endorse a natural law conception of the fundamentals of the rule of law.

3. The Judges vs. The Monarchy

One of the important outcomes in the development of rule of law based freedom in the common law tradition, influenced by the Magna Carta, was represented in the conflict between

^{* &}quot;The forms of action we have buried, but they still rule us from their graves." F.W. Maitland, The forms of action at common law 296 (1910).

the English judges and the Crown. This is illustrated in the behavior of Sir Edward Coke and best indicated in Dr. Bonham's case decided in 1610. Bonham was a physician practicing in London. He had a medical degree from a top university, but did not have a license to practice medicine. Bonham was fined for practicing medicine without the license. The Royal College of Physicians arrested, tried, and fined Bonham. The fine was to be paid to the Royal College of Physicians. Coke ruled that the Royal College could not sit as a complainant and act as a judge in its own cause. Coke stated the following:

"The common law doth control Acts of Parliament, and sometimes adjudge them to be void: for when an Act of Parliament is against Common right and reason, or repugnant, or impossible to be performed, the Common Law will control it, and adjudge such Act to be void..."*

Just prior to deciding the Bonham case, Coke was asked by the king to rule on whether a royal edict, which sought to restrict building in London and to regulate trade of specific commodities, would be consistent with the law. According to Coke,

"The King cannot change any part of the Common Law, nor create any Offence by his Proclamation, which was not an Offence before, without Parliament"

Coke took on the King in this and other contexts. The King, in return, had him arrested and put into the Tower of London. Coke was later freed. Coke was largely supported by the English Parliament, which acted to preserve his legacy. What is important for the United States is that Coke's works were read by American lawyers before the revolution. Moreover, the leading precedent in the common law world, on the principle of judicial review[‡] without a doubt was influenced by Coke's daring assertion of the supremacy of the Common Law. Indeed Coke has been cited by American judges and statesmen throughout the history of the Republic. § 5.5.**,††.‡‡

Coke was also influential in the adoption of the Petition of Right and the Bill of Rights, instruments well known to American lawyers. Coke's effort to justify the values behind the Magna Carta has been rooted deep in the history of England prior to the Norman Conquest. It is not necessarily historically well founded. It is probably the case that he read into the Magna Carta an ideological orientation consistent with the Whig interpretation of history, influenced by Lockean ideas. These ideas found expression in the early Massachusetts Bay Company Charter, the Virginia Charter, including other colonies such as Maryland, which in 1638 recognized the Magna Carta as the law of the Province, but which was refused such recognition by the King. The further development of these ideas in England was reflected in Dicey's work

^{*} Dr. Bonham's Case, 77 Eng. Rep. 646, 652 (C.P. 1610).

[†] Case of Proclamations, 12 Coke 74 (1610).

[‡] Marbury v. Madison, 5 U.S. 137 (1803).

[§] Moody v. Daggett, 429 U.S. 78 (1976). Dissent by Justice Stevens quoted Coke on guarantee to speedy trial.

[¶] Ford v. Wainwright, 477 U.S. 399 (1986). Justice Thurgood Marshall quoted Coke in the case of the execution of a man who had become insane since trial and sentencing: "[B]y intendment of Law the execution of the offender is for example, ... but so it is not when a mad man is executed, but should be a miserable spectacle, both against law and of extreme inhumanity and cruelty, and can be no example to others." *Id.* @ 407.

^{**} Pacific Mutual Life Insurance v. Haslip, 499 U.S. 1 (1991). Justice Blackmun quotes Coke on the phrase "due process of the law," and writes, "The American colonists were intimately familiar with Coke..." Id. @ 29.

^{††} Washington v. Glucksberg, 521 U.S. 702 (1997). Chief Justice Rehnquist, arguing against suicide, wrote, "In 1644, Sir Edward Coke published his Third Institute, a lodestar for later common lawyers. Coke regarded suicide as a category of murder..." *Id.*@712, footnote 10.

^{‡‡} Brogan v. United States, 522 U.S. 398 (1998). Dissent by Justice Stevens argued, "as Sir Edward Coke phrased it, 'it is the common opinion, and the communis opinion is of good authoritie in law." Id. @420-21.

on the English Constitution and the Rule of Law.* What Dicey was able to establish was that the common law, with its fidelity to concrete case law development, professionally instituted and decided by professionally capable and independent judges carried with it the elements of the supremacy of law and this is the foundation of the modern rule of law principle. In short, the rule of law is the essential component of modern governance, which respects the freedom and dignity of the individual and assures this by the assumption that the rights and obligations of the ordinary citizen may not be arbitrarily or capriciously violated by the state.

Although our approach thus far has focused on the salience of a natural law connection to the ideals of law and justice, we would be remiss not to point out that the scientific approach to law, although seen as unsympathetic to natural law principles, has nevertheless provided us with an important contribution to the application of law, in fact, to the principles of justice.

One of the most important problems that theorists and practical lawyers had to contend with was that the very notion of the right, notwithstanding the casuistic methods of the common law still left this important concept floating in a great deal of legal ambiguity. And if a legal right is ambiguous it is very possible that in the specific prescription and application of that right it may descend into the domain of arbitrary and capricious legal action. This is where the form of positivism, which focused on the scientific use of language in law, made an enormous contribution to unpacking the notion of a legal right in scientific terms. The leading theorist in this development was an American academic lawyer and Yale professor Wesley Newcomb Hohfeld.

Hohfeld's genius was to provide us with the operational grammar of a working legal system. It will be often seen that the term right is used erroneously to cover many different relationships. Additionally, the term right and its derivatives come in the form of jural opposites. Thus, if one has a right, the opposite would be one has no right. In the context of the correlative relationship of the notion of a right, we will see that there cannot be a right if there cannot be a correlative duty. Each exists because of the other. This approach has been fully developed in the American restatement of contract and property. Probably the best illustration of the value of Hohfeld's system is to be found in Corbin's *Corbin on Contracts*, 1952. The insight of Hohfeld that legal norms come in opposites or correlatives, sometimes referred to as legal complementarities, reflects upon a deeper insight into the prescription and application of the higher ideals of human justice. For example, the right to life is complemented by the right to self-defense.¹

	(1)	(2)	(3)	(4)
	Right	Privilege	Power	Immunity
JURAL OPPOSITES	No Right	Duty	Disability	Liability
JURAL CORRELATIVES	Duty	No Right	Liability	Disability

^{* &}quot;That 'rule of law' then, which forms a fundamental principle of the constitution, has three meanings, or may be regarded from three different points of view."

[&]quot;It means, in the first place, the absolute supremacy or predominance of regular law as opposed to the influence of arbitrary power, and excludes the existence of arbitrariness, of prerogative, or even of wide discretionary authority on the part of the government. Englishmen are ruled by the law, and by the law alone; a man may with us be punished for a breach of law, but he can be punished for nothing else." A.V. Dicey, Law of the Constitution 189 (3rd ed. 1889).

4. 1965 Selma to Montgomery Civil Rights March

If the Magna Carta was an event concerning the quality of justice for the citizen, and which has had the traction for over a millennium, we now come to another event which is also a sentinel event symbolizing the struggle for justice. One way to capture the importance of this march for equal justice under law is to recognize events leading up to it that were also indicators of a form of paradigm change for justice, possibly on a global scale. In 1941, the Congress of the United States adopted the Atlantic Charter.* The Atlantic Charter was the brainchild of President Franklin Delano Roosevelt (a liberal) and Prime Minister Winston Churchill (a conservative). The Atlantic Charter was seen as necessary to establish the war aims of the allies, or more precisely, the reason why we were fighting the war. The Charter proclaimed the four freedoms of universal salience. This was a fight about the freedom of speech and expression (political freedom), the freedom from fear (security freedom), the freedom of conscience and belief (religious freedom) and the freedom from want (economic justice). In another continent (Africa), the African National Congress of South Africa, endorsed the Atlantic Charter as representing the values which the African people sought in their struggle for freedom. The basic values expressed in the Atlantic Charter, although conceived in a contemporary context still demonstrates the underlying values of the Magna Carta itself.

If Americans, including African-Americans were fighting for freedom in terms of the Atlantic Charter, it is apparent that these freedoms should also have some domestic resonance. One of the earliest effects of these efforts was the executive order of President Truman to integrate the armed forces of the United States. If African-Americans were brave enough to fight for American freedom, then their claims to experience freedom at home would certainly be legitimate political claims. Additionally, as the cold war intensified the ideological position of the United States, its foreign policy was that: we were for freedom and human rights and our ideological adversary was not. I am inclined to believe that the United States' position as a leader in the fight for global freedom and dignity must have had an effect on the legal profession, the practice of law and the evolution of adjudicatory craft skills and values. In short, when the Supreme Court decided *Brown v. Board of Education*, it may not have used the language of human rights as such, but *Brown* was essentially a

^{* &}quot;The President of the United States of America and the Prime Minister, Mr. Churchill, representing His Majesty's Government in the United Kingdom, being met together, deem it right to make known certain common principles in the national policies of their respective countries on which they base their hopes for a better future for the world."

[&]quot;First, their countries seek no aggrandizement, territorial or other";

[&]quot;Second, they desire to see no territorial changes that do not accord with the freely expressed wishes of the peoples concerned";

[&]quot;Third, they respect the right of all peoples to choose the form of government under which they will live; and they wish to see sovereign rights and self government restored to those who have been forcibly deprived of them";

[&]quot;Fourth, they will endeavor, with due respect for their existing obligations, to further the enjoyment by all States, great or small, victor or vanquished, of access, on equal terms, to the trade and to the raw materials of the world which are needed for their economic prosperity";

[&]quot;Fifth, they desire to bring about the fullest collaboration between all nations in the economic field with the object of securing, for all, improved labor standards, economic advancement and social security";

[&]quot;Sixth, after the final destruction of the Nazi tyranny, they hope to see established a peace which will afford to all nations the means of dwelling in safety within their own boundaries, and which will afford assurance that all the men in all lands may live out their lives in freedom from fear and want"; "Seventh, such a peace should enable all men to traverse the high seas and oceans without hindrance";

[&]quot;Eighth, they believe that all of the nations of the world, for realistic as well as spiritual reasons must come to the abandonment of the use of force. Since no future peace can be maintained if land, sea or air armaments continue to be employed by nations which threaten, or may threaten, aggression outside of their frontiers, they believe, pending the establishment of a wider and permanent system of general security, that the disarmament of such nations is essential. They will likewise aid and encourage all other practicable measures which will lighten for peace-loving peoples the crushing burden of armaments." Franklin D. Roosevelt & Winston S. Churchill, The Atlantic Charter (August 14, 1941).

[†] Brown v. Board of Education, 347 U.S. 483 (1954).

breakthrough on the question of human rights in race relations in the American legal culture. I am also inclined to believe that the broadened vistas of freedom generated in the post-war struggle against totalitarianism also inspired a renewed activism in the demand for civil rights in the domestic legal and social process of the United States. Certainly, extremists on the right wing of the political spectrum saw the ascendance of human rights as a threat to extremist reactionary values. Thus, it was that Senator

"The struggle for justice does not come from inaction."

Bricker, for example, argued that he wished to bury the human rights covenants so deep that no president of this country would dare to resurrect them.* Reactionaries saw as a particular threat to their values the concern that the United States might in fact ratify the convention that outlaws genocide.† Since genocide is a crime that also implicates a conspiracy to actually destroy, in whole or in part, other races. Since racism is an initial step toward genocide, they feared the implications of an international criminalization of the form of racism that could lead to genocide. Race became implicated in the human rights values our nation was proclaiming in the war against totalitarian order.

The struggle for justice does not come from inaction. As in all human relations context, they must emerge from the social process itself, those specific claims that target specific deprivations in the demand for justice. Therefore, the civil rights movement of necessity was a response to the widespread claims among African-Americans, as well as all those Americans committed to the notion of universalizing justice. Then the specific question would emerge: how should leaders in the communities respond to these claims for basic social, political, and economic justice? This is where the Gandhian style of political struggle influenced the leadership of the civil rights movement, led by Martin Luther King, Jr. Gandhi had started his professional life as a political activist in South Africa. He was a newly minted lawyer trained in England. He was asked to represent clients in the Transvaal Province of South Africa. On the way to Johannesburg, he was removed from the train because he was of the wrong race, although he had a first-class ticket. His immediate experience in South Africa was of severe, often legislated forms of racial discrimination, which targeted the Indian community. Since the authorities were well armed and often prone to violence, Gandhi developed a theory of political struggle, which he began to implement.[‡] It was, for example, immoral on the part of the victim not to oppose unjust laws. It was immoral on the part of the victimizer to impose unjust laws. Victim and victimizer were implicated. Not only must the victim change, but also so must the victimizer. The struggle, therefore, was not only concerned with the objects of the struggle for justice, but also the method to secure those objectives. Moreover, the method used should be one that would have an educative effect on both the

^{* &}quot;My purpose in offering this resolution is to bury the so-called covenant on human rights so deep that no one holding high public office will ever dare attempt its resurrection." Senator John Bricker (R-Ohio), 1951.

[†] Convention on the Prevention and Punishment of the Crime of Genocide, 78 U.N.T.S. 277, entered into force Jan. 12, 1951.

[‡] Gandhi is generally regarded as the person who gave the principle of non-violence a distinctive status in political struggle. In effect, with Gandhi, non-violence became both a philosophical approach to politics as well as a preferred human ideal for human development. What is important is that Gandhi made non-violent political action reach a level that had never before been achieved. In Gandhi's action non-violence gravitated from the individual to the social to the political and indeed the spiritual plane. Gandhi captured the notion of non-violence (ahimsa) and its various applications under the concept of satyagraha. In the political struggle in which the victim uses non-violence and accepts violence inflicted on himself without the victim inflicting it on others, the victim is in fact a hero. The sacrifice of enduring the suffering of violence is a monument to moral courage. It is the absolute antithesis of cowardice. In the political struggle, the perfect weapon to confront prejudice, and repression fed by violence, is the weapon of non-violence. The absorption of ahimse into the concept of satyagraha essentially means that non-violence contains the element of truth force or soul force or what Martin Luther King called, "love in action". See Jude Thaddeus Langeh Basebang, AFRICA NEEDS GANDHI!: The Relevance of Gandhi's Doctrine of Non-violence (2010). https://www.mkgandhi.org/africaneedsgandhi/gandhi's philosophy of nonviolence.htm

victim and the victimizer. In short, there is a morality in both the method and the objective for the struggle for justice. There is a morality in protesting unjust laws. This morality should be respected by both the victim and the victimizer and hopefully the victimizer will see the futility of fighting for immorality. Additionally, there is the strength where the principle of non-violence is an essential strategic component of confronting injustice. In my view, violent solutions are generally a high cost non-solution to the problems of coexistence, human solidarity, and peace. It was these procedures that Gandhi used in South Africa, and later in India, that had some important successes. These strategic methods were reflected in the famous Selma to Montgomery March. The idea of a march itself was reflected in the protest marches that Gandhi used to protest the unjust British Salt Tax³ in India. The notion of a march demonstrates mass support, disciplined, non-violent foci on a specific target of injustice, such as the Salt Tax in India or the right to vote in Alabama.

The Selma – Montgomery march occurred throughout March of 1965. Demonstrators were confronted with violence from both the public and private sectors. March 7th is remembered as Bloody Sunday. The march started on March 7th with about 600 marchers starting to walk the 50 miles from Selma to Montgomery. The prime objective of the march was to end discrimination in voter registration. On the first day of the march, law enforcement officers attacked the peaceful marchers with teargas and billy clubs. On March 9th, Martin Luther King, himself, led another march to Edmund Pettus Bridge. The bridge was barricaded by state troopers. The barricades had led to demonstrations throughout the United States in solidarity with the marchers in Selma. On the same day, President Johnson condemned the violence in Selma. On March 10th, the Department of Justice filed a suit in Montgomery, Alabama requesting an order to prevent the state from punishing people from exercising their civil and political rights. On March 17, a brave federal judge, Frank M. Johnson, ruled for the marchers. "The law is clear that the right to petition one's government for the redress of grievances may be exercised in large groups." Judge Johnson exemplified the common law tradition of an independent judiciary, acting in case-specific circumstances and unequivocally upholding the supremacy of the law.

Governor George Wallace attacked Judge Johnson's ruling before the state legislature. He additionally claimed that he could not provide security for the marchers nor did the state have the financial resources to do so. Wallace then sent a telegram to President Johnson indicating that the state did not have enough troops to provide adequate security. In turn, President Johnson issued an executive order, which federalized the Alabama National Guard and authorized the Defense Secretary to deploy such federal forces as were necessary to ensure the security of the marchers. The very next day, March 21, 1965, some 3,200 marchers set out from Selma to Montgomery, in a march that symbolized more than simply the repression of voting rights, but rather the effort to validate the legitimacy of the human right to democracy for all. The numbers of the marchers grew and by the time they reached Montgomery, they were 25,000 strong. During the march, a makeshift stage was erected one evening, featuring a Stars for Freedom Rally. Famous singers were on hand, including Harry Belafonte; Joan Baez; Tony Bennet; Peter, Paul and Mary; Nina Simone and many others. Notwithstanding the promise of federal security support, harassment continued and the Ku Klux Klan murdered Viola Liuzzo, a white mother of five from the Midwest. In the wake of the Selma to Montgomery March process, President Johnson presented a bill to a joint session of congress. This bill was eventually passed as the Voting Rights Act. In introducing the bill, Johnson told the Congress that:

"Even if we pass this bill, the battle will not be over. What happened in Selma is part of a far larger movement, which reaches into every section and state in America. It is the effort of American Negroes to secure for themselves the full blessings of American life. Their cause must be our cause, too, because it is not just Negroes but really, it is all of us who must overcome the crippling legacy of bigotry and injustice. And we shall overcome."

At the conclusion of the Selma to Montgomery march Martin Luther King determined that this march was one of the "great marches of American history." It was a march that generated profound solidarity, among not only African-Americans, but also the nation as a whole. It was, he thought, the democratic spirit that compelled congressional action. In his speech, he recognized that the Civil Rights Act restored to African-Americans the "rightful dignity," but he also pointed out that without the right to vote, the dignity did not have cultural efficacy. The symbology of the notion of the march as a tool of struggle is repeated again and again with such

"The Court deals with discrimination as an abstraction from reality and not as a product of the imperfections of our social processes."

phrases as, "let us march," and "let's march," regarding such issues as poverty, starvation, ballot boxes. Indeed, the march becomes a symbol for the march of universal justice, for the march of human solidarity of universal dignity of all of human kind. The march provides the struggle for justice with a tool of mobilization, a tool of creative non-violent struggle and a tool for reaching out and activating the victim and challenging the victimizer. It is the march and the morality of non-violent struggle that recognizes, in King's words, "the dignity and worth of all of God's children."

5. Voting Rights: Post-Script

The march and the struggle for justice and essential dignity proceeds in fits and starts, and sometimes even setbacks. Thus, today, we see renewed efforts of a political party to prescribe and implement procedures designed to undermine the right to vote. A great deal of support for these initiatives have come from five Supreme Court Justices who believe that efforts to protect the right to vote are simply forms of racial entitlement and constitute a form of prohibited discrimination.* This is a view that is vastly divorced from social reality and is moreover an astigmatic misconception of the fundamentals of modern moral imperatives. In short, the Court deals with discrimination as an abstraction from reality and not as a product of the imperfections of our social processes. In truth, any form of legislation must perforce make distinctions. A distinction means that different members of society will be treated differently: some may benefit, some may be indifferent, and some may feel they have lost something. To determine when a distinction is meant to be discrimination, there must be an examination of the conditions where the distinction leads to unfair discrimination. And such a determination can only be made by examining the context of conditions which suggest that the distinction, deemed to be unfair is one that targets a group culturally conceived in

^{*} Shelby Co., Al., v. Holder, 570 U.S. 2 (2013), striking down section 5 of The Voting Rights Act.

historic terms as constituting a group of non-self others. Moreover, the court has never really grappled with the social process of unfair discrimination itself and particularly the distinctive concept of racial discrimination. This is doubtless a continuing struggle. What I want to get back to, in conclusion, is a reexamination of the struggle for human and civil rights and to consider the role of religious values in shaping the struggle.

6. The Inspiration of Religious Values in the Struggle for Justice & Dignity

In the 20th century, it was the Indian political activist (Gandhi) who thought through the issue of the morality of the struggle against prejudice and political oppression. His initial lessons were learned in South Africa. However, the religious influences in his life were significantly developed when he was a student in London. There he connected with the Theosophical Society, which had been initiated by Helena Blavatsky and others. The Theosophical Society took a universalistic view of religion and was greatly influenced by Hinduism, Buddhism, the Kabala tradition, as well as Christianity. It was here that Gandhi became acquainted with Hinduism and Christianity. It is difficult to pinpoint precisely whether the roots of his Hinduism were the foundation of his non-violent approach to political action. Certainly, in the Bhagavad Gita there are references to the high value of non-violence, yet the Gita is also a justification for the moral imperative of engaging in a just war. However, in the Christian tradition, there is Christ teaching that if one slaps you, turn the other cheek. This represents a much stronger form of how one manages to confront violence with non-violence. Here, I believe, at the back of the Christian message is the notion that even the victimizer is not ultimately bereft of all moral sensibility. Giving him the other cheek is also giving him pause to reconsider, and if this happens, he may become aware that violence is simply amoral and he must retreat from it.

What emerges here then is that non-violent resistance to injustice is a sacrifice. Moreover, this sacrifice, in part, is an act of reaching out to the victimizer and giving him the possibility of redemption. So political struggle is meant to be a process of redeeming mankind from himself. This is a very high order of morality and, in my view, it is the quintessence of Christ consciousness. This idea seeped into the Gita and became a part of Krishna consciousness. We may therefore see in the march from Selma to Montgomery the Martin Luther King reconstruction of the Gandhi Christ-Krishna consciousness. The object of struggling for political freedom and dignity cannot shed itself of the moral foundations of Religious consciousness. And Religious consciousness includes: disinterested altruism; a globalizing of compassion and kindness; a constant search for the defining characteristics of human solidarity on a global basis; a deep sense of responsibility that humanities moral order faces immense threats from weapons of mass destruction and from global warming; and that the moral responsibility, underlined by Gandhi and King, requires us to abolish weapons of mass destruction, and to do what must be done to save humanity from global warming. In short, we need global marches to affirm the moral values and affirm our faith in the capacity of humanity to expand its sense of global affection and global love of all.

7. Conclusion

When I was a child, I was able to see the movie, The Wizard of Oz. There is a song in that movie, Somewhere Over the Rainbow. The song includes the lines, "...and the dreams that

you dare to dream, really do come true." In the March on Washington, Martin Luther King said that he too had a dream. His dream was a dream that our nation would judge people on the content of their character and not the color of their skin. At a deeper level, this is a dream in which the very idea that as a nation and as a world we are beset with non-self others who are continuously being characterized as a threat. In the New Testament, Christ gives us the parable of the Good Samaritan. The Good Samaritan is a non-self other who rescues another non-self other. In short, this act abolishes the idea of a non-self other and broadly expands the inclusive notion of the we, as a symbol of humanities brotherhood and solidarity. In our own time, the Good Samaritan could be a Palestinian and the victim, who is rescued by the Palestinian, an Israeli citizen. From a Christian point of view, they would represent the common "brotherhood or sisterhood of humanity". That is the dream that we must dare to dream. That is the dream that sustained Martin Luther King's Christ-consciousness informed vision of the future of humanity.

"The struggle for justice is not only existentially, but also spiritually a march based on a profound ethical and moral commitment to non-violence and universal brotherhood." — Martin Luther King

Martin Luther King consistently stresses that the struggle for justice is not only existentially, but also spiritually a march based on a profound ethical and moral commitment to non-violence and universal brotherhood. Let us pause for a moment to consider the implications of the concept of the march itself. It is possible to see the symbology embodied in the march as having both an existential and an allegorical significance for justice and freedom as a step toward marching for spiritual enlightenment. Moreover, here, we have a search for meaning that is both existential and spiritual. Poets have envisioned the search for meaning as also a search for enlightenment. The poet William Blake gives us this version of enlightenment,

"To see a World in a Grain of Sand And Heaven in a Wild Flower Hold Infinity in the palm of your hand And Eternity in an hour... Every Night and every Morn Some to Misery are Born.

^{*} On one occasion an expert in the law stood up to test Jesus. "Teacher," he asked, "what must I do to inherit eternal life?"

[&]quot;What is written in the Law?" he replied. "How do you read it?"

He answered, "Love the Lord your God with all your heart and with all your soul and with all your strength and with all your mind'; and, 'Love your neighbor as yourself.'"

[&]quot;You have answered correctly," Jesus replied. "Do this and you will live."

But he wanted to justify himself, so he asked Jesus, "And who is my neighbor?"

In reply Jesus said: "A man was going down from Jerusalem to Jericho, when he was attacked by robbers. They stripped him of his clothes, beat him and went away, leaving him half dead. A priest happened to be going down the same road, and when he saw the man, he passed by on the other side. So too, a Levite, when he came to the place and saw him, passed by on the other side. But a Samaritan, as he traveled, came where the man was; and when he saw him, he took pity on him. He went to him and bandaged his wounds, pouring on oil and wine. Then he put the man on his own donkey, brought him to an inn and took care of him. The next day he took out two denarii and gave them to the innkeeper. 'Look after him,' he said, 'and when I return, I will reimburse you for any extra expense you may have'."

[&]quot;Which of these three do you think was a neighbor to the man who fell into the hands of robbers?"

The expert in the law replied, "The one who had mercy on him."

Jesus told him, "Go and do likewise."

The Parable of the Good Samaritan, (Luke 10:25-37, King James Version)

Every Morn and every Night Some are Born to sweet delight. Some are Born to sweet delight, Some are Born to Endless Night."⁶

Thus, the march for justice and freedom is also a march for spiritual meaning. In the words of the physicist, David Bohm,

"In human life, quite generally, meaning is being..."*

The march for justice is a march that implicates the interpretation of the universe and we may be in part creating that universe with a commitment to spiritual enlightenment. This search for meaning is vital to the being and becoming of humanity and its spiritual potentiality. As Bohm points out:

A change of meaning is necessary to change this world politically, economically and socially but that change must begin with the individual; it must change for him... If meaning itself is a key part of reality, then, once society, the individual and their relationships are seen to mean something different from what they did before, a fundamental change has already taken place.†

It is therefore possible to place the meaning of the Selma to Montgomery march in a broader challenge of the unfolding of meaning as critical to the political and spiritual transformation of humankind. This, I would suggest, is the deeper meaning and the lasting value of the Civil Rights March from Selma to Montgomery, Alabama. It is also Dorothy's dream from *The Wizard of Oz* that the dreams that we dare to dream will really come true.

8. Afterthoughts

I have decided to provide an expanded conclusion to this presentation. In part this has been inspired by the tragic events in Missouri involving Michael Brown. I began to think of the problems of the proliferation of guns and the tragedies that they inspire. In thinking of Ferguson and Connecticut and the stand-your-ground problems regarding Trayvon Martin in Stanford, Florida, I was reminded of the title of a famous Hemmingway novel which is "For Whom the Bell Tolls." These words were appropriated from a poet of the 17th century John Dunn and they first appeared in a sermon he gave. The fuller text is as follows:

"Any man's death diminishes me because I am involved in mankind and therefore never send to know for whom the bell tolls. It tolls for thee."

This is a profound insight into the idea of the intricate oneness of humanity and that such tragedies as in the Michael Brown case or the children of Newtown, Connecticut, profoundly diminish us all. Indeed, because of our human interconnectedness a tragedy for one is a tragedy for all. This is a universalizing of compassion and empathy, but in a deeply

^{*} Swami Ranganathananda, Human Being in Depth: A Scientific Approach to Religion (Albany: State University of New York Press, 1991)

Bohm: "I am interested in meaning because it is the essential feature of consciousness, because meaning is being as far as the mind is concerned."

Weber: "Is meaning being?"

Bohm: "Yes. A change of meaning is a change of being. If we say consciousness is its content, therefore consciousness is meaning. We could widen this to a more general kind of meaning that may be the essence of all matter and meaning."

personalized way.

My second insight is owed to a physicist, Albert Einstein. When we consider that so many of our political and economic leaders see the future of America and indeed, the future of mankind as a gigantic poker game or crap shoot, we must of course be very distressed. Our most cherished national and global values are simply poker stakes. It was Albert Einstein's profound instinct that said, God does not play games.

My third point of enlightenment comes from honest Abe Lincoln. It was Lincoln who uttered an absolutely profound caution:

"I tremble for my country when I consider that God is a just God."

My final comment as a point of departure is about the Tea Party. The Tea Party was not a party but a commitment to destroy the tea in Boston Harbor. Today the Tea Party seems bent on destroying some of our most cherished institutions of national government. To them our whole national experience which includes the advancement of human rights for all Americans is a matter to be confronted and destroyed. I would like to see us promote a national tea party where on the 4th of July all the people get together throughout the country and have a national tea party to celebrate our diversity, our commitment to human rights, and to celebrate the universal dignity of man. That is a tea party that I could live with.

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Institutional and Cultural Inertia

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Abstract

Today we are faced with multiple interrelated crises, for example the threat of catastrophic climate change or equally catastrophic thermonuclear war, and the threat of widespread famine. These threats to human existence and to the biosphere demand a prompt and rational response; but because of institutional and cultural inertia, we are failing to take the steps that are necessary to avoid disaster.

1. The Scope of the Crisis

Is the threat of catastrophic climate change as bad as people say it is? No; in fact it is much worse! The mainstream media shield us from the worst facts. To see this, we have to look north. A number of experts, such as David Wasdell, Director of the Apollo-Gaia Project, and Dr. Natalie Shakhova, Research Associate Professor of the International Arctic Research Center, have pointed out that curves based on observations indicate that possibly as soon as 2015, the Arctic will be free of sea ice in September, which is the month when ice is at a minimum. Arctic seas will of course refreeze during the winters, but the ice is observed to be thinner and more vulnerable to storms and before one or two decades have passed, sea ice will vanish entirely from the Arctic.¹

With the vanishing of Arctic sea ice, several dangerous feedback loops will come into play. Ice reflects sunlight, but dark water absorbs it, accelerating the warming of the region. Warmer waters will progressively release more water vapor into the atmosphere, where it acts like a greenhouse gas. Melting Arctic tundra will release large quantities of the potent greenhouse gas methane. Furthermore, the warming of the bottoms of shallow Arctic seas will destabilize the very large amounts of methane hydrate crystals found there, releasing much more methane and CO_2 into the atmosphere, and further accelerating the rise in temperatures. The Arctic is already roughly 3 degrees Celsius above the 1981-2010 average.²

In 2012, the World Bank issued a carefully-researched report which concluded that the world as a whole is presently on track for warming of 4 degrees C by the end of the 21st century, and if determined action is not taken to prevent it, the warming will not stop there.³

With higher temperatures, melting of the Greenland ice cap will accelerate. The time that will be needed for the complete melting of the Greenland ice cap is uncertain. It is predicted to take place within 1,000 years, but non-linear effects may cause it to take place much sooner. It is observed that lakes forming on the surface of the ice sheet during the summers drain down to the bottom of the sheet, where they lubricate the flow of the ice towards the sea. Complete melting of the Greenland ice cap would raise global ocean levels by about

7 meters, and the loss of Antarctic sea ice would add approximately 7 meters to the total. Coastal cities throughout the world are at risk.

"International relations are still based on the concept of absolutely sovereign nation states, even though this concept has become a dangerous anachronism in an era of instantaneous global communication and economic interdependence."

Rising ocean levels threaten to flood many low-lying regions of the world, such as the Netherlands, oceanic islands, parts of Vietnam, Bangladesh and Southern Florida, producing climate refugees and reducing global agricultural output.

Glaciers throughout the world are melting rapidly because of climate change.⁴ The continuation of this trend would threaten the summer water supplies of China, India and some parts of North and South America. This would also damage global agriculture at a time when population is increasing.⁵ Droughts and floods produced by climate change also threaten the world's agricultural output.⁶ We have recently seen severe floods in Jammu and Kashmir,⁷ as well as unprecedented droughts in the South Western regions of the United States and in East Africa.

Thus, through several mechanisms, climate change threatens the world's food supply. We must also recognize that a large fraction of global agricultural output depends heavily on high-yield modern agriculture (the "Green Revolution"), which in turn depends on the availability of fossil fuels, for producing chemical fertilizers, for driving farm machinery and for transportation of food. Not only is the use of fossil fuels one of the main causes of climate change, but also one can predict that both oil and natural gas will soon become very expensive.

We can see that by the middle of the present century, just as the global population reaches the unprecedented level of approximately 9 billion, the world's food supply will deal a severe blow by the effects of climate change coupled with the collapse of modern high-yield agriculture. There is a danger that an extremely wide-spread global famine will then occur, which may produce billions of deaths, rather than millions.

Almost all scientists agree that the threats posed by climate change are very severe indeed, and yet the majority of governments fail to take the firm steps that will be needed to avoid its worst effects. To make matters worse, powerful lobbyists from fossil fuel industries have mounted massive advertising campaigns to convince the public that climate change is not real, that it is "a liberal hoax". Thus we can see that dangers due to climate change are linked with dangers from the rise of economic inequality and corporate power, and to the decay of democratic government. Part of the blame must also fall on our servile and dishonest mainstream media.

2. Institutional Inertia

Our collective failure to respond adequately to the current crisis is very largely due to

institutional inertia. For example, international relations are still based on the concept of absolutely sovereign nation states, even though this concept has become a dangerous anachronism in an era of instantaneous global communication and economic interdependence. Within nations, systems of law and education change very slowly, although present dangers demand rapid

"Extreme inequality, such as we have today, can also contribute to economic collapse."

revolutions in outlook and lifestyle. Our financial system is deeply embedded and resistant to change. Our entire industrial infrastructure is based on fossil fuels; but if the future is to be saved, the use of fossil fuels must stop.

The failure of the recent COP20 climate conference in Lima to produce a strong final document can be attributed to the fact that the nations attending the conference felt themselves to be in competition with each other, when in fact they ought to have cooperated in response to a common danger. The heavy hand of the fossil fuel industry also made itself felt.

Corporations also represent a strong force resisting change. By law, the directors of corporations are obliged to put the profits of stockholders above every other consideration. No room whatever is left for an ecological or social conscience. Increasingly, corporations have taken control of our mass media and our political system. They intervene in such a way as to make themselves richer, and thus to increase their control of the system.

3. Economic Inequality, the Decay of Democracy, and the Danger of Nuclear War

A recently released study by Oxfam⁸ concluded that almost half of the world's wealth is now owned by just 1 percent of the population. The report states that "Left unchecked, political institutions are undermined and governments overwhelmingly serve the interests of economic elites, to the detriment of ordinary people".

Extreme inequality, such as we have today, can also contribute to economic collapse.⁹ The poor do not have enough money, and the very rich are too few in number to buy back the output of a society. This is a formula for economic recession. To avoid the inevitable downturn caused by excessive inequality, our oligarchic governments resort to what might be called "Military Keynesianism".¹⁰ To prevent the crash of stock markets and banks, our corporate-controlled governments pour almost unimaginable amounts of money into perpetual wars. Enemies have to be found: communists, terrorists, the Islamic world, Russia, Iran, China, and so on. The corporate press keeps the public perpetually in fear of these "enemies".

Although many countries have undemocratic and oligarchic governments, the decay of democracy is especially worrying in the United States. When Barack Obama was elected President, there was hope throughout the world that the gangster-like domestic and foreign policies of the Bush administration would change. On the basis of his campaign promises and his speeches in Prague and Cairo, Obama was even (prematurely) awarded a Nobel Peace Prize. But nothing changed. In fact, under Obama, perpetual wars and aggressive interventions in the internal affairs of other countries have become more flagrant and reckless than they were under Bush. At home, violations of the constitution and civil rights, as well as prosecution of whistle-blowers and militarization of the police have become the norm.

Why did Obama change overnight into a new and worse version of George W. Bush? Why do both Democrats and Republicans in the US Congress slavishly vote for the interests of the super-rich oligarchy, the military-industrial complex, the fossil fuel industry and Israel? Why do European politicians support the imperial goals of the United States? Are they being blackmailed through personal secrets revealed by all-encompassing NSA spying? Are they being bribed, or threatened, or both? We do not know. All we know is that the will of the people no longer counts for anything. In Frank Zappa's words "Government is the Entertainment division of the military-industrial complex". The corporate billionaire oligarchs are saying to us: "Vote for whomever you like; we own them all".

Under this system, Washington insiders have begun to believe their own propaganda. Influenced by ingrown "group-think", they exhibit symptoms of recklessness bordering on insanity. We can see this almost-insane recklessness most clearly in the recent attempt of the United States government to revive the Cold War by supporting a neo-Nazi coup against the elected government of Ukraine. The aim seems to be to provoke a conflict with Russia. Conflicts are, after all, needed to justify obscenely bloated military budgets. But a conflict between Russia and the United States could easily escalate into a nuclear war.

The centenary of the tragic outbreak of World War I reminds us of the dangers of escalation. We can also remember that none of the people responsible for the outbreak of that world-destroying conflict had any imaginative idea of what it would be like. They thought that it would be over in a few months. They visualized romantic and heroic cavalry charges. But the machine gun, long-range artillery and poison gas had changed the character of war. Similarly, it seems that none of the Washington hawks who today risk provoking a thermonuclear war with Russia have any imaginative idea of what such a war would be like.

Recent research shows that a large-scale nuclear war would be an ecological catastrophe, damaging global agriculture to such an extent that it could initiate a very large-scale famine involving billions of deaths, and severely damaging the biosphere. Furthermore, long-lasting radioactive contamination would make large areas of the world permanently uninhabitable.¹¹

4. Limits to Growth

Although never-ending exponentially-increasing economic growth on a finite planet is a logical impossibility, today's politicians and economists are almost universally committed to such growth. Their defiance of logic is achieved by refusing to look more than one or two decades into the future. We can gain some understanding of this self-imposed myopia by examining today's fractional-reserve banking system.

Fractional reserve banking is the practice whereby private banks keep only a small fraction of the money entrusted to them, and lend out the remaining amount. Under this system, profits from any expansion of the money supply go to the banks, rather than being used by the government to provide social services. This is basically fraudulent and unjust; the banks are in effect issuing their own currency.

When the economy contracts instead of expanding, the result is still worse. The depositors then ask the banks for their money, which is their right to do; but the banks do not have the cash. It has been lent out. Unless the government and the taxpayers are able and willing to save the banks, they collapse. This explains why politicians and economists fear a stationary

or contracting economy, and why they are so dedicated to limitless growth, despite the fact that it is a logical and mathematical impossibility.

Of course, it is necessary to distinguish between industrial growth and growth of knowledge and culture, which can and should continue to grow. Qualitative improvements in human society are possible and desirable, but resource-using and pollution-producing industrial growth has reached or exceeded its sustainable limits.

Because of the unrestricted growth of both industry and population, the earth is headed towards an ecological mega-catastrophe. According to Wikipedia, "Global deforestation sharply accelerated around 1852. It has been estimated that about half of the earth's mature tropical forests have now been destroyed. Some scientists have predicted that unless significant measures (such as seeking out and protecting old-growth forests that have not been disturbed) are taken on a worldwide basis, by 2030 there will be only 10 percent remaining, with another 10 percent in a degraded condition. 80 percent will have been lost, and with them hundreds of thousands of irreplaceable species." 12

The world's ability to feed its growing population is threatened by loss of fertile cropland through erosion, salination, desertification, loss of topsoil, urbanization and failure of water supplies. In China, India and in the southwestern part of the United States, water tables are being overdrawn and are falling at an alarming rate. For example, the Ogallala aquifer in the southwest US has a yearly overdraft of 160 percent.

If irrigation of arid lands is not performed with care, salt may be deposited so that the land is ruined for agriculture. Another type of desertification can be seen in the Sahel region of Africa, south of the Sahara. Rapid population growth has led to overgrazing, destruction of trees and wind erosion, so that the land has become unable to support even its original population. Often tropical rain forests are felled or burned for the sake of new agricultural land. However, the nutrients in the newly-cleared land are often quickly washed away by rains, so that the land becomes unsuitable for farming and has to be abandoned. Loss of fertile land also occurs when it is paved over by urban development. 14

5. The Long-term Perspective

The interrelated threats to humans and the biosphere which we have been discussing become still more clear and severe if we consider the long-term perspective. For example, we mentioned climate change feedback loops resulting from the destabilization of methane hydrate crystals on Arctic sea floors. In the long term, there is a danger that melting of these crystals will occur at the bottom of oceans throughout the world. Geologists tell us that there have been five major extinction events in the past, in each of which more than half of all living organisms were lost. Many scientists believe that global warming by 10-15 degrees C due to the release of methane from ocean floors was the cause of these mass extinctions, and that unless prompt measures are taken to prevent it, there will be a danger of a human-initiated 6th mass extinction. The worrying thing about methane hydrate crystals at the bottoms of oceans is the enormous quantity of carbon which they contain, perhaps as much as 10,000 gigatons. One can put this enormous quantity into perspective by comparing it with the total amount of carbon emitted by human activities since the start of the Industrial Revolution: 337 gigatons.¹⁵

The danger of nuclear war also becomes clearer when we look far ahead. Suppose that each year there is a certain finite chance of a nuclear catastrophe, let us say 1 percent, then in a century the chance of a disaster will be 100 percent, and in two centuries, 200 percent, in three centuries, 300 percent, and so on. Over many centuries, the chance that a disaster will take place will become so large as to be a certainty. Thus by looking at the long term

"Cultural evolution is responsible for the success of our species."

large as to be a certainty. Thus by looking at the long-term future, we can see that if nuclear weapons are not entirely eliminated, civilization will not survive.

Finally, the limits to growth become very clear if we look far into the future. One can argue about the exact future date at which particular non-renewable resources will become so expensive that they cannot be used economically, but one cannot argue that such a time will never come. Furthermore, exponential growth of any kind, whether it is growth of population or growth of pollution-producing and resource-using industry, cannot be continued indefinitely on a finite planet. For example, if the rate of increase is a modest 2 percent per year, then over 500 years, whatever is growing at that rate will have increased by a factor of 22,000. No one can maintain that the earth can support 22,000 times its present human population or 22,000 times its present industry.

6. Religious Conservatism

All known human societies have religions; and this is true not only of societies that exist today, but also of all past societies of which we have any record. Therefore it seems reasonable to suppose that the tendency to be religious is an intrinsic part of human nature. It seems to be coded into our genes. If evolutionary forces have produced the human tendency to be religious, then it must have some survival value. My own belief is that religion helps us because it is a mechanism for the preservation and transmission of human cultures.

All living organisms on earth hand on information from one generation to the next in the form of messages coded into their DNA and RNA. Humans are unique in having also evolved extremely efficient non-genetic methods for transmitting information from one generation to the next through our highly developed languages.

Cultural evolution is responsible for the success of our species. We dominate the earth because of cultural evolution. Thus, if religion is a mechanism for the preservation and transmission of particular cultures, it must have conferred a great advantage to those societies that possessed religion, and a tendency to be religious would have been favored by the Darwinian forces of natural selection, and this perhaps explains why it is now a universal part of human nature.

Throughout history, until recent times, the conservative role of religions in transmitting and preserving our cultural heritage has been a great advantage. However, the dangers that we are experiencing today demand quick changes in our patterns of thought and in our lifestyles; and here the conservatism of religion may be a disadvantage. For example, at a time when the exploding global population contributes to the severity of most of the dangers that we face, religious opposition to birth control has become inappropriate.

Furthermore, human history is drenched with blood from wars that have been fought in the name of religion. We can think, for example, of the Crusades, or the Islamic conquests in the Middle East, North Africa and Spain, or the wars between Catholics and Protestants in Europe, or the brutal treatment of the indigenous populations of Africa, and the Americas in the name of religion. The list by no means stops there. This is because religion is so closely associated with ethnicity and nationalism.

"Although religion may be a part of the problems that we face today, it can potentially be part of the solution."

The religious leaders of today have the opportunity to contribute importantly to the solution of the problem of war. They have the opportunity to powerfully support the concept of universal human brotherhood, to build bridges between religious groups by making intermarriage across ethnic boundaries, and to soften the distinctions between communities. If they fail to do this, they will have failed humankind in a time of crisis.

Although religion may be a part of the problems that we face today, it can potentially be part of the solution. Because of the all-destroying modern weapons developed through the misuse of science, we urgently need religious ethics, i.e. the traditional wisdom of human-kind. Not only do the fundamental ethical principles of the world's great religions agree with each other, but they also do not conflict in any way with science. If practiced, these principles would make war impossible, thus eliminating one of the greatest dangers that we face today, the cause of much of the suffering that humans experience.

The central ethical principles of Christianity can be found in the Sermon on the Mount and in the Parable of the Good Samaritan. In the Sermon on the Mount, we are told that we must not only love our neighbors as much as we love ourselves; we must also love and forgive our enemies. This seemingly impractical advice is in fact of great practicality, since escalatory cycles of revenge and counter-revenge can only be ended by unilateral acts of kindness. In the Parable of the Good Samaritan, we are told that our neighbor, whom we must love, is not necessarily a member of our own ethnic group. Our neighbor may live on the other side of the world and belong to an entirely different race or culture; but he or she still deserves our love and care.

Contrast this with the idea of "massive retaliation" which is part of the doctrine of nuclear deterrence! In nuclear retaliation, the victims would include people of every kind: women, men, old people, and infants, completely irrespective to any degree of guilt that they might have. As the result of such an attack, many millions of people in neutral countries would also die. This type of killing has to be classified as genocide.

When a suspected criminal is tried for a wrongdoing, great efforts are made to clarify the question of guilt or innocence. Punishment only follows if guilt can be established beyond any reasonable doubt. Contrast this with the totally indiscriminate mass slaughter that results from a nuclear attack!

Thus both the doctrine of nuclear deterrence, and the very existence of nuclear weapons, are completely contrary to the central ethical principles of Christianity; and not only to the principles of Christianity, but to those of every other major religion.

It is an interesting fact that the Golden Rule, "Do unto others as you would have them do unto you", appears in various forms in all of the world's major religions. The Wikipedia article¹⁶ gives a fascinating list of the forms in which the rule appears in many cultures and religions.

The Buddhist concept of karma has great value in human relations. The word "karma" means simply "action". In Buddhism, one believes that actions will return to the actor. Good actions will be returned, and bad actions will also be returned. This is obviously true in social relationships. If we behave with kindness to our neighbors, they will return our kindness. Conversely, a harmful act may lead to vicious circles of revenge and counter-revenge. These vicious circles can only be broken by returning good for evil. However, the concept of karma has a broader and more abstract validity, beyond the direct returns of actions to the actor.

When we perform a good action, we increase the total amount of good karma in the world. If all people similarly behave well, the world as a whole will become more pleasant and more safe. Human nature seems to have a built-in recognition of this fact, and we are rewarded by inner happiness when we perform good and kind actions. In his wonderful book, "Ancient Wisdom, Modern World", the Dalai Lama says that good actions lead to happiness and bad actions to unhappiness, even if our neighbors do not return these actions. Inner peace, he tells us, can only be achieved through good actions.

In Buddhist philosophy, the concept of karma, action and reaction, also extends to our relationship with nature. Both Hindu and Buddhist traditions emphasize the unity of all life on earth. Most Hindus regard killing an animal as a sin, and many try to avoid accidentally stepping on insects as they walk. The Hindu and Buddhist picture of the relatedness of all life on earth has been confirmed by modern biological science. We now know that all living organisms have the same fundamental biochemistry, and we know that our own genomes are more similar to than different from the genomes of our close relations in the animal world.

The people of the industrialized nations urgently need to acquire a non-anthropocentric element in their ethics, similar to the reverence for all life found in the Hindu and Buddhist traditions, as well as in the teachings of St. Francis of Assisi and Albert Schweitzer.* We need to value other species for their own sakes, and not because we expect to use them for our own economic goals.

Today a few societies follow a way of life similar to that of our hunter-gatherer ancestors. Anthropologists are able to obtain a vivid picture of the past by studying these societies. Usually, the religious ethics of the hunter-gatherers emphasize the importance of harmony with nature. As the expansion of industry threatens to produce an ecological mega-catastrophe, we can learn much from societies that live in balance with the natural world.

We can see from this discussion that religious conservatism cuts both ways. In some respects, it damages our response to the current crisis, for example when it supports war or opposes birth control. On the other hand, the ethical principles of the world's great religions can help to save us.

^{*} The simple life-style that we associate with St. Francis can also teach us much. St. Francis and St. Claire and many others who have followed in their footsteps lived lives of voluntary poverty and service, close to the ideals of Jesus himself, who said "Lay not up treasures on earth...".

7. Shooting Santa Claus

No one wants to shoot Santa Claus. That goes without saying! Who would want to harm that jolly old man, with his reindeer and sleigh, and his workshop at the North Pole? Who would want to prevent him from bringing happiness to everyone? Who would want to stop him from making the children's eyes light up like stars? Surely no one!

But the sad truth today is that we have to get rid of Santa somehow, before he kills us, and before he kills most of the plants and animals with which we share our world. Perhaps shooting is too harsh. Perhaps we should just forget Santa and all that he stands for, with his red suit, invented by the advertising department of Coca Cola.

This is what Santa stands for: The customer is always right. Your wish is our command. You have a right to whatever you desire. If you feel like taking a vacation on the other side of the world, don't hesitate, just do it. If you feel like buying a SUV, just do it. Self-fulfillment is your birthright. Spending makes the economy grow, and growth is good. Isn't that right?

But sadly that isn't right. We have to face the fact that endless economic growth on a finite planet is a logical impossibility, and that we have reached or passed the sustainable limits to growth.

At Christmas, or New Year or the Carnival in New Orleans or Rio, or Bastille Day, or whatever festival one might think of, we do what we have always done. The feeling of continuity that we obtain from carrying out these ancient rituals gives us a sense of security. But sadly, the full, expensive celebration of festivals is becoming unsustainable and ecologically destructive. The very security that we seek in such traditional celebrations may be undermined by our unbridled orgies of consumerism.

In today's world, we are pressing against the absolute limits of the earth's carrying capacity, and further growth carries with it the danger of future collapse. In the long run, neither the growth of industry nor that of population is sustainable; and we have now reached or exceeded the sustainable limits.

The size of the human economy is, of course, the product of two factors: the total number of humans, and the consumption per capita. Let us first consider the problem of reducing the per-capita consumption in the industrialized countries. The whole structure of western society seems designed to push its citizens in the opposite direction, towards ever-increasing levels of consumption. The mass media hold before us continually the ideal of a personal utopia, filled with material goods.

Every young man in a modern industrial society feels that he is a failure unless he fights his way to the "top"; and in recent years, women too have been drawn into the competition. Of course, not everyone can reach the top; there would not be room for everyone; but society urges us all to try, and we feel a sense of failure if we do not reach the goal. Thus, modern life has become a competition of all against all for power and possessions.

When possessions are used for the purpose of social competition, demand has no natural upper limit; it is then limited only by the size of the human ego, which, as we know, is boundless. This would be all to the good if unlimited industrial growth were desirable; but today, when further industrial growth implies future collapse, western society urgently needs to find

new values to replace our worship of power, our restless chase after excitement, and our admiration of excessive consumption.

If you turn on your television set, the vast majority of the programs that you will be offered give no hint at all of the true state of the world or of the dangers which we will face in the future. Part of the reason for this willful blindness is that no one wants to damage consumer confidence. No one wants to bring on a recession. No one wants to shoot Santa Claus.

"It is up to the people of the world to make their collective will felt."

But sooner or later a severe recession will come, despite our unwillingness to recognize this fact. Perhaps we should prepare for it by reordering the world's economy and infrastructure to achieve long-term sustainability, i.e. steady-state economics, population stabilization, and renewable energy.

8. What then can we do?

On the 23rd of September 2014, the United Nations Climate Summit took place in New York.† Delegates and heads of state from around the world were shown images of the inspiring and heartfelt People's Climate March, which took place on Sunday, September 21st.¹⁷ The organizers of the march had expected 100,000 participants. In fact, more than 400,000 came, and the march was unique in its artistic brilliance and ethnic diversity. On the same day 2,600 similar events took place in 170 nations throughout the world, with the participation of 600,000 people. The slogan of the march in New York was "To change everything, we need everyone", and in fact, everyone came!

On that momentous September Sunday in 2014, the people of the world spoke with one voice on the urgent need to prevent the worst effects of climate change. They shouted loudly, "We do not want climate change! We want system change!" In her new book, "This Changes Everything", author and activist Naomi Klein argues that the urgent need for action to avoid the worst consequences of climate change can unite people in the cause of other urgently needed changes, such as overthrowing oligarchy and re-establishing democracy.¹⁸

Pulitzer Prize-winning author Chris Hedges believes that widespread civil disobedience demonstrations will be necessary. Of course such demonstrations cannot be violent, since they would have no chance at all against today's militarized, tank-driving police. But both Mahatma Gandhi and Martin Luther King have shown how effective non-violent campaigns can be as a tool for system change. And, as both Gandhi and King showed in their own lives, fearlessness is the key.

All of the technology needed for the replacement of fossil fuels by renewable energy is already in place.¹⁹ Much research and thought have been devoted to the concept of a steady-state economy.²⁰ The only thing that is lacking is political will. It is up to the people of the world to make their collective will felt.

We live in a time of crisis. We did not ask to be born at such a time, but history has given to our generation an enormous responsibility towards future generations. We must achieve a

[†] https://www.youtube.com/watch?v=h5YaqcPEUNc

new kind of economy, a steady-state economy. We must stabilize global population. We must replace fossil fuels by renewable energy. We must abolish the institution of war. We must act with dedication and fearlessness to save the future of the earth for human civilization and for the plants and animals with which we share the gift of life.

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A People-centered, Preventive Approach to Disaster Risk

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Abstract

As natural disasters increase and intensify around the world, their consequences are felt most acutely in those countries less equipped to cope with them, economically and politically. The current response to such disasters is mostly reactive; however, this paper will argue that such disasters need, instead, a pro-active, comprehensive, preventative, and human-centred approach that has the capability of fostering change in human perspective, attitude and preparedness. This activist approach will not only involve the affected workers and population at large, as both resource and beneficiary, but should also be based on the establishment of Decent Work,* as per the ILO definition: decent job opportunities and rights at work, which will contribute to fostering social and economic development. Such an approach entails a number of characteristics: an effective methodology; the active participation of employers' and workers' organizations; employment and livelihood concerns; anticipating and mitigating risks; collaboration among the public and private sectors, and the social economy; efficient and cost-effective multiple responses; a better plan of rebuilding; and reconstruction and recovery efforts that recognize and foster diversity. Implementation of such an approach must involve a coordinated effort among governments, the UN agencies, social partners, business and civil society organizations.

Foreword by Alberto Zucconi†

We have finally become aware and concerned about the rising risks of climate warming, the destruction of natural and human capital and the significant part that human behaviour has in impacting all the life forms of our planet. This awareness is a necessary but not sufficient condition for dealing effectively with such man made catastrophes. Successfully managing these emergencies requires the awareness that we not only need effective tools of diagnosis but effective tools of intervention as well. The efforts of disaster prevention and mitigation need to use more effective tools than in the past. The mechanistic approaches have clearly shown their limits, that too often they have been giving not only poor results but even some boomerang effects.

^{*}The decent-work agenda of the International Labour Organization is an important instrument for achieving the objective of full and productive employment and decent work for all through the promotion and realization of the fundamental principles and rights at work, creation of greater and equal opportunities for women and men to secure decent employment and income, and enhancement of the coverage and effectiveness of social protection for all and the strengthening of social dialogue (ref.:ECOSOC Resolution 2008/18 Promoting full employment and decent work for all)

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Too often we have acted without consideration of some basic facts: that reality is socially construed, that there are many variables simultaneously at work, that we need to see, think and act systemically, address all the variables, especially the bio-psycho-social and spiritual ones and that our help needs to be offered by empowering the people, the communities, the regions and nations using person-centered, people-centered, culture-centered and community-centered approaches scientifically validated in order to avoid the risks of disempowerment, passivation, and of negative costs/benefits ratios that have undermined the results of too many good willed actions. It is quite encouraging to see that in this important paper Donato Kiniger- Passigli and Anna Biondi clearly address all these fundamental issues and that the UN agencies are taking the leadership in this direction. Hopefully we will see soon the dissemination of best practices of this promising course of action.

1. Introduction

Today, as the overall world risk situation continues to worsen dramatically as a result of natural disasters, the vast majority of such disasters and the consequences of their impact on people as well as property are regrettably concentrated in countries less equipped to cope with them in terms of ensuring assets and transfer costs of recovery. The preparedness and response to these disasters must be as dramatic as the disasters themselves. In this paper we will argue that such measures should be part of a comprehensive and human-centred approach that begins with fostering change in human perspective, attitude and

"The truth is that there is nothing "natural" about disasters, as they are largely provoked by human activities."

preparedness. The underlying assumptions of our position lie in the innate, determinative capacity of humans to be active in meeting challenges as opposed to passively reacting to them. This activism is, furthermore, most effective when the affected population is both the beneficiary and resource for meeting the need of preparedness. In addition, a further challenge is to establish a comprehensive approach, addressing multiple dimensions and utilizing various types of resource capabilities and strategies. This universal challenge is best met by the unique role of international organizations, in general, and specifically, by the ILO's approach to disaster management based on social and economic justice.

Evidence shows a growing need to improve emergency preparedness globally and, in particular, in countries at higher risks of natural hazards and conflict, i.e., the poorest and most fragile. In these countries, disasters are likely to exacerbate already existing weaknesses and instabilities due to the scarcity of human capital and due to the destruction of social capital.

Climate change brings with it extreme conditions, such as floods, landslides, earthquakes, wildfires, tsunamis, typhoons (such as Haiyan) with unprecedented winds and storms: natural disasters that unfortunately will probably increase in frequency and intensity in the near future. Equally, if not more devastating, are the effects of progressive desertification, rising sea levels, carbon emissions and ecological disasters of all kinds.

The truth is that there is nothing "natural" about disasters, as they are largely provoked by human activities.[‡] While we cannot stop a hazard from happening, it is possible to act in order to *prevent* it from becoming a major disaster and to mitigate its effects.

Furthermore, disasters, if not prevented or mitigated, will have a major impact on the world of work, adding numbers to temporary or long-term unemployment in countries where the lack of decent work is already the rule, in rural areas (among agricultural workers and share croppers) and in urban and semi-urban peripheries where large numbers of emarginated youth survives, often in idleness.

"To create decent job opportunities and dignified occupations, a multidisciplined, people-centred approach has to be set in place with joint efforts of governments, workers' and employers' organizations, local communities and civil society at large."

The International Labour Organization (ILO), historically the first specialized agency of the UN system that addresses labour and economic life, aims at supporting its constituents through rehabilitation, recovery and reconstruction. The ILO's constituents – governments and social partners (workers' and employers' organizations) – contribute substantially to set in place and implement recovery programmes based on employment intensive schemes, productive jobs, social protection, human and labour rights, and social dialogue. Based on this comprehensive approach, alongside UN partners, the organization works towards prevention, mitigation and improved disaster preparedness.

2. Preparedness is the Key

Higher preparedness is key to reducing risk levels, developing the capacity to respond and reinforcing the ability to recover both at community and workplace levels. The promotion of resilient employment and livelihood opportunities is an integral part of higher preparedness, and by enhancing the capacity of communities to survive, adapting and growing in spite of adverse conditions produces social and economic stability.

In order to create decent job opportunities and dignified occupations, a multidisciplined, people-centred approach has to be set in place with joint efforts of governments, workers' and employers' organizations, local communities and civil society at large. Preparedness should not be treated as an afterthought in the wake of mega disasters; on the contrary, it should be designed to fit people's requirements and skills, to ensure better living and working standards, and to anticipate post-disaster recovery needs.

Technological responses alone are doomed to failure or can be easily "misunderstood" and misused as demonstrated in the early days of the post-tsunami recovery when the "Lost

[‡] According to the definition provided in the Hyogo Framework for Action (HFA), a hazard is a "damaging physical event, phenomenon or human activity and can have different origins, natural or induced by human processes." This definition implies that technological hazards are within the remit of disaster risk reduction and legitimates the workplace as a centre stage of disaster risk reduction in view of its role in prevention, mitigation, recovery and rehabilitation.

in Translation" Syndrome caused more harm than good in many villages on the shores of the Indian Ocean.

This is why preparedness measures should be developed along people's cultural and traditional beliefs with innovative methods that build upon those endogenous, ancestral and original models, while ensuring a comprehensive and contemporary rights-based approach, including, for example, gender equality issues, if need be.

But what does it take to be prepared?

First and foremost, it requires us to have at hand a mix of designed settings, proper skills and an effective methodology. As stated, this not only means seeking out very expensive solutions (often not affordable in developing countries) but creating the necessary safeguards and awareness, and continuously building the capacities of local and international experts in anticipation of possible disasters. With this aim, the ILO has successfully mainstreamed the employment and livelihood dimensions into the post disaster needs assessment initiative led by the UN family, the EU and the World Bank. The global rollout of the Post-Disaster Needs Assessment (PDNA) training in 2014 has generated a growing pool of experts ready to be deployed upon demand.

In their efforts to preserve assets and development gains from the devastating consequences of disasters, countries should strengthen participatory planning mechanisms, encouraging the active participation of employers' and workers' organizations (with a national, local and sectoral component) in disaster risk management.

Employment and livelihood concerns should be factored into disaster risk management of vulnerable countries, considering in particular the planning and management of rural and urban development and of ecosystems, and focusing on strategies to reduce livelihood risk and increase resilience. Workplaces should be placed center stage for disaster risk reduction in view of their role with managers and trade union representatives as frontlines in deescalating the impact of disasters through prevention, mitigation, recovery and rehabilitation. Existing Occupational Health and Safety (OSH) Committees should be enhanced in order to include these new skills, and new ones should be created where needed. Collaboration between employers' and workers' representatives in OSH committees is, in fact, the first step in establishing a culture of prevention and mitigation: it must not be forgotten that the workplace is also a potential source of major industrial and technological disasters, and that a key strategy in preventing and dealing with them is to adopt a health and safety approach based on the respect of international labour standards. Positive synergies also need to be established with labour *inspectorates* as well as along the supply chains, including across countries.

While intervening in a disaster setting, a **people-centred** approach is required, focussing on human needs and livelihood concerns. Helping people to recover their means of earning a living is central to the ILO's overall mission. Economic recovery enables people to reduce their reliance on long-term relief, adding to self-motivation, dignity and a sense of purpose. Alongside direct relief to affected people, local public and private markets, services and businesses that provide employment or support livelihoods more broadly also need to be assisted. Livelihood recovery can be part of rebuilding homes and infrastructure through

employment-intensive schemes, and it is more likely to be successful when reconstruction avoids the simplistic relocation of people or settlements, or simply rebuilding "as it was", without innovative approaches which will anticipate and prevent future problems.

"Lessons learned from previous sudden disasters show that appropriate preparedness reduces the impact of disasters and lays the foundations for quicker business recovery."

Being prepared also means anticipating and mitigating risks, such as climate change, through innovative approaches. For example, in 2011 the ILO completed a pilot project on climate change adaptation in the Philippines that developed an integrated financial package with weather index-based insurance to help service providers identify high-risk communities that are not covered by regular financial institutions. The results were promising: In the face of climatic risks, the identified communities were able to continue their production by applying climate-informed decisions and reduced their risk through a more diversified source of income and better access to insurance schemes.

The private sector involvement in disaster risk reduction is key in achieving a solid integrated approach to share expertise and capacities in order to develop an enabling environment for recovery and to minimise the long-term impacts of a hazard. In Bosnia-Herzegovina, the ILO is currently collaborating with collective representations of the private sector in developing blueprints for businesses to prepare for and respond to disaster situations. Through social dialogue, the ILO facilitates the active participation of entrepreneurs and workers' organizations at both the community and national levels in order to develop suitable business continuity plans along the supply chain to be activated when a disaster strikes.

While governments need to retain and increase their firm governance role in disaster risk reduction, the **collaboration between the public and private sectors** is also an important driver in achieving a solid integrated approach, in sharing expertise and capacities for prevention and response, in developing an enabling environment for recovery, and in minimizing the long-term impacts of hazards and risks. In particular, the development of **business continuity plans** through the participation of employers' and workers' organizations has the potential of contributing to the protection of workers' lives, of maintaining adequate standards for health and safety, of promoting job and income security, and of reducing business losses.

Plans to guarantee the continuity of public services should be developed and implemented in all critical sectors, given their utmost importance. Such plans, currently being discussed with communities and civil society organizations, should involve the public sector unions in their design, ensuring ownership, positive response and support from the start.

Lessons learned from previous sudden disasters show that appropriate preparedness reduces the impact of disasters and lays the foundations for quicker business recovery. Such preparedness restores quality jobs and incomes, while also improving key enterprise functions, processes and practices, with positive spillover effects at the community level.

Along with continuity of business and public service delivery, livelihood support is key to minimizing the impact of disaster-induced population displacement/forced migration, and a precondition for addressing it through durable solutions.

Providing a smooth transition from relief to recovery is also central to disaster preparedness. Only when employment and development opportunities are maximised from day-one of the relief effort can we foster a strong and lasting recovery and, at the same time, address underlying risks and vulnerabilities. In the 2010 massive earthquake that hit Haiti, the ILO programme included emergency employment-intensive reconstruction, jointly with the promotion of quality jobs in enterprises and the enhancement of entrepreneurship skills. Several enterprise service centres have since been opened, which provide practical, technical and managerial training in recycling the debris material into pavement blocks, and in road and public space rehabilitation. Small enterprises have acquired the capacity to repair roads; workers have been trained and trainers equipped with business development skills. More work is needed – especially in reference to securing better wages, conditions of work and collective agreements for workers – but this action has shown a practical way towards longer-lasting solutions, desperately needed on the island.

In Somalia, the ILO has worked with the government and local implementing organizations in employment-intensive infrastructure investments. Flood-retaining walls, catchments, roads and irrigation canals have been constructed and rehabilitated, generating work opportunities for women and men: again, a small contribution on the way towards decent work in a difficult setting for workers and their families.

Such activities aim at involving local business and workers' representatives in disaster risk reduction, and taking actions to enhance their disaster resilience at the local level. Natural and man-made disasters also **require efficient and cost-effective multiple responses** to strengthen national and local coping mechanisms. With increasing hazards, humanitarian needs threaten to increase beyond the capacity of governments and of the international emergency response system. Action is needed to tackle natural and human-made risks, to reduce the scale and costs of humanitarian interventions, and to increase their effectiveness; on the other hand, adequate resources need to be allocated for prevention if the national government and the international community believe in such prevention beyond mere slogans.

At this critical juncture, when a Post-2015 Framework for Disaster Risk Reduction is being prepared, participants in the discussions leading to next March's World Conference in Sendai, Japan, have importantly recognized that "disaster risk is a combined result of hazard, exposure and vulnerability" and that among underlying risk drivers – such as unequal economic development, poverty, inequality, weak governance and local capacities and climate change – compound disaster risk and, hence, determine higher losses. The vicious circle of fragility is determined by social crises, risks of violent conflict, unemployment and precarious conditions of work, lack of participation, inequality and discrimination. The response is a combination of reducing levels of risks, strengthening social and economic resilience, and adopting a just transition to a "greening" economy in response to the global climate change challenge.

Preparedness also **requires a better plan of rebuilding.** Reconstruction and recovery efforts must take future hazards and risks into account. In the Philippines, the ILO supported the Department of Labour and Employment in creating jobs in the aftermath of Typhoon Haiyan. This effort was made to create quality jobs (from the temporary jobs in the aftermath of the crisis), with a guaranteed minimum wage, and protective gear and clothing as well as health and social security contributions – to help improve living and working conditions of affected communities.

"A disaster may be transformed into an opportunity for improvement."

3. Integrated Approach

Reconstruction and recovery efforts must also recognize and foster diversity. Communities and populations affected by disasters are not homogeneous. Different groups have different needs, skills and capabilities. In its disaster recovery efforts, the ILO gives special consideration, in particular, to the needs of women, indigenous people and disadvantaged groups. In this sense, a disaster may be transformed into an opportunity for improvement. If projects and programmes are well-designed and implemented, we can build the capacity of institutions; expand access to services, such as health and education; reduce poverty and strengthen livelihood security; advance gender equality; and empower and open up spaces for civil society. ILO intervention is always based on creating an opportunity for implementation in practice of International Labour Standards. When addressing this topic, a mix of standards is needed for guidance: fundamental rights at work (which include freedom of association and effective recognition of the right to collective bargaining, elimination of child labour, forced labour and discrimination) are considered "enabling rights" for workers, especially in condition of distress or great vulnerability, and they need to be respected, together with other standards, such as C. 122 on Employment, C. 169 on Indigenous people, C. 174 on Prevention of Major Industrial Accidents, among others.

A specific mention should be given to C. 94 on Labour Clauses in Public Contracts, which is particularly relevant if – in the aftermath of a disaster – the public bodies charged with reconstruction want to truly build longer lasting examples, both for public and private contractors.§

An integrated approach is needed to reinforce local capacities, shift from a reactive to a preventive approach, establish robust public-private partnerships and secure ways for the private sector to increase their investments in risk management and business continuity.

If more investments are directed towards disaster risk reduction programmes, more quality jobs may also be created. In parallel, governments and local institutions should promote an effective understanding of measures at hand and offer effective solutions to the challenges communities are facing in order to build a society resilient to disasters. As stated in the UN Plan of Action, resilience can be achieved only through higher preparedness, a higher capability to respond and a higher ability to recover. Generating resilient jobs and livelihoods that can withstand shocks is key to this endeavour as they ultimately create a better working

[§] For the full list of ILO standards please see: http://www.ilo.org/global/standards/introduction-to-international-labour-standards/lang--en/index.htm

environment, better skills, and improvements in production, income-generation and safety at work.

Achieving resilience requires all stakeholders, both in the public and private sectors, to participate and assume responsibilities. Governments should promote – through specific incentives and mechanisms of cooperation with the local communities – a stronger engagement of social partners, of businesses and of officials in charge of local economic development in disaster risk reduction.

Private-public partnerships may offer useful avenues of reducing risk by leveraging business strategies (such as supply chain management and business continuity planning), and strengthening the foundations of resilience, leading to economic opportunities for the public sector as well as for small, medium and large enterprises and cooperatives. The principles of the ILO MNE Declaration are particularly important for companies that want to support workers and employers in managing risks along the supply chain.¶

4. Conclusion

In conclusion, it is worth re-stating that the main role of the international community and the multilateral system is to prevent disasters from happening through adequate planning, coherent efforts and sharing resources for implementing the sustainable development goals currently being set in the post-2015 agenda. In case a disaster strikes, the response should not aim to rebuild the status quo but to use the emergency as an opportunity for improvement. If the recovery is well-designed, development will follow, starting with the institutions' capacity-building as well as progress in a number of areas, such as health and education, poverty reduction, security of livelihood, gender equality, and the empowerment of men and women who have lived on the margins of society. Decent work has to be a key component of any successful strategy in rebuilding resilient and democratic societies.

We trust that the successor of the original Hyogo Framework for Action will contribute to the achievement of these goals.

As UN Secretary General Ban-Ki-Moon urges us: "Ours is the first generation that can end poverty, and the last that can take steps to avoid the worst impacts of climate change. In this 70th anniversary year in which we renew our commitment to the goals and principles of the UN charter, the international community must rise to the moment".**

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[¶] http://www.ilo.org/empent/Publications/WCMS_094386/lang--en/index.htm

^{**} http://www.theguardian.com/commentisfree/2015/jan/12/last-generation-tackle-climate-change-un-international-community

Priming Political Leaders for Fateful Choices*

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Abstract

This paper presents nine propositions: (1) humanity is cascading through a rupture in its history into an epoch of "anthropo-transmutation"; (2) to prevent self-destruction and facilitate pluralistic thriving many counter-conventional radical innovations in human values, institutions and policies are essential; (3) enlightened voluntarism cannot be relied upon; (4) human enhancement possibilities too requite strict control and regulation, based on clarified value judgments; (5) novel decisive global governance norms and structures are urgently needed; (6) the future-shaping stratum must be mobilized; (7) spiritual leaders advancing raison d'humanité are essential; (8) political leaders are critical, but to meet existential needs of humanity they need much improvement; and (9) priming political leaders to cope with the fateful issues posed by science and technology is a top priority.

Recognizing the need to upgrade political leaders, adding it to public discourse and working out concrete improvement proposals should be among the main tasks of the World Academy of Art and Science, the Club of Rome, the Club of Madrid and similar knowledge-intense humanity-serving epistemic communities.

1. Introduction

This short essay presents a set of nine propositions, leading to the major recommendation to focus on priming of political leaders for fateful choices, with applications to the endeavors of the World Academy of Art and Science and related bodies, such as the Club of Rome, the Club of Madrid and the European Academy of Sciences and Arts.

"Humanity is cascading through a self-produced rupture in its history into an epoch of Anthropo-transmutation, in the sense of human actions changing basic features of human existence and its nature."

^{*} This essay is partly based on a short presentation read at an annual meeting of the Commonwealth Partnership for Technology Management – Smart Partnership Movement, invited by its Director and CEO Dr. Mihaela Smith. Its subjects are fully developed in Yehezkel Dror's Avant-Garde Politician: Leaders for a New Epoch (Washington, DC: Westphalia Press, Imprint of the Policy Studies Organization), 2014.

2. Main Propositions

2.1 Proposition One. Humanity is Cascading Through a Rupture in its History into an Epoch of "Anthropo-transmutation"

A relatively new term which has caught on is "Anthropocene," referring to the epoch that began when human activities had a significant global impact on the Earth's ecosystems. But the tools increasingly supplied by science and technology enable humanity to do much more than impacting on ecosystems, namely to transmute its way of being, including also self-annihilation and creation of a Homo sapiens novo with inconceivable attributes. In short, humanity is cascading through a self-produced rupture in its history into an epoch of Anthropo-transmutation, in the sense of human actions changing basic features of human existence and its nature. This is no longer a matter of "future eating," but also of the possibility of "future ending."

Some dangerous results of human action, such as climate changes, may be reversible, thanks to science and technology such as geoengineering. However, some of the potentially poisonous fruits of the tree of knowledge may be much harder to control, such as abilities provided by synthetic biology to mutate viruses in "kitchen laboratories," providing fanatics with unprecedented mass killing weapons. Therefore, radically new policies and institutions based on revaluation of some norms presently accepted as "obvious" are essential. However, even in the best of cases, harsh transition crises accompanied by much pain are unavoidable – making outstanding crisis coping abilities essential.

2.2 Proposition Two. To Prevent Self-Destruction and Facilitate Pluralistic Thriving Many Counter-conventional Radical Innovations in Human Values, Institutions and Policies are Essential

To start with a relatively simple example of a "disruptive technology," advances in artificial intelligence, robotics and perhaps molecular engineering are sure to transform labor markets, by enabling high levels of productivity with much less human resources, making contemporary concepts of "employment" and widely accepted development policies obsolete.

However challenging, this example is benign in comparison to the full potentials of synthetic (and emerging quantum) biology, molecular engineering, artificial intelligence, robotics and more. Even more problematic are the potentials of human enhancement, human cloning and perhaps creation of new life forms.

Advances in science and technology can bring about human thriving but also increase mass-killings up to the point of ending the existence of humanity. Therefore, strict regulation on the production and diffusion of potentially very dangerous knowledge and tools is becoming essential. Such regulation has to be applied globally without exceptions. Therefore, a strict global surveillance and enforcement regime is becoming necessary, subject to safeguards.

This implies limitation of sovereignty of states, some intrusive surveillance, restriction of freedom of research and access to dangerous knowledge, and additional measures which are radical, counter-conventional and contradict presently widely accepted values.

2.3 Proposition Three. Enlightened Voluntarism Cannot be Relied Upon

Recognition of some of the more obvious potential dangers of science and technology that can easily be misused, or cause devastating accidents, is growing among concerned scientists and some groups of policy intellectuals, in addition to broad agreement on the risks of climate changes probably caused by cumulative human action. However the vast majority of proposals for coping with the dangers are, in my view, pipedreams.

"Leaders who try to divert resources in order to contribute to the future of humanity as a whole risk losing the next elections."

Thus:

- There exists no "global public sphere" for reasoning that leads to consensus; and preconditions for such processes, such as a shared set of basic values, are not fulfilled.
- Talk on some forms of "global democracy" is premature by at least a century and probably more.
- Self-regulation by scientists and technology developers, even if taking the form of
 agreed codes of ethics, is sure to be ignored by quite a number of them, whether at their
 initiative or because of various pressures and incentives by governments and market
 actors.
- Raison d'état and often even narrower localism and parochialism, are given priority
 over raison d'humanité by both political leaders and their publics. And leaders who
 try to divert resources in order to contribute to the future of humanity as a whole risk
 losing the next elections.
- Willing cooperation by states will not withstand realpolitik, conflicting interests and value differences.
- Many non-state actors cannot be controlled even if states are willing to do so; a majority operates in failed states; and fanatic ones can only be contained by brute force, which is anothema to widely accepted values and contemporary norms of public international law (which often lags behind evolving challenges).
- Even if most market actors should join efforts to regulate dangerous knowledge and tools, free riders are sure to utilize the opportunities to make a lot of money by meeting demands for such knowledge and tools.
- No global mass movement supporting control of dangerous knowledge and tools is likely to arise. Even if some such mass movements emerge, their effectiveness is very limited as illustrated by their failure to bring about adequate measures against greenhouse effects and other environmental damages.
- Reliance on global social networks is similarly misplaced, as they lack sustainable real power and are counteracted by other manipulated networks.

• No "coalition of the willing" can impose the necessary measures on the non-willing unless a strict and decisive global regime does so.

Furthermore, necessary measures will meet much resistance by economic interests, quite some scientists and a variety of interest groups as well as true believers in the "goodness of humans," the "hidden hand of free markets" and various "tyrannies of the status quo" – often supported by large segments of populations. And important actors will oppose necessary value changes, such as acceptance of somewhat intrusive global surveillance impairing privacy and limitations on research and access to scientific knowledge.

"Taking a balanced view of the potentials of science and technology for better and worse is emotionally and intellectually demanding and hard to achieve for the vast majority of humans."

Therefore quite a large "critical mass" is needed to bring about essential measures counteracting the potential dangers of science and technology; and this critical mass must be sophisticated and knowledgeable so as to maintain overall support for science and technology. Only an electronic microscope can perhaps find beginnings of such a critical mass in the making, with major calamities being probably necessary as a catalyst for producing it.

In some respects most insidious of all, outside select groups of scientists and policy intellectuals the very dangers posed by unrestrained science and technology are not recognized. Instead, limitless optimism on their blessings dominates contemporary cultures, all the more reinforced by the tremendous contributions of science and technology to human welfare. These overshadow the not less tremendous potentials of damaging human welfare and perhaps endangering the very existence of the human species. Taking a balanced view of the potentials of science and technology for better and worse is emotionally and intellectually demanding and hard to achieve for the vast majority of humans.

Even when dangers are recognized, they are hypothetical and seemingly far-off and therefore find no place in public issue agendas overloaded with pressing problems. For sure, the vast majority of politicians will shy away from them, because of ignorance, overloads by current pressing concerns, lack of public interest, narrow "pragmatism" and – to be frank – lack of needed qualities of the mind.

2.4 Proposition Four. Human Enhancement Possibilities Requite Strict Control and Regulation Based on Clarified Value Judgments

Even more perplexing is the situation in respect to "human enhancement," in the sense of interventions with attributes of human beings through changing features of the human body (as distinct from psychological and educational ones) having physical or psychological effects. Thus, prolonging life expectancy to an average of 120 quality years or raising some forms of intelligence by 50 per cent may well become possible and seem beneficial, though implications for human societies are unpredictable. The specter of human cloning

is much more threatening and leads to inconceivable futures. Application of enhancement technologies to animals, such as raising some forms of intelligence of Chimpanzees also has inconceivable results. And should it become possible to produce multicellular living entities from inert materials – implications for human self-understanding and all of theology are mind staggering.

But these are not possibilities which can a priori be labeled as "bad" or "good", as can production of mass killing viruses or an effective genetic immunization against most forms of cancer respectively. Therefore new values must be generated and agreement on their validity comes prior to enforcement. However, it is hard to specify meta-values serving as bases for salient values judgments; there will be divisive disagreements on them (as prevalent in the literature starting to deal with human enhancement); and no forum able and entitled to set down norms on human enhancement is in sight or easy to imagine realistically. Furthermore enforcement may be more difficult than in respect to clearly dangerous technologies, all the more so as much human enhancement research and tools can serve both the good and the bad, however defined.

One possibility which I tend to support is to adopt a very cautious norm prohibiting all human enhancement research and technologies which may have impacts on the future of the human species, broadly defined. This, together with an explorative approach providing a steep learning curve on which more general norms can be based, subject to oversight by a kind of Super-Helsinki committee structure. But, whatever may somehow be decided has to be enforced globally, with strict measures to counteract the many temptations to ignore limitations on human enhancement research, technology and uses.

Clearly this is an urgent subject in need of intense consideration, while in fact it is ignored by most of the powerful actors, including nearly all political leaders.

2.5 Proposition Five. Novel Decisive Global Governance Norms and Structures are Urgently Needed

The politics of the United Nations Framework Convention on Climate Change and of the Kyoto Protocol clearly demonstrate the inadequacy of existing global governance for coping with climate change. All the more so are present global governance regimes and institutions clearly unable to handle the fateful problems raised by potentially dangerous scientific and technological knowledge and tools. Therefore, a novel decisive global regime based on new global institutions and promulgating as well as enforcing innovative obligatory norms are essential.

It is on this imperative that widely discussed proposals are fanciful. Thus, many imagine some kind of "global democracy," which is in the foreseeable future a nonstarter. And the relatively less unlikely possibility of a kind of Chinese-United States duopoly set up, together with some willing powers, following some major global calamities is not seriously considered.

2.6 Proposition Six. The Future-Shaping Stratum Must be Mobilized

This is not the place to go into detailed proposals on a required global regime and the conditions which may make its establishment feasible. But activation of actors who may with

time enable founding of the essential kind of global governance is necessary, together with preparation of suitable global governance designs, so as to be ready when opportunities open up. This applies in particular to mobilization of the future-shaping stratum.

Let me start with the concept of "future-shaping stratum." It includes all who exert significant impact on the future, such as (in no order of importance, which varies with issues and time) scientists and technologists, entrepreneurs, social activists, mass media shapers, creative authors and artists, policy and social issues professionals, international lawyers, spiritual leaders and political leaders.

It is important to be frank about a fundamental fact: the entire future-impacting stratum is miniscule. As a rough guesstimate, its order of magnitude is probably around ten thousand as a maximum. This means that a very small part of humanity shapes the future of multitudes.

A possible partial exception may be the aggregative effects of internet-based virtual network communities, whether temporary or somewhat permanent, with sometimes large number of participants. But these too depend on small number of initiators and leaders in the absence of whom the networks are ineffective and dissipate rapidly.

At any given time and place the future-shaping stratum is influenced by traditions, cultures, social habitus, dominant ideologies and paradigms, together with additional sediments of the past. Its freedom of impacting on the future is further constrained by the facticity of power maps, resources limitations, accepted views and so on. Overriding and circumscribing all these are the limits of human minds and the rarity of "geniuses" who somehow break through some of these limits. But, still, it is the future-shaping stratum which is crucial for our concerns, with various components exerting influence in different ways on diverse domains.

As the impact of human action on the future is undergoing a quantum leap, the quality of the future-impacting stratum is becoming a major factor in shaping the fate of humanity and its parts. Therefore it must be radically upgraded to fit the increasingly fateful and also difficult choices facing humanity as posed by its rapidly increasing ability to shape its future for better and worse, as supplied by science and technology. This applies to all components of the stratum, such as artists who can play an important role in strengthening a shared sense of "The Family of Humans." But the single most important part of the future-impacting stratum for our purposes are political leaders; and, differently but perhaps even more important, spiritual leaders. It is therefore their misfit or fit with what is required that should be at the center of concern and improvement efforts.

2.7 Proposition Seven. Spiritual Leaders Advancing Raison d'Humanité are Essential

Most of the measures required for containing the serious and in part fatal dangers posed by bad uses of science and technology or serious accidents are mainly a matter for top-down initiatives and actions. But bottom-up massive support by significant parts of humanity is not only important in terms of participatory values, but essential for long-term success of the top-down measures. What is needed is a constantly growing sense of human communality combined with readiness for efforts and also pain now in order to assure a good future for generations to come.

Many agencies can help build up and diffuse such a sense, for instance writers and artists producing emblems on human oneness. But most important of all are spiritual leaders leading towards wide acceptance of d'humanité, as an increasingly dominant hyper-value and metaethical basis.

Widely accepted spiritual leaders are also essential for helping with the many tragic choices involved in coping with the emerging dilemmas; and, even more so, for the needed value innovations, including radical ones. However, the contemporary supply of such spiritual leaders, who should combine normative contemplation and creativity with a strong sense of rapidly changing reality, is very small. Indeed, it is near to zero, with only a single person meeting satisfying parts of the required qualities.

All the more I regret having no promising ideas on how to increase the supply of high-quality global spiritual leaders. In the longer run, multi-religious discourse may help a little, as can introduction of relevant subjects into the curricula of seminaries. But more can be done to upgrade the qualities of political leaders by appropriate selection, mentoring, supply of professional staffs and other interventions than for developing high-quality spiritual leaders. At present, at least, the appearance of global spiritual leaders is, in this-worldly terms, mainly a matter of what Machiavelli called Fortuna.

2.8 Proposition Eight. Political Leaders Are Critical, But to Meet Existential Needs of Humanity They Need Much Improvement

As noted, the situation is different in respect to political leadership. This being a main focus of my theoretic work, comparative studies, and practical experiences, I hope this interest of mine does not bias my views. But I think that clearly political leaders are critical in all efforts to contain the dangers of emerging science and technology knowledge and tools. Only they are legitimately and usually actually in charge of promulgating laws and regulations and giving binding directives. And in well-ordered states they have a monopoly over the use of large-scale force. Furthermore, only they can decide on setting up decisive global governance institutions and establish the necessary global regime.

This does not mean that political leaders can do so on their own and act freely as they may wish. They need support of salient populations and institutions and are constrained by law and a variety of power holders. Also, they need staffs and operate within machineries of governance, which help them but also limit them. Still, political leaders can do a lot to build up support and increase their freedom of choice, if they have the necessary qualities such as enlightening the public on which they depend and gaining its support.

• The dangers of toxic political leaders is a real one and must not be ignored, all the more so as their enlarged tasks as discussed in this essay require more powerful leaders for overcoming frictions and also resistance – and this increases the dangers associated with possessing power. Therefore balances are needed, though not necessarily in their present form. Thus too narrow legal oversight may inhibit or at least unduly delay needed action. But given fitting answers to the classical question Quis custodiet ipsos custodes? (who will guard the guards themselves?), as can be designed with the help of innovative institution design, political leaders are critical for the concerns discussed in

this essay, though as noted in some respects spiritual leaders may be more important – inter alias by providing the cultural basis for high-quality political leadership.

 The statement that political leaders are crucial for dealing with the risks of bad uses of science and technology may seem obvious; but it is not so. Much contemporary discourse regards business entrepreneurs, civic actors, mass media etc. as more important. This is true for some aspects of impacting on the future, with scientists and technologists for instance providing much of the knowledge on which "Moral exhortations are in fashion, but focused and serious thought on better qualifying political leaders for new fateful issues is very scarce."

a better human future can be based. But it is political leaders who are in charge of critical choices, including providing the frames and bases, such as public safety, essential for other future-impacting activities, such as economic, cultural and scientific ones.

Granted the importance of political leaders, the question is reached whether the vast majority of contemporary ones are up to coping with emerging fateful issues. My proposed answer is a regretful but clear "in the main, no!"

To start with a rather elementary example, a minimum requirement from political leaders is good literacy in scientific and technological core trends and at least some understanding of their potential impacts. However my contacts with senior politicians in many countries leads me to the strong impression that this requirement is seldom met, though it is not difficult to acquire the necessary knowledge and understanding if one recognizes their necessity.

This is only a relatively small bit of what is missing in the minds of nearly all political leaders. My evaluation is that most political leaders (as well as most of the policy stratum worldwide) are preoccupied with current crises, pressures and demands; caged in "the art of the possible" instead of being committed to what is needed; and all-too-often, though not always, rushing forward with mental eyes fixated on rear mirrors.

In short, as detailed in my book, the vast majority of contemporary political leaders lack the moral, cognitive and volitional qualities essential for making correct fateful choices and fulfilling well the crucial extraordinary mission of looking out after the future of humanity, including appropriate uses of science and technology.

2.9 Proposition Nine. Priming Political Leaders to Cope with the Fateful Issues Posed by Science and Technology is a Top Priority Necessity

The gross inadequacies of political leaders are in part not the result of personal failures. Inappropriate institutional structures and the sleep-walking public carry much of the blame. But still, given all impediments, many political leaders could and would be better if they were aware of the need to upgrade themselves and had the will to do so even if this involves risks to their political careers. However, they receive little, if any, encouragement and help to do so. For example, nearly all the books being published on upgrading governance confine themselves to short term issues and narrow improvements. The "digital revolution"

is receiving a lot of attention, but the very idea of improving the quality of politicians is not only neglected but often "taboo" – as if somehow getting elected assures ipso facto that the selected is suitably qualified, and as if raising questions about such myths somehow contradicts the principles of democracy and endangers them. Moral exhortations are in fashion, but focused and serious thought on better qualifying political leaders for new fateful issues is very scarce.

At least and as a first step, political leaders should be primed (in the dictionary sense of "making someone ready to do something") by being clearly presented with the nature of the novel fateful tasks facing them and the qualities of the mind which they need for doing them well.

More is needed, including institutional reforms. Thus, electoral processes may have to be reformed to assure that the public knows enough about candidates to make an informed choice; it may be necessary to prolong the time between elections so as to reduce the pressures of "politicking"; the influence of money on elections has to be neutralized; university teaching should include subjects preparing suitable students for becoming high-quality political leaders, far above and beyond what is offered now in the vast majority of political science departments and public policy schools; policy advisory staffs have to be upgraded; and more. But, first of all, the pressing necessity to improve politicians needs broad recognition, intense attention and deep pondering by salient epistemic communities, and by serious political leaders themselves.

To sum up with a second question and suggested reply: Can something be done to improve essential qualities of political leaders before a high price is paid for their inadequacies? My answer is a loud "yes", but this depends on clearly recognizing what is needed before calamities become a harsh headmaster of humanity.

3. Implications for WAAS and Related Actors

Drawing attention to the necessity to radically upgrade the qualities of political leaders and priming them to improve themselves are major responsibilities of "free floating" public interest intellectuals, whether located in think tanks, epistemic communities, or contemplating on their own. They can and should withdraw mentally from the blinders of what is accepted and, instead, consider what is becoming vital, somewhat as suggested by Arnold Toynbee. And if this involves transgressing some taboos and accepting some risks, so be it! Counterconventional thinking is a must for coping with radically novel issues.

Among the groups who shoulder the tasks of priming political leaders by pointing out their inadequacies and proposing ways for improving their qualities the World Academy of Art and Science, the Club of Rome, the Club of Madrid, the European Academy of Sciences and Arts and the World University Consortium should occupy a place of honor. But this is not so.

They should realize that, in addition to fateful issues of preventing dangerous uses of science and technology, the best of proposals for protecting the climate, preventing depletion of resources, building social solidarity, reducing inequality, improving education and so on – have little chance of impacting substantively on reality without the support of political

leaders based on understanding of the issues. High-quality political leaders are not only a desideratum, but often a sine qua non for realizing proposals of the World Academy of Art and Science and related epistemic communities. Appealing to "global public opinion" will achieve near to nothing if political leaders are unwilling and lack understanding.

Therefore, priming political leaders for fateful choices and helping them to be adequately qualified for coping with them are proposed as a central subject of concern, through recommendations by the World Academy of Art and Science and related groups. I realize that this involves some risks, but without "speaking truth to power" little can be done to take care of the future of humanity.

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Social Capital and the New Paradigm Thinking*

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Abstract

This article is based on a presentation the author gave in Kazakhstan late last year. The article seeks to clarify the empirical foundations of human capital and then seeks to explore and clarify the role of human capital in the context of the social process. The effort here is to clarify the empirical and normative boundaries of social capital. Of the most important outcomes of social capital are the values important to human needs and social coexistence. The author draws upon the work of former President of the Academy, Harold Lasswell, and Fellow of the Academy, Myres S. McDougal, and their social process model, which clarifies the critical value/institutional categories that are found in all social processes. These values still require a clearer delineation of their intrinsic value for both political economy and universal well-being of humanity.

"The person-centered emphasis has provided important guidance for an evolving social and economic theory, with a person-centered emphasis."

Two of the most important ideas that animate the new paradigm thinking are (1) the salience of human capital, and (2) the salience of social capital. A focus on human capital is an emphasis that stresses the importance, indeed the centrality of the human person in improving the human prospect. In the World Academy, we owe an intellectual and professional debt to Professor Alberto Zucconi, whose professional life as a psychologist has stressed the importance of a person-centered approach to the practice of psychology. The person-centered emphasis has provided important guidance for an evolving social and economic theory, with a person-centered emphasis. The importance of the person-centered emphasis is that it stresses the importance of individual/human capital in the new paradigm thinking. The individual human being, it may be observed, is a social unit immersed in energy, and this energy is an element or resource that is inherent in human capacity. This resource of energy may be unleashed by the individual if the capacity is developed and opportunity freedoms associated with human rights are provided to the individual. The outcomes generated by unleashing human-centered energy include the stimulation of curiosity, initiative, innovation,

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and creative orientation. The release of human energy in this sense is a powerful repository of human capital.

We now turn to social capital. Here, the observer must shift the focal lens of observation from individual to social capital. What are the consequences of this shift of focus? Here, we will observe that human capital involves human beings in a socially interactive role. This means that the energies of individual human capital are engaged in complex interactive relationships between the self and non-self others in the social universe. The outcomes of human social capital in this interactive universe of human relations would be the aggregate

"Individual social participants, acting alone or in association with others, pursue values/needs through institutions based on resources."

value of social capital outputs in social process. This focus requires a wider and more realistic sense of the values generated by human beings in the social process and correspondingly, a wider lens that accounts for value accounting.

The focus of observation on social capital adds complexity to the observer's focus of attention. The description of social process is complex, the analysis of energy and value interaction is also complex and therefore the process of explaining both the value inputs and outputs and how to measure them are correspondingly challenging. Without social interaction in the social process, there would be no foundation for social capital. Additionally, the central component of social process is the individual human being, who individually, or in association with other human beings, pursues values and generates values through institutions based on resources. The outcomes of the social process of interaction therefore results in the accretion of social capital. To make this more explicit, without a social process of social interaction, where human beings pursue and generate values through institutions based on resources there would be no institutions, such as markets or money central to economic thinking. These institutions would not exist.

Better understanding of the place of social capital as an outcome of the global social process requires a vantage point that is sufficiently comprehensive and particular in the identification of the individual social participant in the global Earth-Space community, Former Fellows of the World Academy pioneered a usable model of social process that could be developed with sufficient flexibility, in both macro and micro-detail. The general model, which is applicable to any social process and at any level of abstraction, is described as follows: Individual social participants, acting alone or in association with others, pursue values/needs through institutions based on resources. This formulation was a major conceptual breakthrough in describing social process, both globally and cross-culturally. This model may be delineated with appropriate levels of specificity or abstraction when the observer asks a series of questions designed to explain the social process as it actually is. This series of questions begins with inquiring about who the participators are, the perspectives of the participators in the sense of their claims to identity, claims to value needs, and claims related to cultural expectations. The inquiry then proceeds with the identification of the basis of power that the participator may deploy and the inquiry continues with regard to the situations in which the interaction, using basis of power, actually occurs. These situations could be organized or unorganized, geographic or temporal, institutionalized or weakly institutionalized, or the situation may be characterized as one involving a crisis. In these situations, the participator will assay the strategic options available, such as strategies of persuasion or strategies of coercion. In general, strategies may include diplomatic and communications assets, economic assets used as indulgences or threats, the assets of propaganda and communication, and the prospect of military or related coercive strategies.

The final two guides to inquiry are the consideration of the outcomes of the social process of interaction. This would involve the production and allocation of values, which we may conveniently term "social capital." The outcomes would indicate what values are produced and how they are in fact shaped and shared in the community. Finally, the outcomes relating to the shaping and the sharing of values in the form of social capital will have effects on the longer-term distributions and accretions of values in the community. In short, the optimal production and distribution of values would appear to represent a desired and defensible production and distribution of social capital in society. On the other hand, if the effects represent significant value deprivations for large sectors of the community, this would mean that social capital is narrowly produced and narrowly enjoyed at the expense of other members of the community.

It is now important that we identify the fundamental values in social process that constitute the domain of social capital:

- 1. Power. The most important expression of power as decision is the understanding of the institution within which it expresses itself. For example, globally, power is significantly decentralized. This means an economic paradigm of global salience runs into the problem of the degree of lack of institutionalization of power. It is probably true that the most power-deprived are the least well off in global society. The new theory must be able to map global power and to appreciate its capacity to be mobilized for rational developmental objectives.
- 2. **Wealth.** In general, this refers to the aggregate volume and composition of what a society produces. It may refer to income in the community and also to the notion of an aggregate resource base. In general, when wealth is developed, the outcome is an increase in the volume and composition of products without depleting the resource base. (P+I)÷R
- 3. Enlightenment. What we mean by enlightenment is the prescription and application of education in social and economic development. The nature of enlightenment as a social capital is evident when education in a society leads to development. A society with an increased education-knowledge base uses enlightenment to extend development through informed decision-making. Decision-makers would make decisions based on informed enlightenment.
- 4. **Well-being.** Well-being including health refers to the state or condition of a society and its members. The well-being of a society is directly proportional to the level of "life expectancy" and indirectly proportional to the expectancy of disease occurrence in that society. The optimum level of well-being, however, is dependent on other values in that society.

- 5. **Skill.** Skill is the ability to perform tasks (especially employment or professional tasks), as a function of human capital development. The skill value is for the benefit of society. Skill development is a consequence of an increase in the strength of the "skill pool" in a society where skills are directed towards development. Skill is a critical component of individual and social capital.
- 6. Affection. Affection is a form of positive sentiment and underlines the loyalty of individuals and associations to the group. Being a basic value, it has tremendous social capital. The increase in scope of positive sentiments in a society increases developmental achievements and goals.
- 7. **Respect.** Showing regard for other individuals within a society is crucial to development. A lack of respect gives rise to discrimination, which in turn becomes a direct cause of retarded development.
- 8. **Rectitude.** Rectitude drives moral behavior in society. When rectitude of individuals within a society matches its development goals, there emerges what we call rectitude development.
- 9. **Aesthetics.** Aesthetics is rooted in human creativity and in human creative capacity. A culture of strong aesthetics will inspire economic development objectives.

"In order to pursue a scope value, a social participant must have access to some base of power."

The foundations of this taxonomy of values are partly owed to distinguished anthropologists, such as Malinowski, who stressed the importance of identifying human needs in social process. Although he emerged with a limited identification of human needs, the publication of the Universal Declaration of Human Rights permitted the needs/values to be more clearly identified and it can be shown that the nine values identified above are the values upon which the rights in the Universal Declaration are expressed.

The values indicated above may be sought for their own sake and we can identify these as scope values. In short, the social participant seeks wealth, power, or respect etc. In order to pursue a scope value, a social participant must have access to some base of power. All the values identified above may serve as bases of power for the social participant. In short, power may be sought for its own sake, but power could be used as a base to acquire any of the other eight values. For example, power may be used as a base to acquire wealth or respect, etc. Wealth may be sought for its own sake or it may be used as a base to acquire power, respect, affection, etc...

Below is a table that identifies the values and institutions, as well as situations and outcomes, which in general are related to the values performing the function of social capital in society. The urgent task is the development of studies, which may in detail provide indicators of value that in each context may provide some method by which the true value in terms

of social process may be assigned to the production and distribution of these fundamental values in the society. This does give us a true measure of the real capital generated in society in comprehensive terms.

Values	Institutions	Situations	Outcomes
Power	Governance-Political Parties	Arena	Decision
Enlightenment	Universities- WAAS	Forum	Knowledge
Wealth	Corporations	Market	Transaction
Well-Being	Hospitals, Clinics	Habitat	Vitality
Skill	Labor Unions, Professional Organization	Shop	Performance
Affection	Micro-social Units (Family) Macro-social Units (Loyalty)	Circle	Cordiality, Positive Sentiment, Patriotism
Respect	Social Class	Stage	Prestige
Rectitude	Churches, Temples	Court	Rightness
Aesthetics	Museums, Monuments, Culture	Creative Orientation	Symbols of Cultural Beauty and Aspiration

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Value Creation: The Role of Values in Improving Organizational Performance

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"Value is a conception—explicit or implicit—that is distinctive of an individual or characteristic of a group. Value propositions distinguish what is considered desirable and they influence the selection, preferences, and ends chosen from available modes, means, and actions."

Abstract

It can be argued that the various institutions of society (law, education, media, etc.) all attempt to maximize the experience of values considered important to a society. However, although economics is considered The Queen of the Social Sciences there is a dichotomy between its value theory and social value theory. From the perspective of classical economics, value is defined in terms of exchange value (the cost, resources, and labor that go into producing something), or use value (how much a customer is willing to pay to purchase an item). In other words value, from the perspective of classical economics, is thought of as what it is worth for someone to put his or her labor into something or what it is worth for someone to obtain something.

"A newly emerging perspective on value theory establishes a complementary connection between economic value and social value."

This article argues that a newly emerging perspective on value theory establishes a complementary connection between economic value and social value. This recent model has been established by organizational theorists who have attempted to discern how to improve organizational performance in ways that improve overall economic performance and, as well, in ways that coincide with stakeholder interests. This article analyzes the newly emerging value theory and explains why it is proving to be enormously successful in improving organizational and economic performance. Thus, as this article will point out, the new strategies for enhancing organizational and economic performance reconcile the dichotomy between the interests of the producer and that of the consumer by placing the emphasis on the co-creation of value (consequentially demanding that value theory be looked at in a new light).

1. Introduction

It is generally assumed that all of the social sciences (law, economics, media, education, behavioral science, etc.) are involved in the endeavor to maximize value. However, the

discipline that has been considered *The Queen of the Social Sciences*—economics—has often looked at the notion of value from a perspective that is different from social value theory. This has been especially evident when it comes to the difference between market ethics and social value theory. In spite of the admonition of Adam Smith that the wealth of nations is based on a company's (or the economy's) ability to maximize benefits for shareholders and stakeholders by operating in line with the principle of value creation (operating more effectively and efficiently to give the customer a better quality product at a lower price) market ethics do not always coincide with this principle. Too often market ethics (the utilitarian effort to maximize benefits by creating the competitive advantage) tend to compel companies to seek capturing value rather than creating value (this was perhaps most pronounced in the dynamics connected with what caused the proverbial *domino to fall* that resulted in the global financial crisis of 2007/2008).

"A new value theory has emerged that places the emphasis on improving organizational and economic performance by increasing the capacity for value creation."

However, recently market ethics are shifting away from the notion of merely capturing value (the prior value perspective—or preference—that placed the emphasis on increasing profits by maximizing the ability to capture value from the environment in the form of resources and from the public in the form of profit). Value theory, in the classical economic sense, is thought of as the process of transforming raw material into value creations that will produce profit. Certainly, until recently, there was no value principle in effect that proposed co-creating value by a process that demands relating to and communicating with stakeholders to determine how to produce outcomes that would maximize benefits for both the stakeholder and the company (thus maximizing both shareholder and stakeholder benefits).

Recently, a new value theory has emerged that places the emphasis on improving organizational and economic performance by increasing the capacity for value creation (with the view of a complementary connection between the interests of the stakeholder and the interest of the producer—as Smith proposed). This new perspective on market ethics has been initiated by organizational specialists (partially in an effort to regain public confidence in the viability of market ethics and principles. Also, this new direction has been an effort to formulate new innovative measures for spurring economic recovery and growth). The new market ethic is focused on knowledge, relational, stakeholder, and social capital. All of these are considered value assets and regarded as intangible factors that are the key to generating the type of innovation needed for improving organizational and economic performance. As we near the midpoint of the second decade of the 21st century, one of the most effective means for generating an increase in value assets is considered to be value creation (a strategy used by the most successful and profitable service companies today).

This new perspective on creating value necessarily results in reconciling the dichotomy between the value perspective of the producer (how can resources be used in a way to convince the consumer that the product is worth the price) and the value perspective of the consumer (how does what this company offers fit into my notion of *end values* and do I believe what I receive in terms of value is worth what I must pay). The new perspective on value—intended to facilitate the shift to the new knowledge-based or technological age economy—reduces the gap between economic value theory and social value theory by eliminating the dichotomy between the interest of the producer and that of the consumer.

"The notion of the co-creation of value is based on the assumption that the interests of the firm and that of the stakeholder can be integrated in a way that improves both organizational and economic performance, while increasing stakeholder satisfaction."

A complementary connection between the interest of the producer and that of stakeholders is established by means of a recent concept—becoming increasingly popular in organizational circles (amongst theorists and practitioners)—called *the co-creation of value* (or in manufacturing terms *the co-production of value*). In fact, the notion of the co-creation of value is based on the assumption that the interests of the firm and that of the stakeholder can be integrated in a way that improves both organizational and economic performance, while increasing stakeholder satisfaction. The co-creation of value approach to organizational behavior and economic performance "Reconfigures the production of *use* and *exchange* value—previously considered internal to, as well as the sole purvey and 'competitive advantage' of the firm—as increasingly [companies are finding it advantageous to generate the] active participation of formerly passive(ized) consumers".²

The co-creation of value approach to economic activity (accompanying the emergence of the knowledge-based or technological age economy) shifts the emphasis to an increase in the significance of relationship building and to a service-dominant logic. In this new approach relationships (managing human resources and stakeholder capital) predominate over the prior emphasis on production and assembly lines. In spite of the obvious advantages afforded by the knowledge-based economy there are still some analysts who continue to perpetuate the established market ethic that presumes that the company has the ability to capture value by extracting from consumers what the company believes is in its best interest (to create profit in accordance with the old paradigm). However, the new paradigm (which is gaining world-wide recognition and increasingly world-wide acceptance) operates on the premise that the new value perspective maximizes value and benefits for professionals, stakeholders, organizations, and economies.

This article proceeds as follows: section two explains the connection between the cocreation of value concept, management theory, and motivation theory (with a slant on managing internal capital and improved organizational performance); section three (the final section) describes the new value theory's contribution to improved performance from the perspective of managing external capital, the connection between marketing and motivation theory, what the new value theory means in terms of improving economic performance, and co-creating *end* value outcomes.

"In terms of organizational behavior value co-creation is the process by which the self-interest and ambitions of individuals can be managed in a way that increases the value-added outcome."

2. The Co-creation of Value Concept, Managing Internal Capital, and Motivation

"Value is the capacity of a good, service, or activity to satisfy a need or provide a benefit ..."

The distinction between fact and value has been basic to the ideas that have been fundamental to the development of Western positivism (the concepts that shaped the Enlightenment and Modernity thus notions of social progress and economic development). The issue for science centers around the difference between *facts* (which are observable, measurable, and empirically verifiable) and value (which have been considered, at best, as *ends* that are deemed worth pursuing but, at worst, to be merely judgments, matters of preference, or opinion). Distinguished scholars of economics, law, and social psychology (including the Nobel Prize winner in economics Amartya Sen, legal expert Martha Nussbaum, and philosopher of science Hilary W. Putnam) argue that maintaining a separation between fact and value in social science research actually results in an impediment to social progress and economic development. That is to say, values actually serve a normative function for society and in that they "connect people, technology and information through value propositions with the aim of co-creating value".

Joseph Stiglitz—also a Nobel Prize winner in economics, a former chief economist at the World Bank, and a former member and chairman of the (US president's) Council of Economic Advisors—concurs with this point of view and claims that if the ultimate aim is happiness, and people do certain things because they are acting in accordance with values they believe will increase happiness, then the well-being and quality of life people desire cannot just be measured in material terms. According to Stiglitz, social value theory takes into account "Peoples' evaluation of their life as a whole or of its various domains." These evaluations imply a cognitive exercise by each person and an effort to take stock of and summarize the full range of elements that people value (e.g. their sense of purpose, the fulfillment of their goals, how they are perceived by others, and include the emotional level—like how they feel about themselves and life).⁶

During the early part of the last century (when the emphasis was on assembly lines and manual labor, with an authoritarian control type leadership style, plus the reward and punishment approach to motivation) there was no expectation that the worker's personal

values would make any difference in terms of the factors that produce profit. However, toward the third quarter of the last century it was clear that a new era of organizational behavior had begun (based on the introduction of the knowledge worker). In this new perspective on organizational behavior—accompanied by an approach to motivation based on Humanistic Psychology—the worker is not expected to leave the value aspects of his or her character, "At the doorway of work everyday [which] is quite effortful, and at times, stressful". "Trying to compel people to be different on the job from who they really are in regards to their true selves is not only stressful and wastes energy, it essentially sends a message that who people really are is not what the organization wants or desires on the job". In other words rather than expecting professionals to suppress the most important aspects of themselves (one could say their true selves) today organizational theory admonishes that values are important intangible assets, innovation generators, and an important basis for motivation in the knowledge age economy.

In terms of organizational behavior value co-creation is the process by which the self-interest and ambitions of individuals can be managed in a way that increases the value-added outcome. Harvard Professor Michael E. Porter and senior fellow Mark R. Kramer, in their Harvard Business Review article *Creating Shared Value* argue that reevaluating value theory in light of the "Shared value [concept] offers significant new ways to innovate and unlock new economic value that most businesses have missed. The value creation concept is defining a whole new set of best practices that all companies must embrace [because] it opens up new avenues for innovation and shared value is created". Organizational theorists, practitioners, and management specialists have undertaken an effort to delimit this new theoretical concept in order to master this new innovative performance measure and to better understand how it contributes to becoming a learning organization. In this respect organizational specialists are undertaking delimitation of the concept *value co-creation* in order to create management and motivational strategies that facilitate the co-creation of value in the workplace.

Most companies today are in the process of transforming their leadership, management, and motivational style away from the assembly line, goods production, company centric perspective to one that encompasses relational, knowledge capital, and stakeholder assets. This transformation was initiated by the introduction of the technological age economy that emphasized knowledge and human assets. Drucker's admonitions facilitated a switch away from Frederick Taylor's view that workers are primarily motivated by wages (thus motivation based on reward and punishment executed by managers who portray authoritarian control).

The initial strategies for motivation in the knowledge age economy drew from the Humanistic approach to motivation proposed by Abraham Maslow. Maslow argued that the motivation theory of the industrial era was based on experiments that were conducted with animals not humans (e.g. Pavlov's dogs and its resulting Behaviorism approach to motivation). Maslow influenced organizational behavior by offering insight into how to resolve the gap between individual human needs and the attempt of the organization to use basic human needs to co-create value. ¹⁰ That is to say that Humanistic psychology prompted theorists to realize that "Organizational needs are co-created in nested human systems".

MIT management professor Douglas McGregor followed up on Maslow Humanistic approach with his Theory Y (his approach to motivation, good management, and improving organizational culture). McGregor argued that workers are not merely cogs in the production

machinery (what he called the assembly line—*Theory X*—perspective on motivation). His Theory Y endorsed self-determination. McGregor believed creativity and the enhancement of quality and excellence occur when managers and workers together co-create means by which the worker's higher order needs (values) can be integrated with organizational objectives.

"Ethical efficacy can be defined as the capacity of the value centered approach to relationships to empower the person of integrity to realize the outcome that he or she desires or what he or she is hoping most to experience."

Toward the beginning of the third quarter of the last century organizational theorists and practitioners were increasingly pressed to devise a strategy for organizational management that would contribute to value maximization (to increase the total long-term market value of the firm given the assumption that the entire economy improves when companies in an economy maximize their total firm value). Emeritus Professor of management and guest columnist for The Wall Street Journal, The New York Times, Fortune, and Business Week—Alfred Rappaport—proposed a solution that soon attracted worldwide attention. He outlined his explanation of the problem and introduced a solution in *How to Build Long-term Value*. He later, in subsequent materials on the issue, defined the problem as a value-gap and described value creation as the solution. The solution, also known as adding value (or value-added) has been proven to increase value outcomes for all constituents of an organization.

The management or leadership ability to generate the resources needed to produce the desired outcome (from the perspective of business ethics) has been described as ethical efficacy. Ethical efficacy can be defined as the capacity of the value centered approach to relationships (or a visionary approach to leadership) to empower the person of integrity to realize the outcome that he or she desires or what he or she is hoping most to experience. The most desired outcome, or end according to Aristotle, is the highest good (the best, ultimate, or supreme end).¹⁴

In fact, organizational and economic theorists argue that the notion of value creation as a key aspect of economic activity dates back to Aristotle (the roots of Western economic theory). Value theory, as first introduced by Aristotle in his treatise on the relationship between social formation and political economy, was a form of social economics. Aristotle analyzed value theory from the perspective of both *exchange value* and *use value* and came to the conclusion that value—which he believed is co-created in social relations—can be defined as the *end* that individuals and social groups attempt to create through a process that results in structuring a society's interactions, exchanges, and communications or, in short, their arrangement for cooperatively living and working together. Aristotle thought of value theory in terms of political economy, in social psychological terms, and as well in ecological terms (the social-economic value of an appropriate relationship with the natural order). Thus Aristotle's value theory encompassed three value domains (individual, social, and environmental). In other words Aristotle reminded the reader that true happiness, well-being,

and flourishing do not occur as a result of pursuing instrumental value alone but result from obtaining that which has intrinsic value (he maintained a balanced emphasis on tangible/material and intangible/intrinsic value assets).

It is for this reason that organizational theorists and ethicists have recently been turning to Aristotle as a basis for their arguments about improving organizational performance, increasing stakeholder capital, and increasing social capital. This is primarily due to the fact that Aristotle's social economics (what is best for the individual, for social relations, and for human-nature relations) is regarded as an ethical basis for arguments on stakeholder theory. Martin Seligman became influential in organizational circles by developing a perspective on Aristotle's value claims and Aristotle's ideas about the significance of happiness (which Seligman established as a variation to Humanistic Psychology which he referred to as Positive Psychology).

Positive Psychology, addresses a similar concern to that addressed by Aristotle, Why is it that it can seem that social, economic, and political conditions are structured in a way that seem to compel individuals to do something whether or not it maximizes happiness and well-being? That is to say that agents sometimes conceive of utility maximizing economic and political schemes that are ultimately harmful to themselves, detrimental to society, and destroy the very ground of being (hazardous to nature). He argued that it is possible (at least in terms of how to make organizations more profitable) to approach well-being from the perspective of Positive Psychology which would result in creating outcomes that are considered positive for shareholders, workers, and stakeholders. Seligman defines Positive Psychology as an approach to engaging others (the way in which relational capital is managed) on the basis of values considered more meaningful by those interacting and in such a way as to collaboratively create outcomes that are more satisfactory (inclusive of an increase in happiness, prosperity, flourishing, and well-being). 19

Ultimately, James MacGregor Burns had a tremendous impact on organizational studies and practices with his Pulitzer Prize winning book *Leadership*. Burns introduced the term Transformational Leadership to describe a motivational strategy based on Transformational Psychology. His description of how to improve organizational performance in the technological age resonated with the co-creation theory of how to generate increased value. He asserts that when the desired outcome is an increase in value and when value is intended to be co-created, then the relationship between leaders and workers must be mutual and allow each side to contribute to the stimulation and elevation of the other plus motivate each other to interact more authentically and with more integrity.²⁰

3. Managing External (Stakeholder) Capital

"There was never a new economics to go along with the new economy"21

This concluding section continues the emphasis on motivational theory however with the focus on recent developments in persuasion and motivational strategies that are effective for managing externalities (marketing), for knowledge management, and for developing a more meaningful relationship with the consumer (in order to increase stakeholder capital and to sustain customer loyalty). Researchers and practitioners have recently discovered that the

most effective strategies for managing externalities and generating the type of knowledge that lends to innovation, improved performance, and increased profitability are: intensive knowledge, customer relations management, customer knowledge management, new developments in production strategies, and the co-creation of innovative productions.²²

Towards the end of the 20th century the impact of the knowledge age economy and ICT began to be evident in new management strategies emphasizing value intangibles, in new production and organizational structures, in an amazing rise in integrative systems, and a rise in collaborative networks. The organizational and structural transformations included a shift from the emphasis on a company autonomously producing value (a firm-centric view of economic activity) to a market orientation where the company offered a value proposition to the consumer which was intended to build a stronger relationship with the client (by allowing more input and participation in co-creating and co-producing value).

C. K. Prahalad and Venkat Ramaswamy, were amongst the first to point out how important it is for marketing to shift its orientation away from viewing the role of the company as producing value and that of marketing to extract as much value from the customer as possible (with the perspective that the customer would then consume/destroy the value). In other words in the established paradigm the intent of the market is to get the public to consume and dispose of as much value as possible. "Traditional economics focuses squarely on the exchange of products and services between the company and the consumer, placing value extraction by the firm and the consumer at the heart of the interaction". Prahalad and Ramaswamy urge marketing departments to move into "The new value co-creation space where managers need to invest in building new infrastructure capabilities, as well as new functional and governance capabilities—capabilities that are centered on co-creation through high-quality customer-company interactions and personalized co-creation experiences." 23

Avik Chakrabarti and Venkat Ramaswamy describe the new market paradigm as "Cocreation thinking as it holds the key to expanding an economist's vision to a space where an enterprise can be seen as a nexus of engagement platforms and the economy as a nexus of enterprises, with competition centering on individuated co-creation experiences that yield unique value to each individual in space-time". A In this respect the company and the client have a stronger sense of a shared or common interest in "Producing desirable and valuable outcomes. This [reflects a] fusion of public communication and the production of economic value [where] our everyday life-world becomes filled with attempts to manage and steer how we actually produce truth, beauty, and utility around goods (which results in creating both *ethical surplus* and economic value)". S

"Contemporary marketing is driven by the pursuit of developing management techniques that bring about social cooperation. In its current incarnation, this pursuit involves the mobilization and expropriation of knowledge, creativity, and communication with consumers as the direct basis for economic value". Thus, in some respect, the acknowledgement that value congruence improves organization performance is spilling over into strategies for managing external capital. In other words developments in the approach for managing external capital has a similar theoretical (or scientific) foundation as did the development of theories for managing knowledge, value intangibles, relational capital, and theories on how to motivate the knowledge worker.

This means that the rise of contemporary marketing theory has developed exactly the way it was envisioned by Philip Kotler (widely known as the father of modern marketing and continues to be respected as one of the world's foremost experts on marketing). Kotler's theory of marketing appeared in conjunction with the rise of electronic communications thus coincided with his recognition of the rise of telecommunications as a means for interacting with customers.²⁷ According to Kotler marketing is more effective when it becomes more responsive to the needs, wants, and desires of the customers. As defined by Kotler marketing is a process by which individuals and groups [stakeholders] are able to experience what they need, what they value, and what they find meaningful by creating and exchanging value with others.²⁸

Thus, Kotler can be considered as one of the first to herald the significance of value creation. This claim is not only valid based on his argument that marketing is all about improving the overall quality of life for stakeholders by truly increasing "quality and value" but—to make the point more strongly—he advocates that "Marketing is not the art of finding clever ways to dispose of what you make, it is the art of creating genuine customer value". He explains his position in terms that are in line with the contemporary claim that there is an organizational shift away from the "Industrial Age paradigm [where] production and consumption activity became separated". As the workforce becomes more highly educated knowledge workers will be looking for and demanding professional, personal and consumption experiences that are more in line with what they find meaningful in terms of their personal sense of values. Kotler argues that organizational motivational theory had to switch away from Behaviorism to Humanistic approaches (a shift away from motivation based on an appeal to extrinsic and instrumental *means* to a focus on intrinsic *value ends*). As the workforce becomes more highly educated to switch away from Behaviorism to Humanistic approaches (a shift away from motivation based on an appeal to extrinsic and instrumental *means* to a focus on intrinsic *value ends*).

Kolter then influenced a movement in marketing that placed an emphasis on the aesthetic, creative, and artistic appeal of advertisements. In other words as a counter to mass society (assembly line mentality) the new era of markets was concerned with "The mood, feeling or experience that they could stimulate in consumers". With the transformation of media, the introduction of information communication technology, plus a growing emphasis in organizational circles on motivation theories based on Humanistic and Positive Psychologies, the era of the materialistic, utilitarian recent past was superseded by a consumer culture that craves aesthetic appeals that appeal to and please the whole person. Motivation research thus suggested that marketing take as its object the programming of this consumerist self-production. This fundamental step, from the product to the relations between product and the consumer (or better, the recognition of the contingency of these relations) constituted a first important step towards the contemporary branding paradigm".

Gibbert et al., in their article Five Styles of Customer Knowledge Management, and How Smart Companies Use Them to Create Value, argue that the new paradigm requires "a different mindset along a number of key variables". Rather than focusing on knowledge about the customer, smart companies seek knowledge residing in customers. That is to say that organizational theory began to emphasize that interaction with the consumer is essential for organizational learning. Customer knowledge management provided companies with increased ability to gain customer loyalty and sustainable advantage. Knowledge management emerged as a significant factor in managing externals although its focus initially was on "Fostering productive and collaborative relationships along the lines of 'if only we knew

what we know,' [however] customer knowledge managers propose an additional dimension, namely 'if only we also knew what our customers know".³⁴

Marketing has become so intent on capturing the customer's deepest longings, desires, urges, and values that they resorted to strategies like neuromarketing and 'empathic design'. That is to say that knowledge managers have become so undertaken with their effort to discover the most intimate desires of the consumer that they even attempt to "get inside the head of their potential customer". Empathic design is a term used by business administration experts at the Harvard Business School Dorothy Leonard and Jeffrey Rayport to describe the company's effort to know and fulfill the customer's deepest desires. In other words empathic design is a form of the co-creation approach to marketing and knowledge management. It is an attempt to satisfy customers by filling their lives with higher quality at lower cost and, as well, to invite the customer to participate in co-creating and co-producing things that the customer finds more pleasing, meaningful, and valuable.

Ilpo Koskinen et al. claim, on the basis of their research on empathic design, marketing, and motivational theory that greater customer involvement in co-creation results in greater customer emphasis on naturalism and aesthetic appeal (appealing and pleasing in a way that gives the user a greater sense of Holistic well-being).³⁷ Managers of external capital have responded favorably to customer interests by creating marketing strategies that are inclusive of stakeholder values and as a result have found that a greater emphasis placed on the combination of aesthetics and naturalism motivates customer loyalty by generating a stronger feeling of meaningful connection and a sense of shared value between the customer and the producer, as what is co-created is more pleasing and meaningful for customers, it satisfies contemporary consumer interest in experiencing a more ubiquitous technology-human interface, and provides a stronger sense of being well-integrated within the fabric of existence

Marketing, as defined by Philip Kotler, is an organizational strategy for promoting the acceptability of what the company offers and the implementation of procedures considered best for generating innovations by means of creating informational networks that generate the knowledge needed for the planning, designing, pricing, communicating, and distributing new creations. Thus, from the initial stages of the telecommunications era marketing was beginning to be perceived as much as creative art as it had been as a science. Equally important it became a means of empowering external capital managers in ways that enabled them to create mediums (messages or communication strategies) "Designed in a way to increase memorability, penetration, and action consequences". That is to say that the marketing department began to realize that to be more successful the art of communication needs to be employed and that advertisement must reflect what has meaning and personal value to the customer.

This laid the foundation for a perspective on external capital management that promoted the elimination of the dichotomy between shareholder value (the assumption being that shareholders are motivated by self-interest and instrumental value) and stakeholder value (the assumption that customers are motivated by an increase in aesthetic satisfaction, increased well-being, sustainability, and intrinsic value). With the increased recognition of the role of the value dimension scholars increasingly referred to John Dewey's (one of America's most

endeared philosophers) aesthetic, ethical, communication, and social value theories (which were based on empirical naturalism).

Dewey described "Scientific generalizations as *means* for accomplishing certain desired and intended *ends*". Such ends (or ultimate/intrinsic values) are determined by a process of inquiry (valuations, interactions, collaborations, and Constructivist processes) and such processes create value by offering mutually satisfactory and beneficial value propositions and outcomes. Dewey asserted that social value created as the outcome of such propositions in that inquiry (a type of democratic process that results in both valuation propositions and an increase in economic efficiency) is the basis of the democratic approach to co-creating social capital. Thus, in "All inquiry, even the most completely scientific, what is proposed as a conclusion (the end-in-view in that inquiry)" is a value that society intends to maximize. 42

On the basis of Dewey's theories: of communication, social capital, the learning organization, the learning society, and his theoretical views on the effective management of (or marketing of) external capital in the emerging technological age, organizational specialists began to pay greater attention to the impact of media in the creation of social value. That is to say that Dewey's communication theory, his ideas about the diffusion of innovation, and social R&D (meshing public interest with the interests of public economics and public finance) became more influential.⁴³ Dewey envisioned—at the initial stages of the rise of electronic communications ability to connect individuals, homes, organizations, and governments globally—that this could lead to the ability of the interdependent global community to experience more happiness, fulfillment, and meaning (if this new potential source of empowerment was handled effectively by knowledge managers). Effective management of external capital was, on the basis of Dewey's social theory, "defined in terms of consumer needs, preferences, and satisfactions. The objective is then to maximize consumer's well-being by increasing their pleasures and decreasing their pains." "44"

Dewey claimed that knowledge management is not only the basis of organizational learning but the key to social learning (the learning society). He also proposed that knowledge management is a means by which the self-interest tendencies of classic economics can be reconciled with the value interests and environmental concerns of stakeholders. Thus, knowledge management became a means of clarifying what has meaning (or what has value) by employing the co-created sense of meaning to co-produce outcomes that increase value for shareholders and stakeholders. In Dewey's own words, ethics/aesthetics is a mean for the expansion of meaning. "Growth is learning the meaning of what our actions are all about. [They are] the good, satisfying, end, of growth—namely the present meaning of action whether that present meaning of action be defined as pleasure, or perfection, or salvation, or the attainment of virtuous character." This approach to external knowledge management (marketing) resulted in establishing a complementary connection between intrinsic value creation and extrinsic value production. The endeavor to wed consumer satisfaction (e.g. co-creations that are more aesthetically pleasing, beautiful and appealing to the whole person contributes to a stronger feeling of nature-human complementarity) with the producer's desire to increase the value added dimension of its bottom line is proving to increase both shareholder and stakeholder satisfaction.

In conclusion Drucker—building on Dewey—boldly declared that "There is only one valid definition of business purpose: to create customers. Therefore, any business enterprise

has two—and only two—basic functions: marketing and innovation".⁴⁶ He was one of the first to propose that marketing for the knowledge economy would require a shift from "A 'selling concept' focused on promotional efforts designed to overcome customer resistance to a 'market concept' focused on determining the needs and wants of the customers and delivering satisfaction along those lines."⁴⁷ Thus, Drucker inspired a perspective on marketing in the knowledge economy that shifted the external management focus to co-creating and co-producing outcomes customers highly desire and find valuable.⁴⁸

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Saint Catherine and the Free Market System: The (Historic) Roots of the Current Crisis

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Abstract

The current crisis is rooted in the past, and is related to the ability of empires to ground their conquests in legitimizing icons that are, at the same time, their own creations. The stories of St. Catherine and the 'free market' are compared in order to illustrate their common human heritage, embedded as they are in the problem of reification, which is the abiding tendency of humans to assign 'extraterrestrial' origins to their very own thoughts, ideas, and theories, presenting them as deterministic laws of God or of nature. Reification and determinism serve to legitimate these ideas and to give them greater authority, with the unfortunate side effect of excusing their authors and followers from any moral responsibility for their long term consequences, intended or not. Since the free market icon and its attendant man-made laws govern, to a large extent, our thoughts about the current crisis-ridden society, it is important to trace their origins and, especially their ontological assumptions, to see if we are, indeed, bound by these laws, or whether we might actually be free to imagine and develop a more humane socioeconomic system without all the deterministic baggage.

1. Introduction - the 'Two Cultures' of C.P. Snow

C.P. Snow's (2013) classic article has led us to believe that there is little connection between art and science, and, indeed, there is much to his argument. However, scientists are also human beings, though their claim to objectivity might seem at times to exclude them from this category. Art in human society, including especially dramatic art, as so many, including Shakespeare, have claimed, is the essence of being human: "All the world's a stage, and all the men and women merely players..." or, "Life is but a walking shadow, a poor player who struts and frets his hour upon the stage. . . ", thoughts that Kenneth Burke and others have turned into a sociological (sociodramatic) theory complete with the technical terms that give it the needed precision (Rueckert 1969, Duncan 1969, Lentricchia 1983). Science appears to have something in common with religion in this respect. First, one must presuppose that science and religion are social enterprises as they both constitute a part of culture, in spite of references to the supernatural, including references to the laws of God and/or of nature. Science, of course, has had greater success in verifying explanations of the material world, the quantum enigma notwithstanding (Rosenblum and Kuttner 2011), at least as far as the gravitational field is concerned. But this may be to get ahead of the story: a comparison of St. Catherine and the 'Free Market'

2. St. Catherine

One of the early complete references to St. Catherine of Alexandria appears in a collection of legends named "Monologium Basilianum", written by an artist working for the Emperor Basil II in Constantinople between 976 and 1025 A.D. By the twelfth century her remains had been enshrined and highly venerated at the Monastery of Mount Sinai. The word 'Catherine' has the same root as 'catharsis' or cleansing, and here would refer to the purity or virginity of Catherine. She is reported to have lived in Alexandria as a princess of the royal house in the Fourth Century A.D. and to have been extremely well educated in many fields, including Christian theology and philosophy, a rare exception in the male-dominated world extending from the domestication of plants and animals until sometime into the 22nd Century (or beyond?)! She is reported to have met the challenge of, and subdued, intellectually, many, many male 'pagan' philosophers, all of whom were put to death by the emperor of Alexandria for their rhetorical shortcomings. She, herself, was finally put to death by the pagan emperor, Maxentius, by being beheaded, after the Wheel of Torture fell apart in a vain attempt to subdue her. At her death, no blood, but only milk is said to have flowed from her veins. Following her death in Alexandria, legend tells us that angels carried her body to Mt. Sinai.

In spite of this elaborate legend, historians have found no evidence of her existence, except, allegedly, for some remains, as reported above. She could have been little more than a figment of the imagination of the monks at Mount Sinai, four hundred years later. In fact, her story is amazingly similar to that of Hypatia, a much more carefully documented female Greek philosopher of Alexandria in the late 4th and early 5th century A.D., celebrated in the recent film, *Agora*, and in many books, including Maria Dzielska's (1996), *Hypatia of Alexandria*. Hypatia was an accomplished philosopher and mathematician who had similar success in demolishing the arguments of, in this case, Christian male challengers. She was also put to death in a cruel fashion by some fanatic Christians of Alexandria during the reign of Theodosius, the Emperor who was determined to solidify Christianity as the official religion of the Roman Empire at the end of the 4th Century. Now, either Alexandria was a hotbed of hitherto, and yet to be ever seen again (until they are finally liberated) female philosophers, or we are witnessing some literary or rather 'legendary' liberties being taken with history. Not the first or last time, one must suppose.

With such a shaky curriculum vitae how could Catherine have become so important a personage in the Christian church, in fact, how could she have become a person at all? Here is where art plays such an important role: her image was painted on the walls of churches throughout the Middle Ages and, voila!, she existed (Stollhans 2014). In one sense, it doesn't even matter if she were real or not. Once people believed she existed, she did, as Bruce Lipton (2008) also might claim, based on his recent book, *The Biology of Belief*, published more than twelve hundred years later. Reality is to a large extent what we make it to be. In the case of Catherine, she was (is) a symbol of altruism, a person who sacrificed herself for her faith and for her church, a necessary ideal if the hierarchical society built on religion were to survive. This, of course, is quite separate from the value of altruism to human existence, which redeems her existence, however fabricated it might be, and would appear to set her apart from the ideals of rational science, which has had much less concern with such things, at least up until now.

3. The Free Market System

The free market, too, is a virtual reality, not much different from Saint Catherine in that respect. They are both forms of rhetoric – as is all communication – designed to persuade people to see the world in a certain way, seeking to "create the world in their own image", as the Bible, Nietzsche and Kuhn, among others would say. As far as the free market is concerned, there are again some rather unrealistic assumptions that one must make, specifically about the ability of the actors in the market to fulfill the requirements necessary for its portrait to be valid (perhaps not unlike some of the assumptions about altruism that would be necessary if St. Catherine were to be taken seriously). These were (are) presuppositions about the time it would take to gather the necessary information to make rational decisions, the ability to process this information when available, the supposed disconnectedness of all the actors from each other in society, etc. In fact, the likelihood of errors in judgment and unintended consequences in the marketplace is so enormous in this respect that whole industries have grown up to estimate and insure against the risk of these occurrences (Giarini 2010).

Another questionable assumption has to do with the ability of the market to remain truly competitive over time. This is because competition always leads to winners and losers, with losers in the long run being absorbed by the winners, thus leading to a substantially less free market and a more monopoly form of capitalism (Baran and Sweezy 1966, Foster 2014). Thus, we no longer see 'Mom and Pop' stores in the U.S., no more corner drugstores or grocery stores. Everything is now part of a 'chain' of nationally or regionally controlled enterprises, all of which are miles away from most people's homes, *thus shifting much of the expense of distribution onto the consumers*. The dozen or so automobile companies in the U.S. are down to the 'big three', or perhaps two-and-a-half, if Chrysler's not so brilliant history is taken into account, etc. In spite of these reservations, one could hardly say that the 'paint is chipping away' from the portraits of the free market, any more than unrealistic assumptions about St. Catherine have diminished her religious qualities. Nevertheless, the icon in both cases has been both symbolic and instrumental, to the religious hierarchy in the case of Catherine and to the modern sociopolitical hierarchy in the case of the free market icon.

This is exactly what one must expect in a social world that is theater, a theater or sociodrama, in which there are to be found both religious and scientific aspects, especially at the large scale, but whose mechanisms are for the most part under the control of society's playwrights, i.e., those who write the 'laws' and determine how society's resources are to be allocated, and the stage directors, i.e., the politicians, priests and academics who carry out and justify the script given to them by the ruling class. In this sense, the social world is not an autonomous and deterministic entity as science and religion would claim.

What this refers to is the danger of reification, i.e., that we will take our metaphors literally (Berger and Pullberg 1966). For economics as a rational science, it would be good always to keep in mind that our 'grandmother' has not, nor ever will, actually have 'wheels'. This is quite apart from the question of whether, even with 'wheels', the free market could ever provide 'optimal' solutions at the system level, given its indifference to the colossal human, social and environmental costs of modern enterprises, which, if included, would deny viability even at the level of the enterprises themselves (Kapp 1988, Korten 1995, Polanyi 2001).

Along with these reservations about the 'free market', and given the importance of assumptions about the individual to its mathematical iconography, it might be well to examine what has happened to the image of the human being, ideologically, that is, since the Middle Ages. At the time of the Renaissance, there was a substantial interest in what the Greeks had written 2000 years earlier. Thanks in great part to the Arabs, what little had survived from that period was available to the Italians and others during this subsequent period. Meanwhile, the Protestant reformation also brought a reformation in the Holy Roman church, the closest thing to a State at that time. Thus, during this period there was great interest in Greek philosophy, including both its scientific as well as its humanistic aspects.

The importance of Aristotle to the scientific and subsequent industrial revolution is well known. Less well appreciated is the number of renaissance philosophers who were interested in the humanism expressed in Greek philosophy (Cassirer 1948, Gundersheimer 1965). This phase of Neo-Platonism lasted from the early 14th century until the early 17th century, excluding a 50-year interruption caused by the 'Black Plague'. After a brief Catholic 'Reformation', inspired in part by the Protestant Reformation in the early 16th century, the Counter-Reformation in the Roman church took hold and humanist ideas were once again suppressed.

Subsequently, the spirit of humanism was hijacked by the concept of individualism, an idea much more compatible with the mathematical formulations and the mechanistic philosophy that has dominated western thought up to the present. Humanism is complicated by a subjective and dialectic view of reality and by references to emotion and morality, dimensions common in art, but less at home with rationality and logic. Indeed, in current discourse, 'rational' is usually contrasted with 'irrational', and the category of 'non-rational' is essentially forgotten, hence the division between the humanities and the sciences in Snow's dichotomy. Individualism was, of course, a liberating idea in its time, inspired by references to humanism, and as contrasted to feudalism, of course. But we are, as always, confronted with the problem of keeping our 'liberating ideas' at one moment in history from turning into 'suffocating straightjackets' at the next, as the dialectic moves through time (Berlin 1962).

By the time that Adam Smith (1998 [1776]) appeared on the scene, as it were, it was already clear that the locus of political power in the church and landed nobility was a serious obstacle to the potential for the economic growth and the accumulation of wealth that was embodied in the rise of mercantilism and the growing industrial and technological revolution. The idea of growth was and is realized in the process of increasing production, profiting therefrom and reinvesting that surplus profit in further increases in production, and so on into infinity – or so one is led to believe according to the script operating in both capitalist and socialist economic systems till now. A necessary accompaniment of this idea was the spirit of *frugality* as embodied in the Protestant Ethic (Weber 1958), rather than the spirit of (often conspicuous) consumption, as was, for the most part, the case with surpluses up to and including the Renaissance. This transition involved a change in the actors and their scriptwriters in charge of society at that time. In short, religion and its symbolism had to be replaced by rational science and its symbolism, if the potential for economic growth were to be realized and a new ruling class to be installed.

Adam Smith and his followers described society as a **deterministic mechanism** in the spirit of the Newtonian science of their time – so much for the idea of 'freedom' embodied

in their rhetoric! This rhetoric, incidentally, allowed Adam Smith and his followers the freedom to imagine a socioeconomic system to their liking, but not the freedom for anyone else subsequently to imagine an alternate, indeed, possibly more humane system, without being branded heretics, idealists, utopianists, planners or whatever... Underlying Newton's mechanism was Democritus' idea of atomism, the idea of otherwise unconnected individual elements moving according to the causal laws of the mechanism of which they were a part. In social terms the actions of individual elements, human beings, would also need to be defined according to the laws of the social mechanism. In Adam Smith's mind this accorded well with the need for the potential of the economic mechanism, i.e., the 'free market', to be realized by the individuals who were struggling against the structure of the former social order, laden as it was with localism, tradition and loyalty to outmoded social hierarchies. Individuals had to be freed from this oppressive social formation; they had to be given a new form of consciousness and a form of motivation that would govern their actions. In keeping with the scientific ethos of the time, 'consciousness' was to be perceived as 'rationality', and in a neat psychological move, 'motive' was defined as a desire for wealth as a means to immediate 'personal satisfaction' (as opposed to the postponed gratification of everlasting salvation).

However, since at least the time of Epicurus, and even before, we have known that personal satisfaction is a complex psychosocial and philosophical problem, not particularly suited to the instrumental vocabulary of Newtonian science and technology (Maslow 1970, Cloninger 2004, Edwards 2010). Yet, for the free market icon to succeed, satisfaction had to be transformed or 'symbolized' into a quantifiable form. In the spirit of the market the obvious symbol would be 'money', though it was also assumed by Smith at the time that money would bring respect and esteem, thus satisfying deeper emotional needs along the way.

The idea of wealth satisfying the need for esteem and respect has in some ways been a curse placed upon humankind probably since the origins of private property, and even referred to as such in the Bible: something about camels and the eyes of needles! Even before that, Sophocles in *Antigone* had claimed that:

"There has never been a worse discovery in the world than money. It destroys cities, creates homeless people, and seduces prudent minds to search for shameful projects. It has even shown people how to commit fraud and to become associated with every form of ungodly behavior. And for whomever carries out such acts using bribery, there will come the time when they will receive their just desserts (Alexandrou 2009, p. 101)."

Or Plato,

"There, where wealth enjoys honor, citizens abandon virtue and their only concern is becoming rich. The rich are carried away, the poor prepare demonstrations, and everyone ignores the interests of the citizens. What prevails is the spirit of advantage, which drives away virtue. There develops an ever greater spirit of greed, and wealth becomes the only measure of political rights (Alexandrou 2009, p. 92)."

This is especially true even for those who have great wealth, something often obtained at the *expense of* deeper moral, emotional and spiritual instincts. Thus, ironically, wealth is often not accompanied by emotional satisfaction. **Respect, as an emotional and social phenomenon** is not to be confused with envy and fear, which are the usual emotions involved when wealth is defined as the sole measure of satisfaction. But this is equally true for those poorer people who envy wealth, thinking that it would be able to satisfy those deeper emotional needs (Gutenschwager 2004, Ch. 10). Needless to say, this is not a black-and-white issue, where no wealth, nor even property, might be seen as the only alternative. We are obviously looking for Aristotle's 'golden mean' here. Also, needless to say, the problem here is not money, itself. It is the abuse of what money symbolizes. Money was designed to symbolize the value of goods and services in order to facilitate their exchange, something for which it is admirably well suited. But by the time of the ancient Greeks it had already became a symbol of social status and now a whole science, economics, uses it to symbolize happiness. This is obviously now a vastly 'overloaded' symbol and a grotesquely oversimplified understanding of a complex socio-psychological phenomenon.

Meanwhile, these newly defined individuals had to be free to break familial and community ties at whatever emotional costs and to move to where economic opportunities would take them, where they could make money, the symbol of social and individual 'satisfaction'. The merchants and industrialists had to be free to maximize profit, thus adding to the surplus that could be reinvested in further production and trade to the benefit of all, in a cycle of continuous growth. And the place where this magic would take place was the market, the locus of free (almost exclusively) men exchanging their goods and services without the heavy hand of the old landed nobility and its "House of Lords", who would seek to turn the benefits towards their gentry friends.

The new theater was thus to be one of (predatory) individuals seeking profit in any way possible, and returning that profit into the system of production and exchange for their own increasing future 'satisfaction', with everyone, theoretically at least, benefiting. What we are talking about here is a profound psychological and cultural transformation, not just a change in the economic system, though as both Marx and Polanyi would point out later, it was the changes in the economic system that strongly influenced the new culture. This new **culture of capitalism** (Macfarlane 1989) grew up in close association with the new science and technology. Little did those participating in this cultural transformation at that time realize, as Erich Fromm (1961) would point out in an afterword to George Orwell's, *1984*, that,

"... one of the most characteristic and destructive developments of our own society [is] that man, becoming more and more of an instrument, transforms reality more and more into something relative to his own interests and functions."

This would ultimately lead to a society dominated by **fear** and **greed**, to say nothing of **loneliness** (Riesman 1950, Slater 1990), something that was apparently not imagined in the small-scale society of that time. But how else could one be expected to act when surrounded by other predatory individuals? Would this not lead to fear for one's own survival? Would this not lead to the desire to accumulate as much wealth as possible so as to insulate one's self and one's family against the threats posed by such an environment? Is this not the prevailing

psychosocial environment characterizing the last several hundred years? Would this not lead to a society characterized by both predatory and defensive aggression, systems of behavior traced, in today's world, to genetic, psychopharmacological and developmental pathologies by Jordan Peterson and Mathew Shane (2004)?

If we think of society as consisting of both a subjective and objective reality, we might ponder how this dialectic might play itself out in the real world of positive science. Subjective reality is defined as the set of images, theories, values, etc. which comprise the thoughts, both individual and collective, that characterize a given society or culture. Objective reality is defined as the actual concrete reality created by these individual and collective thoughts, in relation to environmental constraints as played out in the real world, consisting of all the observable and measured elements of that world (Berger and Luckmann 1966, Gutenschwager 2013).

For economics, the subjective reality consists of a mathematically defined rationality leading to a sort of robotic behavior by the human players on the environmental scene, bolstered by certain biological beliefs about genetic determination, e.g., the 'selfish gene', the naturalness of human aggression, etc., something that is now being increasingly questioned by research in a whole range of scientific disciplines (Sahlins 2008), all of which point to the conclusion that cooperation is more normal than competition. Indeed,

"... pleasure centers in the brain are activated when people cooperate, except in individuals who, in independent measures show characteristics of psychopathy (Sussman and Cloninger 2011, p. 5)".

If this is true, could it be that economics is in some way related to the study (and promotion) of psychopathology? Assuming that most economists would not like to be a part of such a story, even unintentionally, they will most likely need to search for a new philosophical paradigm outside the Newtonian one used until now. To find such a new paradigm they will need to reexamine their ontological and epistemological assumptions. They will need to reject the outdated stereotypes they have inherited from the past and begin to learn how human beings actually can and do live and work together. There are many books reporting research on this topic, but they are all outside the accepted dogma of conventional economics. The challenge is there, but the emotional cost will be high, though not unsatisfying, and in the long run, all of humanity will benefit greatly.

The objective reality of current economic science consists by and large of a mechanism that operates according to the causal laws that govern its presumed existence. Notably missing from this picture is any human content. There is no spiritual dimension, no place for human emotion or for moral judgment. In fact, in this **deterministic** world there is no need for human actors to feel anything; they are freed from all human responsibility for what might occur as a result of what is assumed to be true, including the resulting behaviors and outcomes that follow from these assumptions. Obviously, there is no need for moral concerns in such a world; things just happen as a result of accidental mutations and adaptations, much as they might if we were all 'in the hands of an angry God' (or machine)!

Meanwhile, this culture of capitalism would experience at least two other important transformations before arriving at its current state. The first of these occurred during the latter

part of the 19th and throughout the 20th century. As capital accumulated and was reinvested in increased production, the one-sided distribution of the benefits of the new system into the capitalist class led to problems of overproduction and the need to stimulate more consumption. Thus, the culture of frugality, which Adam Smith knew and admired and which Weber described so well, had to give way to the culture of waste and consumerism; a new culture, a new society was born, one unimagined by Smith. This should have been a red flag to any economist who believed that society could be imagined to be a deterministic system. The cornerstone of Smith's theory of the free market – frugality and the investment of surplus for the benefit of all – was superseded, leaving its rather more irrational and predatory character in full sight for any thinking person to see (Veblen 2009). Growth would no longer be a 'natural' characteristic of the economic system; it would have to be artificially stimulated by human intervention. This also should have been a warning that the ontological assumptions about human nature and about the idea of using 'natural laws' to explain the system were for the most part a grand illusion. Indeed, the subsequent creation of the consumer society was, as Stuart Ewen (1976, 1988) has illustrated so clearly, pure theater, including its staging in the appropriate architecture (Duncan 1965), having little, if anything, to do with the mechanistic world theorized by economics.

And yet, in the long run even this was not enough to preserve the evolving market system, and some economists, most notably Maynard Keynes, realized that while portrayed as a giant mechanism, the economic system might, in fact, still need to be regulated (in new ways, that is) by the government. In fact, Polanyi (2001, [1944]) has described in great detail how government intervention has always been a necessary prerequisite to the creation and maintenance of the free market economic system, given, especially, its destructive impact on human society as a whole. Thus, in the early 20th century the culture of **welfare capitalism** was created, whose purpose was to fulfill some of the basic human needs that the market was incapable of doing. This, however, created a source of conflict, both ideological and practical, between the capitalist class and the welfare governments who had to supply the less profitable, but socially necessary goods and services such as education, health care, physical infrastructure, environmental cleanup, etc. in order for the society itself to function. Here we can also include President Eisenhower's 50,000 miles of national defense highways, necessary to 'defend' the profits of the all-important automobile industry, one must suppose.

Meanwhile, this has also created a long-running ideological conflict among the economists whose (socio-dramatic) task has always been not only to explain, scientifically, but also to **justify, ideologically**, the free market system, both in the academy and beyond. This conflict pits those still wedded to the old theater of an autonomous, deterministic and self-equilibrating 'free market', against those who believe in a new theater where conscious human intervention should be used to protect the system from the vicissitudes of its crisis-ridden history. The actual Keynesian 'intervention' lasted from the early part of the 20th century in Europe and North America until the mid 1970s, two bloody world wars notwithstanding, or perhaps 'withstanding', when we consider the shift to military Keynesianism after WWII.

In the developed countries of the West we find ourselves in a phase at the end of the post-war boom with an increasing maldistribution of the rewards of the system, as witnessed by the fact that, in the U.S. at least, median family income has not increased at all over the

past 40 years or so. This maldistribution, by diminishing purchasing power, has necessarily placed limitations on profitable investment, with the exception of certain high-tech industries, including especially, military weaponry, which, of course, isn't related to the free market at all. These limitations have, in turn, led to an explosion in financial capitalism along with a scramble to open up investment opportunities by privatizing every possible segment of human activity, including, especially, those activities that had come to be the domain of the welfare oriented governments until now (Frank 2008). Alongside this, there has been an increase in the use of science and its newest technology to seek out and create opportunities to gamble on ever more risky and meaningless investments, simply to use up the excess capital that the imbalance in distribution has created. In mainstream economics, this has entailed an abandonment of the theory and ideas of the welfare state and a return to the old culture of the magical, autonomous 'free market'. Ironically, this free market, in its recent financial attire, is now leading us tragically into a new feudalism. Wealth is becoming more and more concentrated in a few hands, while the mass of people, whose property is gradually being confiscated from them by the seemingly autonomous workings of the free market, are being led into a new form of serfdom.

In spite of these changes in the market system, what has not apparently changed over these several hundred years, and especially now, and in spite of recent questioning in many quarters, is the abiding emphasis placed on individualism. As argued above, in the context of the theory and ideology of the system, this individualism is necessarily instrumental and ultimately 'predatory', though MacPherson (1962), in somewhat kinder language, has called it simply 'possessive'. This ideology continues to be deeply embedded in the culture of the West. Ironically enough it was considered to be a serious problem up until the late 18th century, originating, as it was believed for over 2,000 years, in the savage beast that was the human being, and a problem that could only be solved by something like the agora or a Congress in which the competing interests could balance each other out, or by a strong authoritarian leader or oligarchy that would keep the savage beasts in line. It was only in Adam Smith's time that this savagery was portrayed in a totally different light as 'resource' that could be used to foster economic development, and as something that government not only did not need to control, but would do well to leave alone and not 'interfere' with, hence the current slogans to that effect (Sahlins 2008).

Thus, given its importance to his argument at the time, Adam Smith **could** have called the new system he was describing in the late 18th century, 'predatory individualism'. But this would not have been very aesthetic. Like Saint Catherine in the beginning, this new reality wasn't really very well defined as yet. Its name would give it its identity. If Adam Smith and his followers had called it 'predatory individualism', surely they would not have found many followers. On the other hand, both the words 'free' and 'market' had a nice ring to them. Everyone would like to be free. Indeed, the fate of most humans since the domestication of plants and animals and the subsequent establishment of 'private property' has been one of slavery (or the domestication of humans, as it were) of one kind or another. And, who could not recall the enjoyment of visits to the market? So there it was: in an artistic (rhetorical) move, 'predatory individualism' was out and 'free market' was in (and, surely, only milk could flow from such veins!).

4. The Institutionalization of the Free Market System

Now we turn to the establishment, or institutionalization, to use the technical term, of this new belief, this new reified reality. The iconography of the culture of science is not, of course, frescoes and painting, as in the case of St. Catherine; it is mathematics. If the new reality could be expressed in mathematical terms, it would, therefore, have to be real. So, with the help of Ricardo and many other 'scientist-artists', the mathematics of the free market system was 'painted', not on the walls of the churches, but on the blackboards of the universities, the new places of worship. As with St. Catherine, the free market had become not only an ideal, an icon, but aso a reality imposed upon society through various forms of government regulation such as tax laws and property laws that favored the rising wealthy class, through tariff policies that favored commercial and industrial interests over domestic agriculture, etc., all creating a 'mechanistic' reality whose 'laws' could be 'discovered' by the new science of economics. As with St. Catherine, the economics icon would then be free to work its magic over time

"The history of humankind has been a search for a manner to regulate society, including its economy, in ways that would best preserve it."

Or would it? The problem with all art (and artful science) is that it can be upset by subsequent interpretations. Art is more likely to be dialectic, hence much less likely to be dogmatic. Its role is, indeed, to experiment with reality. Meanwhile, many books, as well as the film, Agora, have exposed the reality of Hypatia and by implication St. Catherine; the examples can be multiplied.

Likewise, the current crisis in the capitalist system has brought forth many criticisms of the not so 'free' market during the current phase of monopoly capitalism. And many economists are questioning the ideological underpinnings of their science, e.g. the World Economics Association (WEA), with its thousands of economists and other members.* Basic to this questioning, however, must be a confrontation with some of the basic presuppositions of social science itself. Is this science, especially economic science, outside society? Or is it playing an active role in **constructing** society, as most humanists and now, perhaps, followers of Heisenberg would claim? Is society a giant mechanism, or are there aspects that cannot be captured with the metaphor of the machine? Does the uncertainty principle hold true for society, as well as for nature? Are the laws that social scientists are discovering truly objective or are they influenced by paradigmatic assumptions (Kuhn 1970), or by the power of suggestion (Michael, et al 2012), or by an indifference to the Null Hypothesis, or by the difficulty of publishing research that merely replicates previous research, etc.

Whether or not human society is a giant mechanism, there is no such thing as an unregulated (free market) society. Indeed, the history of humankind has been a search for a manner to regulate society, including its economy, in ways that would best preserve it. The biological

^{*} www.worldeconomicsassociation.org/

demand for survival and reproduction is moved to a new social scale as the population grows and its connections expand over space and time. Instinct is supplemented by human thought and intention, as is necessary to manage this new scale. Philosophy, religion, art and science are part of a continuous effort to comprehend, organize and regulate an ever-changing social reality. The idea of natural laws or an 'unseen hand', proven mathematically, is not ultimately very far from the conventional belief among many, even today, in a God that oversees and controls everything. This apparently was also Newton's belief, as he sought God's laws embodied in nature (though with a much stricter methodology, of course).

"Insofar as individualism becomes predatory, we must ask to what extent it is, or, even more, encourages, sociopathology."

Meanwhile, the idea of a social world free from government regulation leaves open the question of how, in fact, this world is to be regulated. In a socioeconomic world dominated by the idea (and reality) of predatory individualism we shouldn't be far off in supposing that regulation would be carried out by the predators, themselves. Does that not seem to characterize today's world, even if the starring roles have recently changed, shifting all the best lines from the industrialists to the bankers? We must also suppose that those predators are working, as always, in their own interest, as the theory of the 'free market' proclaims that they should.

A recent book by John Weeks (2014) offers a thoughtful discussion of how (a different approach to) economic theory could be used to resolve the current finance-generated crisis, that is, largely through renewed government regulation within a Keynesian framework. This government regulation would have to 'interfere' with the workings of the 'free market system', making it less free, one would suppose. But if the term free market is but a cover for the reality of predatory individualism, we must imagine that it would only be a matter of time before the predators would regain their 'rightful' (powerful) place in society, as, indeed, they did after more than forty years of Keynesian regulation before, during and after the Second World War. A St. Catherine icon provided a symbol of altruism, as means of legitimating a social hierarchy dominated by the church; so also has a cleverly crafted 'free market' icon legitimated a new social hierarchy dominated by a plutocratic class.

What I am arguing is that, call it what you might, the ideology of individualism cannot by itself be a basis for a healthy society, unseen hand or not, any more than it is for the cells in the human body or the elements of nature. Nor, for that matter, of course, were the slavery and serfdom that preceded individualism a healthy basis for society. What we need are new liberating ideas, while always recognizing in the dialectical spirit that they too, may in time, be turned into suffocating straightjackets (Berlin 1962). To change the social world it is not sufficient to change the way the 'mechanism' is regulated; we must change the very idea of what society is: Is it a mechanism or is it theater, (or, at least, some synthesis of the two, if unintended, often mechanistic, consequences of human actions that may be discovered by science are taken into account)? This goes to the heart of the choice between C.P.Snow's two worlds. Do we go with Sophocles and Shakespeare or with Adam Smith and Thomas Hobbes and their many descendants in the modern world of positivist social science? If we see our

social world as theater, we must ask who are the playwrights, the directors and the main actors, and what are their motives? We must examine the rhetoric, the ruling ideas that govern the consciousness and intentions of the "poor players who strut and fret their hour upon the stage". Insofar as individualism becomes predatory, we must ask to what extent it is, or, even more, encourages, sociopathology.

According to a recent study by Martha Stout (2005), something like an (rather modest) estimated 4% of the American population is classed as sociopathic. A sociopath is defined as one who has no conscience, no moral values, no sense of right or wrong, no emotional depth or the ability to relate emotionally to others, no concern about the fate of others, whether they, themselves, are involved in creating that fate or not. Sociopaths are deceitful, manipulative and irresponsible. They may also be charming and parasitic, with a "grandiose sense of selfworth" (Stout, pp. 6-7). Her research suggests that from 35-50% of sociopathic behavior is inherited; it is found in our genes, which as Lipton would argue is not the product of a deterministic system but may well be the product of prior environmental influences on a given generation's progenitors. Whether it will be expressed in current behavior has a great deal to do with the kind of culture in which we are raised. If a culture emphasizes the interconnectedness of all things, with or without quantum theory, it will dampen sociopathic tendencies among its people. If it emphasizes the separateness and individuality of persons, as in Social Darwinism, it will encourage those with sociopathic predispositions to act them out in their behavior.

From the Wild West of the past to the corporate outlaws of the present, American society seems to allow and even encourage me-first attitudes devoted to the pursuit of domination . . . North American culture, which holds individualism as a central value, tends to foster the development of anti-social behavior, and also to disguise it. In other words, in America, the guiltless manipulation of other people 'blends' with social expectations to a much greater degree than it would in . . . other more group-centered societies" (Stout, pp. 136-7).

As a further insight into this problem, we may also ponder the following quotation:

Robert Oppenheimer, when he found himself reflecting on how he and his people made decisions said: '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 technical success. That's the way it was with the Atomic bomb' (Jacobs, 2014).

Predatory individualism and its attendant 'free market' is an ideology, almost a religion for many economists and others following in the footsteps of Adam Smith and Milton Friedman. It is deeply embedded in western culture where it appears under the mantel of a deterministic science, wearing the vestments of 'freedom', rationality and objectivity. It is mightily defended in the citadels of higher learning, and, along with the mechanistic view of society, is **probably the current, single most important obstacle to a more cooperative and humane society**. Indeed, its influence is felt well beyond academia, creating a form of alienated environment for entire cultures. It is not that sociopathic behavior has been unknown, especially among ruling classes in the history of human kind over the past 10,000

years, and perhaps before; but hunters and gathers would and still do recognize immediately the dangers to their very existence of such behavior. Here we can also refer to the human body with its 50-70 trillion cells where predatory individualism is unknown and where organs do not attempt to dominate or go to war with one another. Yet, social legitimation today under the ideological influence of science creates ironies and contradictions that the insights of art could well help to reveal.

What we are referring to here is the danger of dominance by the more successful among the predatory individualists (what today we might call 'bullying'), and the resulting development of a nondemocratic hierarchical sociopolitical order, not one designed to rein in the 'savage' humans as was the vision up to the 18th century, but one actually beholden to the most cunning of them. Christopher Boehm (2000) argues, with a great deal of anthropological and ethological evidence that the danger of such developments had contributed to the development of a moral consciousness even before

"Science and art must find ways to work together and not simply pretend that they occupy 'different worlds'."

Homo sapiens appeared on the scene. That is, the distaste for being dominated had led even prehuman species to develop a consciousness of and means for dealing with the bullies who could potentially upset the egalitarian harmony of their bands. They would be controlled through ostracism, through punishment and even through execution, if thought necessary, as has also been found in more recent studies of hunting and gathering societies existent today.

5. A New Role for Social Science

Mechanistic Newtonian science has its repertoire of terms used to conceive the social world. Some of these terms are being questioned by quantum physics, especially beyond the realm of the five senses. The humanities have always questioned the capability of the mechanistic metaphor to fully comprehend the social world. Quantum reality offers an opening for a more humanistic approach to social reality, one that may allow human beings to be seen as emotional and moral beings not circumscribed in their thoughts and actions by narrow definitions of rationality and by only instrumental needs that don't allow extension beyond the materialistic (Capra 1982, Rosenblum and Kuttner 2011, Gutenschwager 2004, Ch. 10). Again, it's important to emphasize that this is not a call to do away with rationalism; it's a call to recognize that there are also other dimensions to human existence that must be taken into account if a holistic understanding is to prevail: science and art must find ways to work together and not simply pretend that they occupy 'different worlds'.

Can social science theory accommodate itself to this non-material extension? Certainly not, within the reified and deterministic framework of conventional positivistic thought. The mechanistic metaphor and the mathematics that accompany it will have to be seen as just that, as metaphors that capture certain often unseen and maybe unintended aspects of social reality, **not as 'laws' that govern it**. Once these (sometimes unintended) aspects of social reality are uncovered, they should become the subject of discussion and debate, a discussion that would raise the question about their **desirability**, not about their law-like **naturalness or inevitability**. These are terms in the deterministic framework that guide conventional

economic thought, but that, as we have seen, tend to obscure profound philosophical assumptions about the nature of the conscious universe we inhabit.

Can economists and other positivist social scientists accept their (diminished) social role as discoverers of temporary regularities that they and others must evaluate as to their desirability? It's not that these discussions are not going on now among concerned scientists. See the work on altruism in nature by W.D. Hamilton (Segerstrale 2013), for example, or the mathematics of cooperation (Nowak 2011), or work on morality, itself (Hauser 2006, Boehm 2012). However, many scientists are still handicapped by beliefs in 'determinism'. They prefer a "handful of certainty to a whole cartload of beautiful possibilities", as Nietzsche has said (1997 [1886], p. 6). The conventional economists who work within the current establishment's 'theater of power' are allowed to believe that they are simply doing their science, much like the operators of drones who are simply 'following orders', whatever the moral consequences of their actions. Scientists and engineers who are simply 'following the orders' of their 'deterministic' science may be able to live in society free from guilt and self-doubt, but they are doing so in a grand pattern of self-deception, something which art has proven so well suited to expose, one might add. It is not that self-deception has not been a force in human history, especially during the past 10,000 years, but we must keep in mind that the survival of hunters and gatherers left little leeway for such things in the evolutionary years before that time. Was this self-deception not involved when St. Catherine's religious fanatics were carving up Hypatia in the 'agora', or later murdering and pillaging their way across the Third World during the age of exploration and the subsequent rise of imperialism, to say nothing of the social scientists who have legitimized this imperialism under the guise of modernization, globalization, the division of labor, the free market at work, etc. in the years that followed?

Ultimately, social scientists must and, indeed, are more and more recognizing that they are not just studying society **but are also creating it**. If we trace the evolution of the idea of individualism we might gain an appreciation of the way in which a social reality can be constructed, often through unintended consequences of meaningful ideas. Individualism evolved under the aegis of economic science into possessive individualism, then quite naturally into predatory individualism, as active and passive forms of aggression, aggression being a form of bullying, which when institutionalized, as we have seen all too often in the 20th century and beyond, becomes fascism. This may explain the emphasis on **cooperation** in some recent avant-garde scientific literature, as the social dialectic between subjective and objective reality seeks to rebalance itself, i.e., as people seek to close the gap between what they are actually doing and what they think they are doing!

In this light, we are also now once again beginning to confront our ultimate dependence on nature, much as did the hunters and gatherers in earlier times. Our culture of science along with its technology (without philosophy) appears to be endangering our very existence. We have little time left for self-deception. We need new scriptwriters and new actors, before we end up writing ourselves completely out of play!

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Challenges and Opportunities*

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Abstract

Out of the depths of the problems that challenged humanity in the past have surfaced great opportunities. Famine, war, depression and subjugation have all left one or more positive impacts on the world. Crises have made men and women rise to the occasion, and with the right response not only overcome the problem but convert them into expansive elevating opportunities. The pressure of the challenges motivates people to perform extraordinary tasks, releasing inherent energy, changing attitudes, and breaking resistances along the way. Just as the momentum of the opponent's attack can be turned around and used to one's own benefit in martial arts, the pressure of the crises can be converted into energy and directed towards finding a solution. Our response to the challenges determines whether the challenges defeat us or are converted into opportunities. What the mind views as irreconcilable and mutually exclusive contradictions can turn out to be complements. Is it possible that every challenge has a concealed opportunity behind it? If so, how can we convert one into the other?

1. Introduction

It was 1922. The Great War had ended 4 years earlier, but Europe was still reeling under aftershocks. All countries suffered to different extents due to the global depression following the war. Czechoslovakia's economy was in ruins. Its exports were drastically cut and there was widespread unemployment in the country. The newly formed Czech government adopted tight monetary controls to fight inflation, and the currency was devalued by 75% in a year. People's purchasing power declined precipitously, most businesses had high levels of debt and falling incomes. Production declined, layoffs multiplied, and the situation in Bata Shoes, a mid-sized footwear manufacturing company was symbolic of what every business in the country was going through. It was suffering badly. Founder Tomas Bata saw his company's exports drop by 75%. Stocks were accumulating in his warehouses, the warehouses were overflowing. There was enormous pressure to lay off workers and cut down production.

The national manufacturers' association of Czechoslovakia called an urgent meeting of its members to discuss the government's policies and see what needed to be done to avert economic disaster. Those who attended felt they were helpless victims of external forces and government actions. They were nearly unanimous in condemning the government and demanding relief, but none could propose a viable solution to the problems facing the nation.

^{*} Based on a lecture delivered by the author in the WAAS-WUC course on Individuality and Accomplishment at Inter-University Centre, Dubrovnik in August 2014.

It was Tomas Bata's turn to speak. Bata saw the futility of the government's policy and industry's response to it. He believed that some radically new strategy was needed to break the vicious cycle of economic decline. He was a man who firmly believed in boldly facing the problem and solving it. He was also motivated by a deep sense of commitment to the thousands of people who depended on him for their livelihood and very survival. When Bata addressed the conference, he did not strike the familiar refrain demanding government action. Rather, he called on the business community to act courageously for its own preservation. He ended his speech with a dramatic announcement that startled the entire gathering. Bata refused to lay off a single worker. Instead, he was going to cut the prices of his shoes in half. Bata's announcement brought a hushed silence, no one was quite sure they had heard correctly. Then, there was derisive laughter. He was dismissed as a lunatic or a fool. How could a company cut its prices by 50% and survive? How could it ever repay its creditors by lowering prices?

Bata returned to his factory and explained his radical decision to his employees. It was the only possible way to save the company and preserve their jobs. All costs had to be reduced to the absolute minimum. Waste of all description had to be completely eradicated. Efficiency and productivity had to be raised to much greater levels than existed. He imposed across-the-board 40% wage cuts for all employees, despite the opposition of a powerful union, but he promised to supply all workers and their families with food, clothing, and other necessities at half the present price to ensure their maintenance. He divided his factory into profit centers and promised incentives for higher productivity. Having put his internal operations on a war footing, Bata launched a national poster advertising campaign depicting a huge fist crushing the Czech word which represented the high cost of living.

The public response was overwhelming. Shoe stores that had been empty for months were suddenly invaded by mobs of people seeking an affordable pair of shoes. Police had to be called in to restore order and regulate traffic. Orders poured into the warehouses until they were almost empty of stock. The workshops were geared up to full production capacity. Within a week, the sense of uncertainty and despair was replaced by one of urgency, excitement, and purpose. In the following months Bata not only maintained full employment but actually started to expand. He continuously introduced improved production techniques, administrative systems, and employee incentives to increase productivity. Over the next five years, employment in Bata's factories more than doubled, and production multiplied 15-fold. Between 1922 and 1932 the average retail price of Bata shoes fell by 82%, while wages in Bata factories rose by 200%. Bata succeeded in producing so efficiently that a former luxury became accessible to the masses for the first time. By 1928 Bata operated the largest tanneries, shoe-making factories, and shoe machinery industry in the world. Czechoslovakia led the world in footwear exports, and the Czech people were the best shod in Europe. What had begun as a crisis due to the bleak economic situation had gone on to propel the company, and the entire country forward.

In the middle of difficulty lies opportunity, said Albert Einstein. Time and again, this has been seen to be true. Out of the depths of the innumerable problems that challenged humanity in the past have surfaced great opportunities. Famine, war, depression and subjugation have all left one or more positive impacts on the world.

The Irish Potato Famine of the 1840s that resulted in the death of over a million people, became a major watershed in Irish economic, agricultural, demographic, political, religious and linguistic history of the country. It resulted, among other things, in a large scale reorganization of the agricultural sector. Farmers and laborers became politically better organized. Funding from those who had emigrated to America and elsewhere came to their support. Emigration forged enduring links between Ireland and the world.

"Throughout history, the solution of every problem has associated with it one or more leaders, people of vision who solved the problem or guided others through it."

The devastating Second World War destroyed the European economy and left millions and millions dead, homeless, or badly affected. But, looking back, it is apparent that the war necessitated and developed many industries. After it ended, most nations rebounded quickly, and witnessed rapid economic growth and modernization. What had been the culmination of five centuries of incessant warfare in Europe led to the founding of the United Nations and the European Community, and the total elimination of warfare in Western Europe. The end of the war was quickly followed by the end of colonial empires around the world and the spread of democracy. Technology developed during the war found commercial use afterwards, raising living standards. Employment of women soared during the war and resulted in greater social freedom and economic opportunities after it ended. Widespread enlistment of African Americans in the armed forces helped bring racial discrimination to an end.

Such a phenomenon can be observed throughout history, in the Black Plague, the American Civil War, the Great Depression, Apartheid, Cold War, oil crises, climate change...

2. Great Leaders

Another phenomenon that can be seen during times of great crises is the appearance of great men and women at the right time and place. Throughout history, the solution of every problem has associated with it one or more leaders, people of vision who solved the problem or guided others through it. The American independence movement saw the rise of George Washington, Benjamin Franklin and Thomas Jefferson. Giants of men, Franklin Roosevelt, Winston Churchill and Joseph Stalin allied during World War II. Martin Luther King Jr. was there to lead the Civil Rights movement. The Indian freedom movement gave expression to the remarkable abilities of Mahatma Gandhi and Jawaharlal Nehru, the Apartheid to Nelson Mandela.

How can we explain the fact that great men have appeared only in the face of major disasters? Is it mere coincidence? Such a constellation of leaders at one point in time as at the time of its Founding Fathers has not been seen again in the USA since its independence. England has not had a leader of the stature of Churchill since World War II ended. India has not seen another Gandhi since the English left.

People of extraordinary talent and capacity live everywhere in all generations. But often the times and circumstances are not conducive for the expression of their potential. The native capacities are activated by crises. Great challenges bring out the greatness in people. They stir them awake. They release the energy of necessity, motivate and pressurize, break down resistances, change old attitudes, necessitate creative thinking, supply courage and strength. In other words, challenges can create leaders, just as they convert severely threatening circumstances into positive expansive elevating opportunities that extend benefits far beyond the elimination of the original threat.

3. Challenges Release Energy

What is it about challenges that open up opportunities, shape leaders out of men? No pressure, no diamonds, said the Scottish philosopher Thomas Carlyle. Carbon is not the only thing that undergoes a transformation under pressure and heat, people do too. The pressure of a challenge releases energy. It raises aspiration in people and awakens them to their inherent strength. People become motivated, resourceful, and capable of taking effort they would never have taken during normal times. When all is well, we don't set tough goals. When we set high challenging goals, we see opportunities that were not visible before.

When Hitler attacked England in WWII, he expected England to surrender within six weeks. But after three months, Germany gave up the attack, though they heavily outnumbered Britain in both aircraft and experienced pilots. At the start of the war, Germany had 4,000 aircrafts compared to Britain's front-line strength of 1,660. Germany trained 800 pilots per month, and Britain, 200. The material advantage was with Hitler, but he had not taken into account the enormous psychological determination of Britain and its leader. In one of his most famous addresses to the nation, Churchill rallied the English to make unheard of sacrifices and unrelenting effort to defend their freedom. He did not ask his countrymen, what do you all think we should do? He did not compare the numerical strength of his army or air force with Hitler's. He did not have in mind the troops the US would send – America had not yet even entered the war. He simply proclaimed that Britain shall not surrender, speaking out of the deepest conviction and courage of his heart. He appealed to the depths of character of the English people. During air raids, he would stand outside on the roof top, shaking his fists at the bombers. His courage, patriotism, sense of honor and self-sacrifice resonated with all the English people. They backed him totally. In one of his other war speeches, he said 'I have nothing to offer but blood, toil, tears and sweat'. What more can a leader offer, and every one of his countrymen was willing to follow him and offer the same. These statements of Churchill had all his emotions, sentiments and beliefs behind them, and struck a chord with all his people. Against all odds the under-equipped and under-manned British air force was victorious in the skies. Britain lost 1012 aircraft, and Germany, 1918. 537 British airmen were lost, Germany lost 5 times as many, 2662. In the face of such resistance, Hitler had no choice but to give up.

Something similar was seen in the battle of Agincourt, France during the hundred years' war between England and France, when, King Henry V led England to a near miraculous victory. The English troops had very little food, had marched 260 miles in two and a half weeks, were suffering from sickness, and faced much larger numbers of well-equipped French men. The French had over 12,000 men, and outnumbered the English 5 to 1. It is said

that some French leaders were so eager to defeat the English that they insisted on being in the front line. But inspite of the great odds, the French casualties were somewhere between 5000 and 10,000 men. Incredibly, the English lost less than 100. Henry V fought a superior French army, crippled France, and started a new period in the war. The courage and determination of the king and his army were immortalized by Shakespeare in his drama *Henry V*.

"It is the pressure of the situation that releases energy in people and makes them rise to the occasion."

Students pulling off an all-nighter the day before the exam is an instance of crises releasing energy seen on a much smaller scale! Challenges also make us more resourceful, we've seen in books like *Robinson Crusoe* and movies like *Castaway* that necessity makes people come up with ideas that they would not have done during normal times. Gasoline shortage in Japan in 1946 made Soichiro Honda attach a small motor, powered by kerosene, to his bicycle. After dozens of his friends asked him to build similar motorbikes for them, he formed the Honda Motor Company. American Southwest airlines had a slow turnaround time for its aircraft. Under pressure of a severe shortage of funds, it adopted aggressive measures to improve the value of speed and punctuality. Now the airline has the fastest turn time in the industry and unmatched profitability.

It is the pressure of the situation that releases energy in people and makes them rise to the occasion. It is what made Bata turn his company around, and Churchill rally his countrymen. It is what made the employees of Bata Shoes work hard, and every soldier and civilian in England give everything in the Battle of Britain.

4. Challenges Change Attitudes

A bad attitude is said to be like a flat tire, you cannot get very far until you change it. A crisis does just that, it changes attitudes. Faced with a crisis, many people see a dead end with no way out. They do not realize that their sense of helplessness arises from their own attitudes, like that of the Czech industrialists who blamed the government and external forces and sought help, while Bata decided to act on his own. He changed his outlook, and infused optimism in everyone around him as well. Changing deep seated attitudes is never easy. But challenges generate pressure for a change of attitudes. Invariably, new opportunities appear as a consequence.

The story of Michael Blumenthal is a great study of an individual taking a challenge and turning it around to strengthen himself. Blumenthal was a Jew, born in Germany, where the family had resided for centuries. But in 1938, his father was arrested and the family's shop burnt. Blumenthal, who was a 7 year old boy, was beaten up. His father escaped from a concentration camp and took the family to Shanghai, as it was a country that did not require entry visas. They hoped to go on from there to some place else. But World War II broke out in 1939, and the Blumenthals became trapped in China for eight years. Frequently, they did not have enough to eat and underwent great physical and mental hardship. Blumenthal worked

in a chemical factory for \$1 a week to help feed his family. His education was interrupted; the trauma took a toll on the family, his parents divorced. After the American troops entered Shanghai in 1945, 21-year old Blumenthal and his sister arrived in San Francisco with just \$60 with them.

"Challenges can strengthen people, and change their attitudes. They teach lessons that no classroom can impart."

Blumenthal enrolled at college and worked at a host of odd jobs-truck driver, night elevator operator, busboy, movie theater ticket-taker. He finished at the University of California at Berkeley. Then, on a scholarship, he earned two master's degrees and a Ph.D. in economics at Princeton, and later taught there. Then he entered politics and public service. He moved from height to height. He masterminded the merger of Sperry Corporation into Burroughs to form UNISYS Corporation, the second largest computer manufacturer in the world at the time and the largest merger in the history of the computer industry until then. He went on to serve as US Secretary of the Treasury under President Jimmy Carter.

A man who fled persecution in Germany, spent nearly a decade of privation in China, and had no easy time on arriving in the US, Blumenthal says he owes his success to the hardships he faced in his early life. The principle that challenges are opportunities is well-known in martial arts. One can use the momentum of the attack and turn it against the attacker. Blumenthal used this Jujitsu principle. He applied the lessons learnt in Nazi Germany and wartime Shanghai to become stronger, more determined and more resourceful. Instead of allowing troubles to crush him, he let them teach him how to cope with adversity. The lessons equipped him for the future. In his autobiography, *From Exile to Washington* he wrote "The tough refugee years were precious lessons for the future; I lived them intensely, and they taught me much that was valuable and that I might never have learned in normal circumstances. Today I am grateful for that."

Challenges can strengthen people, and change their attitudes. They teach lessons that no classroom can impart. The improved attitudes often improve situations, and bring solutions.

5. New Situations Break Old Resistances

Sometimes, the society, organization, or individual's entrenched pattern of thought, attitude and action cause the problem. A crisis enables the revamping of this structure. The pressure of a crisis can be used to break down the resistances that are the source of the problem.

Resistance crumbling under pressure of a crisis was witnessed in the turnaround of America's third largest automobile manufacturer, Chrysler. Founded in 1925, the company expanded into Europe, and acquired French, British and Spanish companies. In the 1970s, a number of factors including the 1973 oil crisis impacted Chrysler's sales. This was aggravated by massive imports of high quality, fuel-efficient small cars from Japan. As a result, Chrysler came to the verge of bankruptcy, forcing its retreat from Europe. In 1979 the financial experts

were unanimous in their diagnosis that Chrysler was all but dead. Lee Iacocca, the man credited with turning around the company, was brought in as CEO. The situation was so desperate that Iacocca had to beg the US government for financial support in order to prevent the loss of tens of thousands of jobs. It was the largest instance of a financial bailout in American history. A study of the actions Iacocca took to save the company is a great course in itself.

When he took over, Iacocca discovered to his dismay that inside Chrysler plants there was just about every kind of problem one could imagine—theft, gambling, protection rackets, prostitution, and even a murder. There was no discipline. Executives used the president's office as a passageway from one office to another. Executives with coffee cups in their hands kept opening the door and walking right through the president's office. Factory workers did not bother to use the trash barrels for their garbage. Absenteeism, low morale, racial tensions, disputes between workers and managers, and wildcat strikes were common. Workers at one plant failed to punch in and out for lunch hour and then broke the clocks when management insisted. These recurring problems seriously affected the efficiency of operations and the quality of the cars.

Chrysler had 100,000 unsold cars valued at \$600 million that were poorly made and deteriorating outdoors; enormous overheads and declining sales that were generating millions in losses every day; a dissatisfied and alienated customer base. Chrysler ran out of cash—it came down to its last \$1 million at a time when daily expenses were \$50 million—and in 1980 and 1981 its total losses were \$2.2 billion.

Iacocca discovered that each of the company's 35 vice presidents was running a mini-empire. Each ruled his own turf. There was no communication or coordination between departments. There was absence of a strong central authority making it difficult to control people and impossible to harness their full capacities for productive work. Talented individuals were assigned to jobs that they had not been trained for. Potential talents were ignored or suppressed rather than being actively encouraged.

Iacocca called it a state of anarchy. He said he never would have accepted the job if he had known how bad things really were. He said it left him seeing double. Iacocca's first task was to eradicate the negative habits and install simple discipline. He had to peel away the encrusting layers of dead habits, vested interests, outmoded strategies, and inertia. He fired 33 of the company's 35 vice-presidents and allowed long-suppressed ideas, energies, and talents to rise to the surface. The pressure made Iacocca remove the entrenched negative habits that had generated the crisis in the first place. It also made the powerful union go along with him, otherwise the company would have to file for bankruptcy and everyone would be left without jobs.

Between 1978 and 1981, Chrysler lost \$3.3 billion – the largest loss ever by an American corporation until that time. Between 1982 and 1984, Chrysler earned a net profit of \$3.3 billion – more money than it had earned in the previous 59 years it was in business. The net gain in profitability was \$6.6 billion. The company repaid the government's financial guarantees seven years ahead of schedule.

Iacocca had earlier served as president at Ford, but he could not do there what he did at Chrysler. Because the obstacles were so large, the pressure was all the more, and great resistances could be removed. Nothing short of imminent collapse could have made such

sweeping changes possible, changes that swept away many outdated, entrenched patterns that were in the way of efficiency and profitability.

6. The Right Response

What differentiates those who tide over a crisis from those who succumb to it? Is there a process that explains how individuals, companies and countries are able to convert challenges into opportunities? Do we really explain anything when we say that Henry V was a great king, Churchill a great war-time Prime Minister, Bata and Iacocca entrepreneurs with acumen? Accomplishment is a human process. There ought to be some general principles we can derive from these extraordinary instances.

Game changers are always on the lookout for opportunity. And they recognize it when they see it. Thomas Alva Edison said that opportunity is missed by most people because it is dressed in overalls and looks like work. Sometimes, a slight change in outlook can make the difference. Lee Iacocca drove a Ford car while he was in college. Whenever his car stalled while driving uphill, instead of cursing the car or its maker, he used to say 'They need me in Ford. Someone who makes this kind of car can do with some help'.

Just as the principle in martial arts, instead of resisting the attack, the momentum of the attack of the opponent is redirected and used against the very opponent, great men and women redirect their energy in the right direction. It was said of Washington that he never appeared to so much advantage as in the hour of distress. Adversity brought his best traits to the surface and ennobled him. When Lee Iacocca was fired from Ford, the anger and humiliation pushed him to take on the presidency of Chrysler. He said, 'There are times in everyone's life when something constructive is born out of adversity. There are times when things seem so bad that you've got to grab your fate by the shoulders and shake it. I was full of anger and I had a simple choice: I could turn that anger against myself, with disastrous results. Or I could take some of that energy and try to do something productive. In times of great stress and adversity, it is always best to keep busy, to plow your anger and your energy into something positive.'

Letting go of the past, anticipating change and adapting oneself to change are essential components of the right response. Those passenger shipping lines that did not see the aviation industry taking off fell further and further behind, whereas those that saw it and moved to cargo or cruise industries, or to an entirely different business survived.

Great leaders learn from mistakes, their own as well as others'. Edison immortalized the idea when he said, 'I have not failed, I have just found 10,000 ways that won't work'. They think creatively and adapt. Life giving lemons is used to indicate life giving problems, lemons in this case signify sourness and bitterness. Julius Rosenwald is credited to have said, when life gives you lemons, make lemonade. That is, the problem can be converted into something good. There is a yet another modern twist to this, when life gives you lemons use the seeds to plant an orchard, make lemonade and start a franchise.

7. From Famine to Plenty

Challenges have done what nothing else could have made possible. A concluding story of

India's Green Revolution that transformed India from a starving nation to a net food exporter shows the capacity of crises to bring about incredible change.

The population explosion of the 1950s brought about by introduction of vaccinations and life saving drugs resulted in perennial food shortages in India that had to be met by massive imports of food at concessional prices from the USA. The problem was aggravated in the mid-1960s, when India faced two successive years of severe drought, and acute food shortage. The country led what was described as a 'ship to mouth' existence. At one point, India reached a stage where she had stocks for only two weeks, and nothing else in the pipeline. Prime Minister Shastri called upon all Indians to miss one meal each week. The FAO estimated that severe famine could take up to 10 million lives in the country.

C Subramaniam (CS), the Food and Agriculture minister proposed importing hybrid seeds that had been developed and experimented in Mexico with success by Dr. Norman Borlaug. He insisted that the government set up a separate corporation that would purchase the extra food produced in food surplus regions at a price that guaranteed the farmers would earn a profit and then sell the surplus in food deficit areas. That way, farmers would always have an incentive for producing more. Seed farms, warehouses and fertilizer plants were set up to support the effort. Then he announced in the parliament that his program would make India self-sufficient within five years. Members of parliament laughed at his absurd boast, but CS was determined.

CS faced formidable opposition from within the Cabinet, from agricultural scientists, the opposition parties, his own party members and the general public. Scientists and economists opposed the proposed strategy. The opponents organized as many as thousand protest demonstrations around the country. But CS worked diligently to persuade various constituencies to his view. He converted five acres of lawn into a demonstration farm at his home in New Delhi. That experiment proved highly successful, leading his Cabinet colleagues to withdraw their opposition and support him. The farmers said it would not work in India, the people wouldn't eat it because the wheat was the wrong color and shape. CS dismissed all these objections. The government brought the seeds by air as they could not wait for the ships.

In the meantime, since food was urgently required, CS went to Washington for assistance. US President Lyndon Johnson agreed to export food, but CS explained that India couldn't wait till the ships reached the ports, it was such an emergency. So he asked the president to redirect the food in ships that were already in the high seas.

Planning for the long term, CS revamped agricultural education in the country, shifted the focus to high priority areas, set up a fertilizer corporation. Meanwhile, the imported seeds were a success, famine was staved off. The Green Revolution had been launched. Food grain production went up by 50% in 5 years. India had a token surplus and began to export. In 10 years, food production doubled. The success was emulated by other Asian and African countries.

As a by-product of the Green Revolution, many other lateral industries flourished. Crop areas under high-yield varieties needed more water, more fertilizer and more pesticides. This spurred the growth of the local manufacturing sector. Industrial growth created new jobs and contributed to the country's GDP. The increase in irrigation created need for new

dams to harness monsoon water. The water stored was used to create hydro-electric power. This in turn boosted industrial growth, created jobs and improved the quality of life of people in villages. India paid back all loans it had taken from the World Bank for the purpose of the Green Revolution. This improved India's creditworthiness. Some developed countries like Canada, which were facing a shortage in agricultural labor, were so impressed by the results of India's Green Revolution that they

"The willingness to learn, adapt and grow determines the result."

asked the Indian government to supply them with farmers experienced in the methods of the Green Revolution. Many farmers from the northern states in India were thus sent to these countries. Not only were their lives transformed, but this had an impact on their hometowns as well. Everything had a positive ripple effect.

8. Conclusion

All of the above read very well as inspiring stories from the past, like the many motivational quotes and proverbs about seeing the silver lining. But they are not just meant to be idealistic anecdotes with happy endings. They are in truth lessons for the present and the future. We can compare the enormity of the challenges we face today, with the ones we have overcome in the past, and look for parallels, guidelines, even warnings. Eradicating poverty around the world seems as huge as overcoming the economic crisis after World War I, but Bata tells us it can be done, and how to do it. If one nation could use an impending famine as a stepping stone to food surplus, together we can achieve food security for all humanity. If Iacocca could revive a company on the verge of bankruptcy, inclusive economic growth must be possible. We see the energy crisis leading to the exploration of renewable energy sources, much as the hardships equipped Blumenthal to rise high. Global warming analysts predict exactly when and how high the sea level will rise. But if Churchill could prove all war experts wrong and make the Battle of Britain end in another way, it should be possible for us to alter the direction regarding global climate change. When implementing the United Nations' Sustainable Development Goals, success in overcoming earlier challenges are practical examples that can inspire us to greater achievements. It is much difficult to see anything positive coming out of spreading epidemics, religious fundamentalism that seems to getting out of hand with each passing day, or the threat of nuclear war, but one quick glance backward is enough to tell us that these challenges can be converted into opportunities. It is our response that is the determinant. Can we give the right response?

What is the difference between challenges and opportunities? As Shakespeare wrote, 'There is nothing either good or bad but thinking makes it so'. Challenges and opportunities are not irreconcilable opposites or contradictions. By challenges, we typically refer to situations that threaten to deprive us of current achievements – situations which seem to demand more energy, knowledge and capacity than we presently possess and are therefore daunting, perplexing or frightening. We view situations as opportunities that have the potential to raise our level of accomplishment to a higher level – we find that opportunities also demand more energy, knowledge and capacity than we presently possess, compelling us to raise our level of performance beyond present levels or what we even believed possible. In practice, the distinction is less clear. Both require similar responses including:

- enormous investment of energy
- · changes in our knowledge, attitudes
- · restructuring of organization
- · acquiring new knowledge, learning new skills
- · risking what we presently have

Our response to the challenge determines whether the challenge defeats us or is converted into an opportunity. The right response to the challenge releases energy and redirects it towards finding a solution. The willingness to learn, adapt and grow determines the result. Contradictions can be complements. What the mind views as irreconcilable and mutually exclusive opposites can turn out to be aspects of a greater whole. Is it possible that all challenges have concealed opportunities behind them? Can we do as the oysters do, convert an irritant into a pearl?

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Urgent: A New Era, New Solutions*

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"There is no challenge beyond the reach of the creative capacity of humanity"

— John Fitzgerald Kennedy, 1963

Abstract

We have to invent our future. Never before have so many things changed so quickly. In the digital era, human beings are no longer invisible, silent and obedient. As the Earth Charter says in its beginning: "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". Equality of gender shall finally allow us to reach the balance that should be the cornerstone of a new era. UNESCO Constitution sets forth in its preamble that humanity should be guided by "democratic principles": justice, liberty, equality and "intellectual and moral" solidarity. A "Universal Declaration of Democracy" is presented. A genuine democracy that will increase food and environmental security, economic equality, immigrant rights, access to education for everyone... and participation, thanks

"We have to invent our future. Inertia is the biggest enemy because it leads us to deal with new problems using old solutions."

to modern communication technology. Actions to be urgently adopted: at the international scale, especially through the refoundation of a UN System; at the regional (European Union); and at the local and personal ones. We have reached a historical turning point that will allow all human beings, and not only a few of them, to live a life that is worth living, being "free and responsible", which is the aim of education.

We have to invent our future. Inertia is the biggest enemy because it leads us to deal with new problems using old solutions. Never before have so many things changed so quickly. If an appropriate evolution is made possible, revolution may be prevented. According to Amin Maalouf "unprecedented situations require unprecedented solutions". For centuries, absolute male power has been based on power of physical strength. The time has come to resolutely put forward the power of reason. In the digital era, human beings are no longer invisible, silent and obedient. They have stopped acting as mere subjects and have become citizens. Radical changes are transforming the spatial, temporal and basic features of our behaviour.

Those who believe we are facing a short term crisis and that the previous "order" has to be restored are missing the point. We have reached a historical turning point that will allow *all*

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human beings, not only a few of them, to live a life that is worth living. We must now focus on "being" rather than "having". We have to yearn for "better" and not for "more", and the "asymmetric wealth" must be replaced by a freely chosen moderation shared by all.

"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 dream of prosperity only for a few has prevailed over the dream of liberation of many. The spheres for personal autonomy are becoming increasingly small in terms of economy and behaviour and even in terms of thought, due to massive information and media pressure. We need to recover enough time to think, imagine and "think what has never been thought."

1. Unavoidable Moments for Decision-making

This is how the Earth Charter begins: "We stand at a critical moment in Earth's history, a time when humanity 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 take action at once, with no further delay, especially when irreversible processes are at stake. We have been living, especially in the last decades, in the midst of an extraordinary conceptual confusion, ecological degradation, extreme poverty, unjustified inequalities, nuclear threat, lack of an efficient multilateral approach, a complete disaster resulting from a money- and short term-oriented system.

In his introduction to a recent issue of "Futuribles" entitled "From one Era to Another", Hugues de Jouvenel emphasizes how wise the Club of Rome was, under the leadership of its watchman Aurelio Peccei, when in 1972 it already stressed the "limits of growth" and the urgent need and the duty we all have due to our inter generational responsibilities, to replace as much as possible the natural resources that are being consumed, and to avoid environmental degradation.

Today we have to take into account in our everyday behaviour the Earth as a whole. Production delocalization and the subsequent pollution do not contribute to solve anything on a planetary scale. We must see ourselves as citizens of the world and behave as such, taking actions that allow us to meet basic needs without destroying the ecosystem. "We are on the brink of a political, economic and financial crisis" according to the economist Thomas Piketty. And we should add that it is also an environmental, conceptual and ethical crisis.

We have finally become aware. We know and we can at last express ourselves freely. Equality of gender shall finally allow us to reach the balance that should be the cornerstone of a new era, an era in which we will no longer avoid challenges, but rather face them and be ready to accept the unacceptable.

2. What is Ethically Unacceptable?

Here there are some of my ritornellos: i) It is intolerable to invest 3 billion dollars per day in military expenses and in the weapon industry while almost 40,000 people are dying every day from hunger and abandonment, most of them being boys and girls ranging from one to five years old; ii) according to a recent report from OXFAM, 85 people own more than half the population of the world (3,300 million people!); iii) The "welfare society" represents only around 20% of the overall population of the planet and, therefore, the vast majority of the human beings are excluded from the wealthier district of the "global village"; iv) The contribution of the richest countries to development aid has decreased rather than increased: with a few exceptions, most of the richest nations have not observed the United Nations 1974 Recommendation to commit 0.7% of their GNP to aid development of the poorest countries (Spain's contribution to development aid is at present amongst the lowest, with 0.46% in the year 2010 and only 0.16% right now); v) By using an inclusion strategy and establishing an adequate legal regulation for specific activities, the exploitation, especially by big multinational corporations, could very quickly cease to be one of the greatest offences inflicted today to humankind: instead of using high fences and razor wires to avoid immigration triggered by hunger and despair, a new policy should be implemented to prevent current abuses induced by impunity at the supranational scale; vi) Climate change and Arctic melting are two major geopolitical and geo-economic challenges, and it's up to us to prevent any decline in the quality of the Earth's habitability, now that we have entered the Anthropocene.

3. Absence of Appropriate Multilateral Organizations

In 1989, when all were calling for peace, when President Nelson Mandela had achieved reconciliation in South Africa and had eradicated the abominable racial apartheid, and when the huge empire of the Soviet Union became a Commonwealth of Independent States, thanks to the magic of Mikhail Gorbachev that brought the cold war to an end without a single drop of blood; when the peace process in Mozambique and El Salvador was successfully completed and was resumed in Guatemala, unexpectedly pro globalization neoliberalism stepped in and the Western world remained impassive while the great "democratic principles" established by the UNESCO Constitution were replaced by the market laws, and United Nations was upstaged by the plutocratic groups composed of 6, 7, 8... 20 countries.... and the World Trade Organization was founded outside the framework of United Nations. And the Convention for the Rights of the Child was not endorsed by the Republican administration of the United States in 1989 and Iraq was invaded, arguing the presence of alleged mass destruction weapons... and the Israeli-Palestinian conflict remained unresolved... and besides the interreligious conflicts there were also intra-religious conflicts (Shiite, Sunni, Salafi, Jihad...) and a strong resurgence of xenophobia can now be observed, even in the once "model" countries of Northern Europe through nationalism being back again.

In the United States, President Obama has exercised his executive powers to achieve the following: important social progress such as the approval of "Medicare"; the integration of many millions of immigrants who were not yet "regularized"; cutting plans for the Pentagon military budget; economic growth through major incentives to encourage employment and

large public works... In the meanwhile the European Union, built through a hasty monetary union with no previous political and economic union, is gradually laying aside its role as champion of democracy and civil liberties, and is strictly complying with the dictates of financial patterns not only through large economic cutbacks but also by setting aside some of the main social conquests that had been achieved. Creativity and invention have moved east and in September 2014 China has been allowed to take the lead over the European Union in Research, Development and Innovation (R&D&I) efforts.

China, a communist country, has now become a great capitalist power. And what about India? How can we still be dealing with current issues based on "traditional great powers" and not take into account what the reality is in today's world? As a scientist I know that a radical transformation of reality is only possible if we have a deep knowledge about it.

4. The Solution: Genuine Democracy

As mentioned above, UNESCO Constitution sets forth in its preamble that humanity should be guided by "democratic principles": justice, liberty, equality and "intellectual and moral" solidarity.

A *democracy* that will increase food and environmental security, economic equality, immigrant rights, access to education for everyone... and participation, thanks to modern communication technology.

Democracy consists in placing the reins of destiny in the hands of "We, the peoples...". To make this possible citizenship involvement must be permanently ensured. Today, we *are counted* during elections, but later *we don't count any more*, we are not taken into account, programs are not kept and parties elected by absolute majority prevail over the legislative and even the judicial power.

The "top boss" of the particracy designates whoever he wants without having heard the members of his own party. The main mission is to ensure re-election through all available means. We are currently undergoing a period of great stress within institutions (the IMF, for instance) and "markets" are relentlessly pursuing those who (in Spain and Greece) are the political expression of social movements.

To enable everyone to fully exercise their human rights, a democratic context is an unavoidable requirement.

- i. *At the international scale*, especially through the refoundation of a UN System that will represent "the peoples", by ensuring that the veto is replaced by a weighted voting system; that 50% of the General Assembly is composed by members of the civil society; and that both a Socio-economic and an Environmental Council are added to the current Security Council.
- ii. At the regional scale, in the European Union the current monetary union must be urgently reinforced with an appropriate political and economic union, implementing the excellent EU Charter of Fundamental Rights approved by the European Parliament in 2000; in the United States, as a result of the worldwide outcry against the outrages of the Republican Party, a reorganization of political life is required so that they may regain the

worldwide leadership, it is still up to them to exercise, but with new patterns approved by everyone that will eradicate the typical anti-democratic shift of the Republican Party; in Latin America, the CELAC (Community of Latin American and Caribbean States) must be reinforced, to enable the emancipation from the long and painful dependence they have been subject to, and to ensure they have the faculty to put forward new governance formulas; in Africa the current positive trends of the Pan-African Union should be encouraged; and the same holds for the Arab League which is still far away from being settled; associations in the huge Asian continent demand, more than anywhere else, the presence of a moral and efficient authority at a planetary level.

- iii. *At the domestic scale*, we must ensure that the standards of a genuine democratic system are being complied with, and to that end it would be relevant and appropriate to adhere to the *Universal Declaration on Democracy*, drafted a few years ago and already signed by many distinguished personalities, and which is undergoing some improvement prior to submission to the United Nations.
- iv. At the local scale, it is worth while stressing the increasingly important role of cities.
- v. *At the personal scale*, act in such a way so that our everyday behaviour is based on principles that express our basic belief in the equal dignity of all human beings.

The right to decision-making, the right to know. That is why, along with the *Universal Declaration of Human Rights* of 1945, it is of the utmost importance that ruling authorities have a thorough knowledge of the Declaration of the World Conference on Human Rights held in Vienna in 1993, which clearly underlines the rights of indigenous communities, minorities, disabled persons, women, the most vulnerable sectors of population to education and the right to self-determination, which according to Chapter five is admissible only under specific circumstances such as the end of a military or colonial domination.

5. Multiple Transitions

i) From an economy based on speculation, production delocalization and war to an economy based on sustainable global and human development, where tax evasion and tax havens will have been completely eliminated; ii) from a culture based on domination, imposition and violence to a culture of encounter, dialogue, conciliation, alliance and peace. From force to word: this is the great historical turning point that will consolidate the new era. A culture based on effort, imagination, dignity for everyone.

Broadly speaking, the main challenges are the following: population growth, induced by a decrease in mortality rather than a higher birth rate; food and drinking water; health care, assuming specific pharmaceutical and health costs of chronic diseases arising from increased longevity; complete equality for women who are the cornerstone of the future we are dreaming of; environment (waste, recycling and recapturing of carbon dioxide), with special emphasis placed on renewable energies; quality of life: housing, allowances, new types of work, employment and occupation, with a possible reduction of working hours and "flexitime"; drug trafficking, which should be regulated in order to put an end at once and for all to the heinous criminality of mafias.

To achieve all the above, it is of the utmost importance to promote R&D&I in every country so that all priorities that are unquestionably needed for a good governance are laid down: i) food for everyone (agriculture, aquaculture, biotechnology); ii) drinking water accessible to everyone (efficient management of consumption, harvesting, desalination); iii) health services for everyone; iv) environment (recapturing and reducing carbondioxide emission; electric vehicles; cable railway); v) education for everyone; vi) peaceful settlement of conflicts.

"To contribute to the upbringing of "free and responsible" human beings—which is the aim of education—instead of specialists and technicians with specific skills and abilities, education should also focus in philosophy and artistic activities that promote creativity."

Radical changes that the digital era has produced on "how" and "where" the education in general and the higher education in particular are provided should not have any impact and especially should not reduce the basic importance of "what", "why" and "what for". To contribute to the upbringing of "free and responsible" human beings—which is the aim of education—instead of specialists and technicians with specific skills and abilities, education should also focus in philosophy and artistic activities that promote creativity.

In the case of Spain, a "country plan" could in a few years transform our country into "Europe's California". The additional possibility of an "Iberian agreement" covering the whole peninsula plus four archipelagos, would not only allow the promotion of tourism and second homes but also a top quality health care with internationally prestigious research centres. Based on its history and geographical location, Spain is no doubt bound to become a great "meeting" point between African, Latin American and Arab countries.

6. It has now become possible

It has now become possible, thanks to the power of the citizenship that will soon prevail over the current "great dominion" (from the military, financial, media, energy and digital powers). In this respect, it is worthwhile stressing the mobilising, catalytic role of the scientific, academic, artistic and intellectual community, in short, of the creative community. To promote this role, a great World Forum will be held, with the contribution of universities, scientific councils, arts associations, mass media, companies... The time has come for action. Pope Francis, a great mentor of our times, has recently said: "What should be done against the scandal of poverty? Less words, more action." More action. Citizenship participation, which has become possible for the first time, will change the world, allowing us to find new paradigms and to make them come true. The World Academy of Art & Science (WAAS) is conducting a commendable job in this regard.

"Be the change you wish to see" was the big challenge put forth by Mahatma Gandhi. Now there will be thousands of millions who will gradually assume a global awareness, a global citizenship who will freely express their opinions, in particular young people who, according to José Luis Sampedro, must "change the course and the vessel".

In the above mentioned World Forum, the foundations of the "new beginning" must be drawn up, before it is too late. There are many excellent analyses, but remedies must be timely implemented.

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Book Review — What Could Change Everything?

Review by Michael Marien

Director, Global Foresight Books; Fellow, World Academy of Art and Science

This Changes Everything: Capitalism vs. The Climate.

Naomi Klein (Toronto). New York: Simon & Schuster, Nov 2014, 566p, \$30.

This very readable and fact-laden book is something else! The reviewer in The New York Times Book Review (9 Nov 2014) calls it "a book of such ambition and consequence that it is almost unreviewable," concluding that it is "the most momentous and contentious environmental book since **Silent Spring.**" It is included in the Book Review's roundup of "100 Notable Books of 2014" (half of which are fiction and poetry, with only seven books devoted to current affairs), along with Henry Kissinger's **World Order**, which doesn't mention climate change at all. In contrast, the economist reviewer in Canada's Financial Post awards it his "Worst Book of the Year" prize, considered as a "masterpiece of fiction." In other words, like the 1972 **Limits to Growth,** it is controversial.

Klein's basic argument inverts the theme of her previous book, **The Shock Doctrine**, a strikingly original thesis that corporate interests have systematically exploited various forms of crisis over the past four decades so as to "ram through policies that enrich a small elite." But now, she writes, we are increasingly faced with the crisis of climate change, a "people's shock" which "could become a galvanizing force for humanity," pulling huge numbers of people out of poverty and providing services now sorely lacking—a vision of the future in which we collectively use the crisis to leap somewhere that seems better than where we are.

"Climate change has never received the crisis treatment from our leaders, despite the fact that it carries the risk of destroying lives on a vastly greater scale than collapsed banks or collapsed buildings." (p.6) It is a crisis worthy of Marshall Plan levels of response. "The thing about a crisis this big, this all-encompassing, is that it changes everything. It changes what we can do, what we can hope for, what we can demand from ourselves and our leaders. It means there is a whole lot of stuff that we have been told is inevitable that simply cannot stand. And it means that a whole lot of stuff we have been told is impossible has to start happening right away." (p.28)

1. Bad Ideas and Good Directions

Chapters in the first two parts of Klein's book go into considerable detail about "how free market fundamentalism helped overheat the planet." Topics include the climate change denial movement (notably the Heartland Institute in Chicago; also the Heritage Foundation, Cato Institute, Competitive Enterprise Institute, Committee for a Constructive Tomorrow, etc.), the "warped values" fueling both disaster denialism and disaster capitalism, how trade deals trump climate concerns, cheap labor and dirty energy as "a package deal,"

economic austerity impediments to much-needed rebuilding and reinventing of the public sphere, neglected finance options to prepare for the coming storms (closing tax havens, a financial transactions tax, a 1% billionaires tax, slashing military budgets, a carbon tax, phasing out fossil fuel subsidies), the neglected potential for green job creation, the virtue of decentralized control over energy, agroecology as a key tool for emission reduction, protesting the Keystone XL pipeline, overreliance on dirty extraction, use of scarce water by the extraction industries, political timidity of the mainstream environmental movement, the disastrous merger of big business and the mainstream "Big Green" (critical comments on the Nature Conservancy, Environmental Defense Fund, and others "who claim climate change requires only minor tweaks to business-as-usual"), the "scam magnet" attraction of carbon offset projects to "carbon cowboys," why "green billionaires" such as Richard Branson won't save us (they make "splashy entrances, with more schemes to rebrand capitalism"), the promise of geoengineering as "our culture's most powerful form of magical thinking," and geoengineering as shock doctrine (in the desperation of a true crisis, all kinds of sensible opposition melts away and all manner of high-risk behaviors seem acceptable; "geoengineering will certainly monsterize the planet").

2. The Promise of "Blockadia"

"Blockadia," first coined by the direct-action Tar Sands Blockade in 2012, which challenged Keystone construction in East Texas, "is not a specific location on a map but rather a roving transnational conflict zone that is cropping up with increasing frequency and intensity." (p.294) Resistance to high-risk extreme extraction by mining and fossil fuel companies is building a global grassroots network to stop "real climate crimes in progress." In contrast to Obama's "All of the Above" energy policy, Blockadia is responding with a tough philosophy that might be described as "None of the Below"—rather than digging up poisons from the deep, we should power our lives from the abundant energies on our planet's surface.

Additional topics include "the power of this ferocious love" that is underestimated by the resource companies, the extreme rootlessness of the culture of fossil fuel extraction (contrasted to ties to the land, especially strong in Indigenous communities), the wave of global victories against coal, pressure for a more sustainable development path in China, the divestment movement for public interest institutions to sell financial holdings in fossil companies, collusion between corporations and the Canadian government, how the exercise of Indigenous peoples' rights has played a central role in the current wave of fossil fuel resistance (it may now be the most powerful barrier to protect us from a future of climate chaos), and positive and concrete alternatives to dirty development as the most powerful lever for change.

"Only mass social movements can save us now," along the lines of the abolition movement and the civil rights movement--some countervailing power to block the road while clearing some alternative pathways to safer destinations. "If that happens, well, it changes everything." (p.450)

3. A Spirited Conclusion

"Mass resistance movements have grabbed the wheel before and could very well do so again." But we must reckon with the fact that lowering global emissions in line with climate

scientists' urgent warnings demands changes of a daunting speed and scale. "Meeting science-based targets will mean forcing some of the most profitable companies on the planet to forfeit trillions of dollars of future earnings by leaving the vast majority of proven fossil fuel reserves in the ground. It will also require coming up with trillions more to pay for zero-carbon, disaster-ready social transformation." (p.452) Economic demands for basic public services that work and for decent housing are nothing less than the unfinished business

"If change is to take place it will only be because leadership bubbled up from below."

of the most powerful liberation movement of the past two centuries. The massive global investments required to respond to the climate threat—"a Marshall Plan for the Earth"—offer a chance to get it right this time. "Climate change can be the force—the grand push—that will bring together all of these still living movements. A rushing river fed by countless streams, gathering collective force to finally reach the sea."

Some final Klein comments to chew on:

- "Winning will certainly take the convergence of diverse constituencies on a scale previously unknown." (p.459)
- "Any attempt to rise to the climate challenge will be fruitless unless it is understood as part of a much broader battle of worldviews, a process of rebuilding and reinventing the very idea of the collective, the communal, the commons, the civil, and the civic after so many decades of attack and neglect. Because what is overwhelming about the climate challenge is that it requires breaking so many rules at once—rules written into national laws and trade agreements." (p.460)
- "A great deal of the work of deep social change involves having debates during which new stories can be told to replace the ones that have failed us." (p.461)
- "Fundamentally, the task is to articulate not just an alternative set of policy proposals but an alternative worldview to rival the one at the heart of the ecological crisis...an unshakable belief in the equal rights of all people and a capacity for deep compassion will be the only things standing between civilization and barbarism." (p.462)
- "The climate movement has yet to find its full moral voice on the world stage, but it is most certainly clearing its throat...most of all, [the] clarion voices are coming from the front lines of Blockadia, from those lives most directly impacted by both high-risk fossil fuel extraction and early climate destabilization." (p.464)
- "It is slowly dawning on a great many of us that no one is going to step in and fix this crisis; that if change is to take place it will only be because leadership bubbled up from below." (p.465)

Comment: A Question of Framing

Blockadia's activist leadership "from below" may well be necessary, but is it sufficient? Klein cites hundreds of individuals and organizations, not only activists on the front lines but UN agencies, the World Bank, and many scientists from respected organizations. Yet, despite 59 impressive pages of footnotes in small print, and six pages of acknowledging help from

hundreds of individuals (including two full-time researchers assisting this writing), Klein underestimates the extent of international sustainability-related organizations by a factor of three or perhaps even four or more! To take just one specific example, she suggests a "Marshall Plan for the Earth" in several parts of the book, seemingly unaware of the Global Marshall Plan Initiative in Germany, founded by Franz Josef Radermacher and others from the Club of Rome and other groups in 2003. Perhaps this is a very small rivulet with little or no input into the "rushing river" gathering collective force, as Klein envisions, but many other streams are seemingly having influence to the "gathering collective force."

An ongoing survey of more than 900 security and sustainability organizations,* of which roughly three-quarters are concerned with sustainability and/or climate change, points to a great number of "top down" organizations and projects, as well as "bottom up" activist groups. Klein complains that "a robust movement responding to the climate crisis is not emerging fast enough." (p.61) But perhaps there is a far greater movement than Klein—or anyone else—imagines, although it still has far to go. One reason that Klein underestimates the movement is that her argument is framed in terms of bottom-up climate groups vs. capitalism, enabled by dismissing "the failures of top-down environmentalism." (p.295) The top-down sector may have had relatively little impact in the past, but it is rapidly expanding around the concept of sustainability and sustainable development, which embraces climate concerns and more, and may well be approaching critical mass, especially as it increasingly overlaps with security thinking.

While Klein is underestimating the macro-system promoting sustainability, she overestimates the leviathan of free market capitalism, while ignoring several other barriers to sustainable progress—again a problem of framing. Capitalism comes in many forms, and Klein is correct in questioning the simplistic free market ideology in North America that favors business interests, reduces government regulation, and starves public spending (although the state capitalism in China is perhaps equally ruinous for the environment). But her major complaint is against fossil fuel and mining industries, best seen as icons of industrial era capitalism.

Many other corporations and businesses are open to sustainability and responsibility arguments, and are prodded by groups such as Business for Social Responsibility (promoting a "just and sustainable world"), Corporate EcoForum, the Green Biz Group, the Dow Jones Sustainability Indices ranking 2500 large companies and industry leaders, the Sustainable Accounting Standards Board (developing sustainability standards for more than 80 industries in ten sectors), Sustainable Brands, Tomorrow's Company in London, the World Business Council for Sustainable Development in Geneva (with its **Vision 2050** scenario and **Action 2020** platform), and the widely-known World Economic Forum in Davos (concerned with food and water security, environmental issues, and much more). Most notable is the UN Global Compact involving 12,000 corporate participants and other stakeholders from over 145 countries in following 10 principles in the areas of human rights, labor standards, and the environment—a "practical framework for sustainable policies". The Global Compact Cities Programme in Melbourne is the urban counterpart promoting the same principles. Also see the C40 Climate Leadership Group for megacities, the Climate Alliance of European

^{*} Michael Marien, along with newly-elected WAAS Fellow David Harries, is preparing an online guide to more than 900 Security and Sustainability organizations—a project of the World Academy of Art and Science. A 94-page Second Interim Draft of the "S&S Guide" is available on request from mmarien@twcny.rr.com. An expansion of this Interim Draft will be sent to WAAS Fellows sometime in 2015.

Cities, ICLEI: Local Governments for Sustainability, Sustainable Cities International, and other urban groups.

The business view of sustainability may not be all that Klein and others might hope for, and some business actions may be trivial "greenwashing." But this activity to shape responsible 21st century capitalism should not be dismissed without some reasonable evidence. Arguably, as climate change worsens, it is a better strategy to split the capitalist sector, gaining support from a growing number of worried businesses while isolating the fossil fuel and mining polluters and forcing them to clean up their toxic activities and to diminish them (leaving much oil and gas in the ground, as recommended by the International Energy Agency).

Meanwhile, there are several other barriers to the sustainability transition, in addition to powerful and reactionary extractive industries. To quickly suggest a few: 1) short-term security concerns about terrorism and cyber-security that demand immediate attention; 2) the inexorable march of new technologies for better *and* worse, threatening loss of jobs through robotics and new bioweapons to add to still worrisome nuclear stockpiles; 3) contamination of air, water, land, and human bodies by a myriad of untested chemicals; 4) information overload that keeps the entertainment-drenched public from appreciating long-term existential threats of human-caused climate change; 5) lack of any institution for seriously debating the many serious issues of our time with evidence-based arguments; 6) fundamentalist religious beliefs that promote violence and violation of human rights, deny charity to the suffering, and/or (among Christian Evangelicals) see extreme weather events as welcome signs of biblical end times.

Fuller consideration of these barriers, an appreciation of the role of non-extractive corporations in promoting sustainability, and a better mapping of the vast but increasingly overlapping worlds of security and sustainability organizations would certainly hasten the global transition. Three big "top down" events in late 2015 will probably help: the unprecedented encyclical on climate change from Pope Francis, the 17 Sustainable Development Goals for all nations (to be issued by the UN in September as a post-2015 follow-on to the largely successful Millennium Development Goals), and the December "COP 21" conference in Paris (which seeks a new global agreement on mitigating climate change). Together, with luck, this may begin to change everything!

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Postscript

Also see "A People's Shock" by Naomi Klein (*The Nation* Cover Feature, 6 October 2014, pp.12-21), adapted from her book (Klein is a columnist for *The Nation*, America's leading progressive magazine). The spin-off is introduced by a sort of sub-title, asserting that "Climate change has created a historic opening for progressives. Rather than the ultimate expression of the shock doctrine, it can be a People's Shock—a blow from below." Klein goes on to discuss how to change the reigning and ruinous worldview, reiterating that "a great deal of the work of deep social change involves having debates" (p.461) to replace the old stories that have failed us. Interestingly, she does not mention "Blockadia" at all!

The Relevance of Infodynamics: From the Biosphere to the Psychosphere

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Abstract

Living matter is considered an emerging property of inert matter, and thinking matter (the mind) is considered as an emerging property of living inert matter. Thinking matter handles information in a way and at a speed with no precedent in the Earth, including determinism. Changes in the planet occurred as cultural evolution speeded up and the planet gained a psychosphere. To try to run the planet as a biosphere is an error, a target in the past. There is a need to understand the underpinning of information — matter — energy relations (infodynamics) as the present thermodynamical view of Physics is limited. Ecology and Economy should merge in one single and unified science with information dynamics as a common core.

1. The Emergence of the Biosphere

At the beginning of Earth history there was only inert matter. The lithosphere, hydrosphere, and atmosphere formed shortly – in geological terms – after the planet aggregated. Matter interacted physically and chemically, and from these basal systems, a new property emerged – life – giving rise to living matter ca. 3,600 million years ago. Living matter behaves differently than inert matter. It is a complex adaptive system that has the ability to accumulate and speed information* transfer, to expand (biomass) and to evolve, and it obviously interacts with the inert matter. Over time, and by so acting it has changed the external part of the planet: the gas composition of the atmosphere, calcareous rocks and soil are

"Thinking matter processes information much faster than living matter and it can accumulate and retrieve information from external deposits."

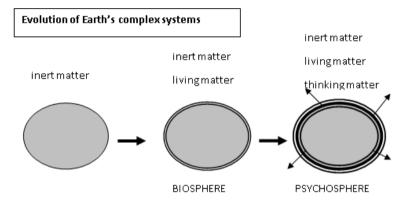
formed, etc. The planet is more complex and looks different; it is equipped with inert and living matter; it now has a biosphere. Biological evolution takes place, complexity grows, and information accumulates; however, the biosphere is restricted to the limits of the planet.

2. The Emergence of the Mind

Very recently in Earth's history, a new property – the mind – emerged, this time from living matter. Thinking matter behaves differently from living and inert matter, although it

^{*} Information is used here in the sense of a basic property of matter (i.e. first quark = first in-formation), not as information related to human communication, which is a rather high and complex level of evolved information

has to comply with all restrictions imposed by these supporting subsidiary systems. Thinking matter processes information much faster than living matter and it can accumulate and retrieve information from external deposits (e. g., books, CDs, etc.). Information in biological systems is transmitted via the genetic channel from generation to generation. Information in thinking matter is transmitted and exchanged between individuals almost instantly. Cultural evolution is a consequence of it, thus, being much faster (Lamarckian) than biological evolution (Darwinian). Technology develops; information transfer gains scale and speeds up† and exosomatic energy is increasingly being involved, magnifying the influence (impact) of the mind on the environment. Global scale consequences of having thinking matter happened in a very short time-span compared with previous living matter induced changes. A psychosphere has built up and it has even surpassed the limits of the planet in the form of radio-wave emissions of structured information.



If we accept that inert matter, life and mind are three distinct cosmic phenomena (emergent systems: inert matter \rightarrow life \rightarrow mind), we may end up with a different perception of human affairs and, perhaps, a new paradigm.

Homo sapiens is the only surviving species where thinking matter is present. However, each person tends to consider himself as a unit,[‡] as the mind cannot be physically separated from its living support system (at least, for the time being). To intellectually separate mind (Psychosphere) from nature (Biosphere) would surely have deep implications in fields like religion or law. Here I will comment only about the environmental field.

3. Environmental Concern

Environmentalists and conservationists tend to be alarmed by changes of planet's life and its environment due to human actions. The change is real and increasing (accelerated) as previously argued, but the reasons for dismay are misleading. In the past, the planet has changed more drastically many times; and in several cases change was induced by the evolution of life (i.e., liberation of oxygen). If there is a new emergent system operating in the planet (thinking matter) now, the surprise would be to not observe an important change taking place. And it

[†] Since the big-bang, information (historic and complex) has been accumulating and speeding up in time.

[‡] From the biological point of view, Homo sapiens is not a functional unit, as we need many symbiotic micro-organism to live. Each one of us is a mammal-bacterial consortium.

is fully logical that present changes are occurring faster than any others before, due to life's presence in the planet, because thinking matter – and thus, cultural evolution – processes information much faster than simple biologic systems. Change is always happening. The planet is not in danger as it is being claimed. What may be at risk are the (comfort) living conditions for our species (or sectors of it), and it is legitimate for the human conscious mind to try to prevent or amend any undesirable change. The conservationist and sustainable use approach in modern society is striving in this direction, but, again, they may be misguided.

"Change is always happening. The planet is not in danger as it is being claimed."

Whatever befalls the earth befalls the sons of the earth. Man did not weave the web of life, he is merely a strand in it. Whatever he does to the web, he does to himself. This is an appealing message attributed to Chief Seattle, but with some wrong implications. Man is not just a part of nature. Human mind cannot be placed at the same level as its biological component (mammal body); they are not homologous. Conversely, Homo sapiens is not homologous to any other part of nature, at least of the "biospheric" nature, because of its mind. Determinism, for instance, is one of the consequences of thinking matter that did not exist before its emergence. It is an error to undermine these basic facts.

4. The Need of a New Science Based in Infodynamics

Modern environmentally concerned society is trying to introduce ecological principles into their running of the world. But present ecological science is biospheric and does not help much to understand how the psychosphere functions. A scientific discipline that tackles this challenge is not yet available.

Traditional thermodynamics take notion of exchange between energy and matter, but in any such exchange there is also a change of information status of which there is neither record nor complete explanation. The most Physics can yet tell us is that life is a mnemonic open linear dissipative system that exchanges entropy for information; and little more. What about information interactions and evolution? Is there a hidden variational principle? One of the three components of real phenomena, information, seems almost missing.

A new science that integrates information in (thermo/info) dynamic processes is much needed. We will hardly understand the functioning of our psychosphere without developing a new scientific body – both basic and applied – of information dynamics. Only then, based on the same information-grounded commons, will present disciplines of Economy (human exchange affairs) and Ecology be merged in one single and unified "Hology" or whatever it may be termed. That is the challenge for this century.

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Remember your Humanity

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Abstract

2015 marks the 60th anniversary of the Russell-Einstein Manifesto. This document resulted from the great concern of both scientists and the general public caused by the explosion of a 15 megaton fission-fusion-fission bomb at Bikini Atoll. Fallout from the explosion caused death and serious illness of crew members on a Japanese fishing boat 130 kilometers distant from Bikini. Even today, the Bikini tests continue to cause cancer and birth defects on the equally-distant Marshall Islands.

With the Russell-Einstein Manifesto as a background, scientists met at the village of Pugwash in Nova Scotia in 1957, with the aim of reducing the danger of a thermonuclear war. This was the first of many Pugwash Conferences. During the Cold War, they served as a forum for informal diplomacy between East and West. In 1995, Pugwash Conferences and its leader, Sir Joseph Rotblat, shared a Nobel Peace Prize for their work towards the abolition of nuclear weapons.

Recent events, such as the crisis in Ukraine, as well as the danger of accidental nuclear war, make it clear that both nuclear weapons and the institution of war must be abolished if civilization is to survive.

This year, 2015, marks the 60th anniversary of the Russell-Einstein Manifesto, which contains the following words: "There lies before us, if we choose, continual progress in happiness, knowledge and wisdom. Shall we, instead, choose death, because we cannot forget our quarrels? We appeal as human beings to human beings: Remember your humanity, and forget the rest. If you can do so, the way lies open to a new Paradise. If you cannot, there lies before you the risk of universal death."

The background for the Russell-Einstein Manifesto is as follows: In March, 1954, the United States had tested a hydrogen bomb at the Bikini Atoll in the Pacific Ocean. It was 1,000 times more powerful than the Hiroshima bomb. The Japanese fishing boat, the Lucky Dragon, was 130 kilometers from the Bikini explosion, but the radioactive fallout from the test killed one crew member, and made all the others seriously ill.

In England, Professor Joseph Rotblat, a Polish scientist who had resigned from the Manhattan Project for moral reasons when it became clear that Germany would not develop nuclear weapons, was asked to appear on a BBC program to discuss the Bikini test. He was asked to discuss the technical aspects of H-bombs, while the Archbishop of Canterbury and the philosopher, Lord Bertrand Russell were asked to discuss the moral aspects.

Rotblat had become convinced that the Bikini bomb must have involved a third stage, in which fast neutrons from the hydrogen thermonuclear reaction produced fission in an outer casing of ordinary uranium. Such a bomb would produce enormous amounts of highly dangerous fallout, and Rotblat became extremely worried about the possibly fatal effects on all living things if large numbers of such bombs were ever used in a war. He confided his worries to Bertrand Russell, whom he had met on the BBC program.

After discussing the Bikini test and its radioactive fallout with Joseph Rotblat, Lord Russell became concerned for the future of the human gene pool. After consulting a number of leading physicists, including Albert Einstein, he wrote what came to be known as the Russell-Einstein Manifesto.¹

Russell was convinced that in order for the Manifesto to have maximum impact, Einstein's signature would be absolutely necessary; but as Russell was flying from Italy to France, the pilot announced to the passengers that Einstein had just died. Russell was crushed by the news, but when he arrived at his hotel in Paris, he found waiting for him a letter from Einstein and his signature on the document.² Signing the Manifesto had been the last act of Einstein's life. Others who signed were Max Born, Percy W. Bridgman, Leopold Infeld, Frederic Joliot-Curie, Hermann J. Muller, Linus Pauling, Cecil F. Powell, Joseph Rotblat, Hideki Yukawa and Bertrand Russell. All of them, except Infeld and Rotblat, were Nobel Laureates.³

On July 9, 1955, with Rotblat in the chair, Russell read the Manifesto to a packed press conference. The document contains the words: "Here, then, is the problem that we present to you, stark and dreadful and inescapable: Shall we put an end to the human race, or shall mankind renounce war?... There lies before us, if we choose, continual progress in happiness, knowledge and wisdom. Shall we, instead, choose death because we cannot forget our quarrels?" Lord Russell devoted much of the remainder of his life to working for the abolition of nuclear weapons.⁴

In 1957, with the Russell-Einstein Manifesto as a background, a group of scientists from both sides of the Cold War met in the small village of Pugwash, Nova Scotia. The meeting was held at the summer residence of the Canadian-American financier and philanthropist Cyrus Eaton, who had given money for the conference. The aim of the assembled scientists was to reduce the danger of a catastrophic nuclear war.

From this small beginning, a series of conferences developed, in which scientists, especially physicists, attempted to work for peace, and tried to address urgent problems related to science. These conferences were called Pugwash Conferences on Science and World Affairs, taking their name from the small village in Nova Scotia where the first meeting was held. From the start, the main aim of the meetings was to reduce the danger that civilization would be destroyed in a thermonuclear war.

It can be seen from what has been said that the Pugwash Conferences began during one of the tensest periods of the Cold War, when communication between the Communist and Anti-communist blocks was difficult. During this period, the meetings served the important purpose of providing a forum for informal diplomacy. The participants met, not as representatives of their countries, but as individuals, and the discussions were confidential.

This method of operation proved to be effective, and the initial negotiations for a number of important arms control treaties were aided by Pugwash Conferences. These include the Strategic Arms Reduction Treaty (START), the treaties prohibiting chemical and biological weapons, the Nuclear Non-Proliferation Treaty (NPT), and the Comprehensive Nuclear-Test-Ban Treaty (CTBT). Former Soviet President Gorbachev has said that discussions with Pugwash scientists helped him to conclude that the policy of nuclear confrontation was too dangerous to be continued.

"War itself must be eliminated in order to free civilization from the danger of nuclear destruction."

Over the years, the number of participants attending the annual Pugwash Conference has grown, and the scope of the problems treated has broadened. Besides scientists, the participants now include diplomats, politicians, economists, social scientists and military experts. Normally, the number attending the yearly conference is about 150.

Besides plenary sessions, the conferences have smaller working groups dealing with specific problems. There is always a working group aimed at reducing nuclear dangers, and also groups on controlling or eliminating chemical and biological weapons. In addition, there may now be groups on subjects such as climate change, poverty, United Nations reform, and so on.

Invitations to the conferences are issued by the Secretary General to participants nominated by the national groups. The host nation usually pays for the local expenses, but participants finance their own travel. Besides the large annual meeting, the Pugwash organization also arranges about ten specialized workshops per year, with 30-40 participants each. Although attendance at the conferences and workshops is by invitation, everyone is very welcome to join one of the national Pugwash groups.*

In 1995, the Nobel Peace Prize was awarded jointly to Prof. Joseph Rotblat and to Pugwash Conferences on Science and World Affairs as an organization, "...for their efforts to diminish the part played by nuclear arms in international politics and in the longer run to eliminate such arms." The award was made 50 years after the tragic destruction of Hiroshima and Nagasaki.

In his acceptance speech, Sir Joseph Rotblat (as he soon became) emphasized the same point that has been made by the Russell-Einstein Manifesto, that war itself must be eliminated in order to free civilization from the danger of nuclear destruction. The reason for this is that knowledge of how to make nuclear weapons can never be forgotten. Even if they were eliminated, these weapons could be rebuilt during a major war. Thus the final abolition of nuclear weapons is linked to a change of heart in world politics and to the abolition of war.

"The quest for a war-free world", Sir Joseph concluded, "has a basic purpose: survival. But if, in the process, we can learn to achieve it by love rather than by fear, by kindness rather than compulsion; if in the process we can learn to combine the essential with the enjoyable, the expedient with the benevolent, the practical with the beautiful, this will be an extra incentive to embark on this great task. Above all, remember your humanity."

^{*} The international organization's website is at www.pugwash.org.

I vividly remember the ceremony in Oslo when the 1995 Nobel Peace Prize was awarded jointly to Sir Joseph and to Pugwash Conferences. About 100 people from the Pugwash organization were invited, and I was included because I was the chairman of the Danish National Pugwash Group. After the ceremony and before the dinner, local peace groups had organized a torchlight parade. It was already dark, because we were so far to the north, and snow was falling. About 3,000 people carrying torches marched through the city and assembled under Sir Joseph's hotel window, cheering and shouting ''Rotblat! Rotblat! Rotblat!" Finally he appeared at the hotel window, waved to the crowd and tried to say a few

"The most important single step in reducing the danger of a disaster would be to take all weapons off hair-trigger alert."

words. This would have been the moment for a memorable speech, but the acoustics were so terrible that we could not hear a word he said. I later tried (without success) to persuade the BBC to make a program about nuclear weapons and about Sir Joseph's life, ending with the falling snow and the torch-lit scene.

The dangers are very great today

Although the Cold War has ended, the danger of a nuclear catastrophe is greater today than ever before. There are 16,300 nuclear weapons in the world today, of which 15,300 are in the hands of Russia and the United States. Several thousands of these weapons are on hair-trigger alert, meaning that whoever is in charge of them has only a few minutes to decide whether the signal indicating an attack is real, or an error. The most important single step in reducing the danger of a disaster would be to take all weapons off hair-trigger alert.

Bruce G. Blair, Brookings Institute, has remarked that "It is obvious that the rushed nature of the process, from warning to decision to action, risks causing a catastrophic mistake... This system is an accident waiting to happen." Fred Ikle of the Rand Corporation has written, "But nobody can predict that the fatal accident or unauthorized act will never happen. Given the huge and far-flung missile forces, ready to be launched from land and sea on both sides, the scope for disaster by accident is immense... In a matter of seconds, through technical accident or human failure, mutual deterrence might thus collapse."

Although their number has been cut in half from its Cold War maximum, the total explosive power of today's weapons is equivalent to roughly half a million Hiroshima bombs. To multiply the tragedy of Hiroshima and Nagasaki by a factor of half a million changes the danger qualitatively. What is threatened today is the complete breakdown of human society.

There is no defense against nuclear terrorism. We must remember the remark of former U.N. Secretary General Kofi Annan after the 9/11/2001 attacks on the World Trade Center. He said, "This time it was not a nuclear explosion". The meaning of his remark is clear: If the world does not take strong steps to eliminate fissionable materials and nuclear weapons, it will only be a matter of time before they will be used in terrorist attacks on major cities. Neither terrorists nor organized criminals can be deterred by the threat of nuclear retaliation, since they have no territory against which such retaliation could be directed. They blend invisibly into the general population. Nor can a "missile defense system" prevent terrorists from using nuclear weapons, since the weapons can be brought into a port in any one of the

hundreds of thousands of containers that enter on ships each year, a number far too large to be checked exhaustively.

As the number of nuclear weapon states grows larger, there is an increasing chance that a revolution will occur in one of them, putting nuclear weapons into the hands of terrorist groups or organized criminals. Today, for example, Pakistan's less-than-stable government might be overthrown, and Pakistan's nuclear weapons might end in the hands of terrorists. The weapons might then be used to destroy one of the world's large coastal cities, having been brought into the port by one of numerous container ships that dock every day. Such an event might trigger a large-scale nuclear conflagration.

Today, the world is facing a grave danger from the reckless behavior of the government of the United States, which recently arranged a coup that overthrew the elected government of Ukraine. Although Victoria Nuland's December 13, 2013 speech talks much about democracy, the people who carried out the coup in Kiev can hardly be said to be democracy's best representatives. Many belong to the Svoboda Party, which had its roots in the Social-National Party of Ukraine (SNPU). The name was an intentional reference to the Nazi Party in Germany.

It seems to be the intention of the US to establish NATO bases in Ukraine, no doubt armed with nuclear weapons. In trying to imagine how the Russians feel about this, we might think of the US reaction when a fleet of ships sailed to Cuba in 1962, bringing Soviet nuclear weapons. In the confrontation that followed, the world was brought very close indeed to an all-destroying nuclear war. Does not Russia feel similarly threatened by the thought of hostile nuclear weapons on its very doorstep? Can we not learn from the past, and avoid the extremely high risks associated with the similar confrontation in Ukraine today?

Since we have recently marked the 100th anniversary of the outbreak of the First World War, it is appropriate to view the crisis in Ukraine against the background of that catastrophic event, which still casts a dark shadow over the future of human civilization. We must learn the bitter lessons which World War I has to teach us, in order to avoid a repetition of the disaster.

We can remember that the First World War started as a small operation by the Austrian government to punish the Serbian nationalists; but it escalated uncontrollably into a global disaster. Today, there are many parallel situations, where uncontrollable escalation might produce a world-destroying conflagration.

In general, aggressive interventions, in Iran, Syria, Ukraine, the Korean Peninsula and elsewhere, all present dangers for uncontrollable escalation into large and disastrous conflicts, which might potentially threaten the survival of human civilization.

Another lesson from the history of World War I comes from the fact that none of the people who started it had the slightest idea of what it would be like. Science and technology had changed the character of war. The politicians and military figures of the time ought to have known this, but they didn't. They ought to have known it from the million casualties produced by the use of the breach-loading rifle in the American Civil War. They ought to have known it from the deadly effectiveness of the Maxim machine gun against the native populations of Africa, but the effects of the machine gun in a European war caught them by surprise.

Few politicians or military figures today do not have any imaginative understanding of what a war with thermonuclear weapons would be like. Recent studies have shown that in a nuclear war, the smoke from firestorms in burning cities would rise to the stratosphere where it would remain for a decade, spreading throughout the world, blocking sunlight, blocking the hydrological cycle and destroying the ozone layer. The effect on global agriculture would be devastating, and the billions of people who are chronically undernourished today would be at risk. Furthermore, the tragedies of Chernobyl and Fukushima remind us that a nuclear war would make large areas of the world permanently uninhabitable because of radioactive contamination. A full-scale thermonuclear war would be the ultimate ecological catastrophe. It would destroy human civilization and much of the biosphere.

One can gain a small idea of the terrible ecological consequences of a nuclear war by thinking of the radioactive contamination that has made large areas near Chernobyl and Fukushima uninhabitable, or the testing of hydrogen bombs in the Pacific, which continues to cause leukemia and birth defects in the Marshall Islands more than half a century later.

As we discussed above, the United States tested a hydrogen bomb at Bikini in 1954. Fallout from the bomb contaminated the island of Rongelap, one of the Marshall Islands 120 kilometers from Bikini. The islanders experienced radiation illness, and many died from cancer. Even today, half a century later, both people and animals on Rongelap and other nearby islands suffer from birth defects. The most common defects have been "jelly fish babies", born with no bones and with transparent skin. Their brains and beating hearts can be seen. The babies usually live a day or two before they stop breathing.

A girl from Rongelap describes the situation in the following words: "I cannot have children. I have had miscarriages on seven occasions... Our culture and religion teach us that reproductive abnormalities are a sign that women have been unfaithful. For this reason, many of my friends keep quiet about the strange births that they have had. In privacy they give birth, not to children as we like to think of them, but to things we could only describe as 'octopuses', 'apples', 'turtles' and other things in our experience. We do not have Marshallese words for these kinds of babies, because they were never born before the radiation came."

The Republic of the Marshall Islands is suing the nine countries with nuclear weapons at the International Court of Justice at The Hague, arguing they have violated their legal obligation to disarm. The Guardian reports that "In the unprecedented legal action, comprising nine separate cases brought before the ICJ on Thursday, the Republic of the Marshall Islands accuses the nuclear weapons states of a 'flagrant denial of human justice'. It argues it is justified in taking the action because of the harm it suffered as a result of the nuclear arms race."

"The Pacific chain of islands, including Bikini Atoll and Enewetak, was the site of 67 nuclear tests from 1946 to 1958, including the 'Bravo shot', a 15-megaton device equivalent to a thousand Hiroshima blasts, detonated in 1954. The Marshallese islanders say they have been suffering serious health and environmental effects ever since."

"The island republic is suing the five 'established' nuclear weapons states recognized in the 1968 Nuclear Non-Proliferation Treaty (NPT), the US, Russia (which inherited the Soviet arsenal), China, France and the UK, as well as the three countries outside the NPT who have declared nuclear arsenals -India, Pakistan and North Korea, and the one undeclared

nuclear weapons state, Israel". The Republic of the Marshall Islands is not seeking monetary compensation, but instead it seeks to make the nuclear weapon states comply with their legal obligations under Article VI of the Nuclear Non-Proliferation Treaty and the 1996 ruling of the International Court of Justice.

On July 21, 2014, the United States filed a motion to dismiss the Nuclear Zero lawsuit that was filed by the Republic of the Marshall Islands (RMI) on April 24, 2014 in U.S. Federal Court. The U.S., in its move to dismiss the RMI lawsuit, does not argue that the U.S. is in compliance with its NPT disarmament obligations. Instead, it argues in a variety of ways that its non-

"The peoples of the world have shown how deeply they long to be free from the menace of nuclear weapons."

compliance with these obligations is, essentially, justifiable, and not subject to the court's jurisdiction.⁷

The Nuclear Age Peace Foundation (NAPF) is a consultant to the Marshall Islands on the legal and moral issues involved in bringing this case. David Krieger, President of NAPF, upon hearing of the motion to dismiss the case by the U.S. responded, "The U.S. government is sending a terrible message to the world, that is, that U.S. courts are an improper venue for resolving disputes with other countries on U.S. treaty obligations. The U.S. is, in effect, saying that whatever breaches it commits are all right if it says so. That is bad for the law, bad for relations among nations, bad for nuclear non-proliferation and disarmament, and not only bad, but extremely dangerous for U.S. citizens and all humanity."

The RMI will appeal the U.S. attempt to reject its suit in the U.S, Federal Court, and it will continue to sue the 9 nuclear nations in the International Court of Justice. Whether or not the suits succeed in making the nuclear nations comply with international law, attention will be called to the fact that the 9 countries are outlaws. In vote after vote in the United Nations General Assembly, the peoples of the world have shown how deeply they long to be free from the menace of nuclear weapons. Ultimately, the tiny group of power-hungry politicians must yield to the will of the citizens whom they are at present holding as hostages.

It is a life-or-death question. We can see this most clearly when we look far ahead. Suppose that each year there is a certain finite chance of a nuclear catastrophe, let us say 2 percent. Then in a century the chance of survival will be 13.5 percent, and in two centuries, 1.8 percent, in three centuries, 0.25 percent, in 4 centuries, there would only be a 0.034 percent chance of survival and so on. Over many centuries, the chance of survival would shrink almost to zero. Thus by looking at the long-term future, we can clearly see that if nuclear weapons are not entirely eliminated, civilization will not survive.

Civil society must make its will felt. A thermonuclear war today would be not only genocidal but also omnicidal. It would kill people of all ages, babies, children, young people, mothers, fathers and grandparents, without any regard whatever for guilt or innocence. Such a war would be the ultimate ecological catastrophe, destroying not only human civilization but also much of the biosphere. Each of us has a duty to work with dedication to prevent it.

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Integrating Ideas & Organizations toward a New Paradigm

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Abstract

Global agendas such as the World Academy's New Paradigm project call for integrating ideas and organizations concerned with the future, but typically neglect to explain how this is to be done. Here are two good examples of successful methods of integration. At an intellectual level, the University of Chicago's Committee on Social Thought and its offshoot, the Center for Human Understanding, have brought together noted intellectuals, artists, and political figures to discuss the world's future in broad, humanistic terms. At a more practical level, Sweden's Dag Hammarskjöld Foundation has convened small groups of scholars and practitioners to tackle specific problems of international development. The lessons these two organizations provide the World Academy include: (1) realizing that success in such work depends on leadership from people who have an extraordinary ability to reach across the boundaries of disciplines, professions, and countries and form lasting and trusting relationships with people from many different backgrounds, people whose opinions count; (2) depending on small networks of friends from many countries; (3) having access to money; and (4) understanding that some people seem unable to do such integrative work in spite of high intelligence and a large store of knowledge and social skills.

Global strategies and agendas commonly emphasize a need to "integrate" ideas and organizations concerned with the future. The World Academy's New Paradigm project is no exception: it aims at "formulating an **integrated perspective**..." on the "realities, needs and emerging opportunities of the 21st century." In an early progress report, Ivo Šlaus and Garry Jacobs wrote that "This endeavor to define, develop and formulate a new paradigm demands, on one side, research, education and creativity and, on the other side, an **integrated activity** by a network of committed global organizations."

Here, an "integrated perspective" means combining ideas to assemble a more complete or harmonious statement about the future; and an "integrated activity" refers to bringing together a range of organizations to work in a coordinated way toward a common purpose.

What tends to be neglected in ambitious ventures such as this is structure and process, that is, the "how" of integration. The methods used in such ventures can have a profound influence on their results. Too often they rely on big conferences, formal committees, and "kitchen cabinets" (groups of unofficial advisers), but there are many other models.

For better answers, we need to look no further than our World Academy Fellows.

First of all, a fundamental point that permeates all the others made here: Former WAAS President Harlan Cleveland (1918-2008) wrote that "All real-world problems are interdisciplinary, interprofessional, and international. ... A committee of narrow thinkers doesn't produce integrative outcomes. The best interdisciplinary instrument is still the individual human mind." In what ways does this happen in the intellectual and more practical spheres?

1. At an Intellectual Level

At an intellectual level, universities can be blamed for much of the narrow professionalism that produces what Alfred North Whitehead called "minds in a groove ... The specialised functions of the community are performed better and more progressively, but the generalised direction lacks vision."³

This overspecialization has been a recurring theme for Michael Marien, a WAAS Fellow who is a frequent contributor to *Cadmus* and *Eruditio*. In reviewing and "mapping" tens of thousands of new books and reports for *Future Survey*, which he edited for many years, and now as director of Global Foresight Books, he has found that academic authors all too rarely cite, and so seem unaware, of work on the same subject by scholars in other disciplines. "Academia does not need capacities for trend-

"There is growing recognition that synthesis and analysis are both essential in public policy work and complement each other."

spotting, forecasting, scenario-writing, or envisioning the good society, which are found in all of the disciplines and professions," he wrote. "What it does need very badly is systemic, **integrated views** to balance rampant hyper-specialization (even when inter-disciplinary)."⁴

In 1941, another WAAS Fellow, the economic historian John U. Nef (1899-1988), founded the Committee on Social Thought at the University of Chicago, a pioneering interdisciplinary, Ph.D. granting program that seeks to foster original research without regard for conventional academic or international boundaries. Its distinguished visiting members have included the artist Marc Chagall, the poet T.S. Eliot, and the composer Igor Stravinsky. It is still going strong as the John U. Nef Committee on Social Thought.⁵

Nef moved to Washington, D.C. in 1964 and set up the Center for Human Understanding in his home, a large old house on N Street in Georgetown. Formally a unit of the University of Chicago, a sort of extension of the Committee on Social Thought, the Center was Nef's personal project. He described it as "a group of close friends united in their mission." Among its members and associates were Chagall, the philosopher Jacques Maritain, the architect Ludwig Mies van der Rohe, and the historian of religion Mircea Eliade. I got to know Nef through my then wife, who was his research and editorial assistant and the Center's sole staff member.

The Center's original purpose was to establish "a world university of the future." "Such an innovation would have to be universal as universities have never been. It would have to provide a model of its own for what a university ought to be. It must not copy the models provided by the universities as they are." In promoting such an entity, "We will be faithful to the mission we have set ourselves: to transcend all particular and specialized interests

on behalf of the individual everywhere and always." Although this "world university" never got past an early discussion stage, the World University Consortium (WUC) linked to WAAS could probably learn from Nef's efforts to found it. During its ten-year existence the Center held several small gatherings of noted intellectuals, artists, and political figures from different countries and backgrounds. Papers from two of these events became books. The "Bridges of Human Understanding" meeting centered on the challenges of communicating across cultures and international boundaries ("The greatest problem of communication is the illusion that it has been achieved," one participant remarked). "Towards World Community" included then World Academy President Lord John Boyd Orr; its proceedings were published as WAAS Publication No. 5.7.8

"In such collaborative policy forums, leaders and experts who represent different constituencies and points of view meet to explore solutions to policy issues and further their different interests."

2. At a More Practical Level

Efforts at integrating ideas and organizations at a more practical level face challenges similar to those faced in the academic world. For example, there is growing recognition that synthesis and analysis are both essential in public policy work and complement each other. Synthesis (integrative or "lateral" thinking) is needed to break out of old thought patterns and generate new ideas. Analysis (sequential or "vertical" thinking) is needed to choose the best course of action and carry it out. However, skills in analysis are more common and much more widely applied than skills in synthesis.

For 45 years, the organization I lead, InterEnvironment Institute, has specialized in synthesis, especially making connections that otherwise would be unlikely to happen. The "Inter" in InterEnvironment stands for interconnections, as well as international. We have done this by producing resource guides that "map" organizations and their activities; by helping to define and promote the concept of sustainability, which cuts across political, social, cultural and economic, as well as ecological concerns; and by convening groups of leaders and experts to search for, design, and implement solutions to public and international problems.

If done right, policy dialogues and other forms of convening can be powerful integrative tools for solving problems and improving policies. In addition to organizing dialogues on a range of environmental issues, we have experimented and studied different methods of convening. In 1989, we held a workshop, "The Power of Convening", for the International Union for Conservation of Nature (IUCN). Its purpose was to look at how policy dialogues could be used more effectively to promote nature conservation and sustainable development. Participants were practitioners and researchers from seven countries and international organizations. As a consequence of the workshop, IUCN started understanding and promoting its "convening power."

The Institute's approach to convening is different from that of many other organizations in that we stress collaboration rather than conflict resolution. The difference is encapsulated in a comment by Jean Monnet, father of the European Common Market: "Do not come together to argue and negotiate; come together to solve a common problem." In such collaborative policy forums, leaders and experts who represent different constituencies and points of view meet to explore solutions to policy issues and further their different interests. Participants come to the table with sufficient respect for the legitimacy of one another's needs and concerns to operate by consensus procedure. Policy forums are not a substitute for conventional political processes but offer a complementary, more informal path.

My favorite convening organization is Sweden's Dag Hammarskjöld Foundation. I first visited it in 1984, while searching for interesting models of organizations that succeed in linking ideas to action. I returned in 1987 for long interviews with its then director, Sven Hamrell, in the Foundation's headquarters, a little two-storey wooden house in Uppsala. My chapter about Hamrell in the proceedings of "The Power of Convening" workshop was reprinted two decades later in the fiftieth anniversary number of the Foundation's journal, *Development Dialogue*. Its methods were distinctive — a staff consisting at the time of two professionals and two secretaries, a small network of friends from many countries, carefully prepared invitational seminars and workshops with an ideal size of 20 participants, an ability to move quickly from one to another very different issue — and its success depended entirely on Hamrell and his ability to bring the right people together and move ideas toward action. (After Hamrell retired in 1995, the Foundation became a more conventional development-research center.)

3. Lessons for the World Academy

I think there are at least four important lessons here for the World Academy.

First, the stellar success of the integrative work that John Nef and Sven Hamrell did, one in a more academic world, the other in a more practical world, had to do with their extraordinary ability to reach across the boundaries of disciplines, professions, and countries and form lasting and trusting personal relationships with people from many different backgrounds, people whose opinions counted.

Second, their work centered on small networks of friends from many countries. When I first met Hamrell, I asked him how his little group was able to do so much. He was only half-joking when he replied, "We have a lot of friends and we drink together". While it is possible for such small, informal groups to be embedded in large organizations, they will prosper only if they are respected and nourished by their parent organizations.

Third, Nef and Hamrell both had access to money, as well as high-level contacts. Others may have had similar cross-cutting ideas, but such ideas can be a hard sell. In John Nef's case, he had access to the wealth of his first wife, Elinor Castle Nef (1894-1953), who was from the prominent Castle family in Hawaii. Nef was able and willing to give the money his university needed to start the Committee on Social Thought. He also had important family connections, both through Elinor and as the son of the respected founding Chairman of the University of Chicago's Chemistry Department.

In Sven Hamrell's case, his work was supported by the endowment of his organization as a Swedish national memorial to Dag Hammarskjöld, the second Secretary General of the United Nations and Nobel Peace laureate who lost his life in a 1961 plane crash on the way to negotiate an end to a crisis in Congo. This identification with Hammarskjöld gave the foundation instant credibility. And for most of his tenure at the Dag Hammarskjöld Foundation (1967-1994), Hamrell had pretty much *carte blanche* to do what he saw needed to be done.

Fourth, some people seem unable to do such integrative work in spite of possessing high intelligence and a large store of knowledge, experience, and social skills. Can they be "trained" to do so? Can integrative skills be learned?* Up to a point, perhaps. It is true that "The best interdisciplinary instrument is still the individual human mind," as Harlan Cleveland wrote, but that is only part of the truth. Not all minds have the attributes required.

Integrating the ideas and activities required to construct a New World Paradigm has less to do with attempting to transfer skills than it does identifying and supporting exceptional people such as those I have described. This is one of the most important tasks before us.

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^{*} Edward de Bono, who has built a successful enterprise promoting "lateral thinking," believes it can be learned. www.edwdebono.com.

Peace on Earth at Last*

Federico Mayor

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"The time of silence, domination and fear has come to an end"

Abstract

Thanks to citizen power the dictum "Si vis pacem, para bellum" can now be replaced by the motto that will mark a new era: "Si vis pacem, para verbum". Multiple factors will gradually produce a "change of attitude" at the personal level, in free citizens who are persuaded that new paths and new guidelines have to be found.

Citizen power will lead the transition from an economy of speculation, production delocalization and war to an economy of global sustainable and human development, based on knowledge and which shall take into account the specific labour and employment features that have resulted from mechanization, robotics and, in general, from digital technology.

Walls must be broken down with the power of transparency, conceptual clarity, creative capacity, serenity, balance, consistent implementation of "democratic principles", justice, liberty, equality and solidarity so that a new framework for action including permanent citizen participation may be gradually set up.

It is essential to plant seeds every day that will provide exceptionally good crops for the inhabitants of tomorrow. It's time for action. Time for personal commitment. Time to invent the future.

1. For the first time in history, the transition from force to word is feasible

Since the very beginning, human beings have lived, territorially and intellectually, in extremely restricted spaces where they were born, where they lived and died. They were invisible, anonymous, fearful beings who could not express themselves beyond their immediate environment and who were also largely unaware of the nature and magnitude of the world events. But they were nonetheless the "eyes of the Universe", the only living beings with the capacity to think, to have a reflex conscience, to know, to imagine, to create. They were elusive beings, but endowed with extraordinary distinctive qualities that they had to use in very restricted areas. They occasionally had a great philosophical, artistic spark, but were invisible and submissive most of the time. History was only a series of events that occurred in an unknown time and space for many centuries. What really happened on Earth has later on been inferred as a result of retrospective studies, once the Earth was known as a whole.

^{*} The article has already been published in The Centre for Peace Research and Education (CEIPAZ) Yearbook 2014-2015.

We must admit that only a few decades ago, when the transition from rural to urban life took place, there were indeed some substantial social, health, economic, political changes but the power remained in the hands of a few men who dominated the rest of men and all women. Everything was solved by force. The adage "Si vispacem, para bellum" was unrelentingly applied. In the middle of the last century, despite the significant progress that had

"Only through citizen participation can a genuine democracy be established."

been achieved, a vast majority of the inhabitants of Earth had not yet reached the status of full citizens, and had not become citizens of the world enjoying "freedom from fear" as proclaimed in the Preamble of the Universal Declaration of Human Rights approved by the United Nations General Assembly in 1948: "These human rights must free humanity from fear".

But, soon after, silence prevailed among the muted and the silent. Some of them remained silent because they could not speak, they were muzzled by ignorance or by a system of zero liberties. Others had the right to express themselves, but they did not dare to do so. "The voice that could have been the remedy was finally nothing but fear". Suddenly, two decades ago, the voice was heard. The word emerged. This is a historical turning point: all human beings can now express their views, thanks to modern communication and information technology. In the digital era a very recent era but already a well-established one, we are not only able to approach "life on Earth" in real time, but also convey our thoughts and emotions. We can now participate in the affairs of the state, nation and the world.

Women are the cornerstone of the new era; for centuries they have been subjugated by male power and even when they were present on the power scenario, normally due to dynastic reasons, they've behaved mimetically. Today, however, gender equality is an essential objective for the radical changes that are needed to achieve equal dignity for all human beings. Equal dignity! This is the basis of all human rights, the foundation needed to build a new coexistence. Regardless of age, skin colour, religion, ideology and sex all human beings are equal in dignity.

Therefore, for the first time in history, the great transition from a culture of imposition, domination, violence and war to a culture of encounter, conversation, reconciliation, and peace is feasible.² – I cannot repeat it often enough – that 30,000 people die from hunger every day, most of them boys and girls ranging from 1 to 5 years, while 3,000 million US dollars is invested in military expenditure and weapons. It is unacceptable. It is intolerable that 85 people own more than half the population of the world (3,300 million people), according to a recent report from *OXFAM*.

We cannot accept it. The culture of peace and non-violence is a pressing need for the design of our future, and to make so many impossible dreams finally come true.

"There is no challenge that is beyond the reach of the creative capacity inherent to humankind". There lies our hope. Every unique human being is capable of creating. This sentence, pronounced by Kennedy only a few months before his assassination, is a kind of "ritornello" to overcome the current ethical debacle, the systemic crisis we are going through, the neoliberal economy drift that makes everything depend solely on money, so much so that in Europe in 2003 a monetary Union was approved without any prior political

and economic Union. What nonsense! This is why it is essential today, when we can finally express ourselves, when women are gradually and actively participating in decision-making, when all human beings and not only a few can demonstrate and act according to their own reflections, that the public outcry, the voice of the people, "We, the peoples..." become the driving force for the advent of a "new beginning," as clearly advocated by the "Earth Charter".4

2. A mobilization led scientific, academic, artistic community intellectuals

Only through citizen participation can a genuine democracy be established because, nowadays at the polls in the elections, citizens are counted but are later not taken into account. They are not counted permanently as they should be in a true democracy. If citizen participation were strong, it will no longer be possible to disregard the public outcry. It will no longer be possible to look away because thousands of millions of voices will demand that attention be paid to those actions and measures they deem appropriate.

At last, thanks to citizen power the adage "Si vis pacem, para bellum" will be replaced by the motto that will mark a new era: "Si vis pacem, para verbum". The great transition will be from force to word, from imposition to dialogue. Today, in our own country we are seeing a complete subordination of the Legislative power to the Executive power, due to the Spanish government having absolute majority in Parliament. And this is how laws are passed, even for basic issues such as education, security, etc. without taking into account the citizens represented by other political parties or simply citizens that are not represented in Parliament.

No attention is paid to people; no attention is paid to their wishes and proposals. Democracy thus becomes a tool that benefits only the rulers.

It is to be deplored that measures, rules and even laws have been recently passed based on absolute parliamentary majority, regardless of the fact that they had a direct impact on the good exercise of human rights. It is within this same context that the exercise of universal jurisdiction has been suppressed, precisely now that people can speak up – think of the "Arab Spring", which has proved to be so efficient in some cases and equally perverse in others. I am referring to a long-awaited voice which evidences the awakening of citizen power.

The subordination of politicians to markets has gone so far as to allow the unashamed designation, without any prior election, of the governments of Italy and Greece, the birthplace of democracy, because stock securities have set aside moral values, and democratic multilateralism has been replaced by plutocratic groups of 7, 8, ... 20 rich countries. How can a few countries pretend to impose their plans on more than 190 countries who are members of the United Nations?

In his compelling paper entitled "Understanding and Overcoming America's Plutocracy", Jeffrey Sachs states that the richest Americans are working in the interest of "the richest among the rich. There has never been a better time for the top 1%". He then speaks about the gigantic "mega-lobbies" of oil, defence, medical insurance and pharmaceutical industry. In the last partial elections, the multimillionaires and their companies managed to raise a total of 3 billion dollars as funds for the candidates. "The plutocracy spreads like an epidemic until democracy declines and fades away. There is historical evidence proving that assaults against democracies are many times committed by insiders rather than outsiders".

Till now dissent could only be expressed by attending specific gatherings that often included the use of violence. Now, cyberspace will allow citizen power to have a critical influence in politics, in defining objectives and in taking measures.⁶

It will also be able to channel alternatives and paradigm changes. Gradually, often inadvertently, walls will be broken down, doors will be opened, new bridges will be built, friendship ties will be created and coexistence will no longer be restricted by immutable and insurmountable boundaries, but will rather give rise to radical changes in the ethical, social and cultural spheres. Multiple factors will gradually produce a "change of attitude" at the personal level, in free citizens who are persuaded that new paths and new guidelines have to be found.7

3. Over a period of hundred years, three peace opportunities have been dismissed

In each of these three opportunities, the Republican Party of the United States, guided by hegemonic ambitions, has prevented the peace initiatives to reach a positive conclusion.

This happened for the first time, as I have often stressed, at the beginning of 1919. President Wilson had come from New York to Brest, horrified by the terrible war of exhaustion, bringing a message of peace to the world: the "Convention on Permanent Peace" should allow conflicts to be resolved through a Society or League of Nations having its headquarters in Geneva. Simultaneously, a Permanent Court of International Justice would be created. The reaction of his own country didn't take too long: the President had not been elected to be the champion of peace but rather the champion of war. And the interdiction even led the United States – a huge contradiction that has to be taken into account from a historical point of view - to refrain from joining the Society of Nations created by the American President himself.

Everyone knows what happened next. Germany rearmed itself, Nazism and Fascism adopted dictatorial ways of acting and in 1939, World War II broke out.

It was a terrible confrontation with the Holocaust, genocide, and a complete contempt for basic humanitarian standards that somehow relieved the most horrendous aspects of military conflicts. Germany and Italy were joined by the Empire of the Rising Sun who completed its incredible and ambitious "Tanaka Plan" by attacking the United States Navy in Pearl Harbour in December 1941. In 1944, when the end of World War II seemed to be close, President Roosevelt made a great proposal to achieve worldwide peace: aiding the defeated with the Marshall Plan; funding for reconstruction and development by the World Bank and the creation of international agencies whose field of expertise could be very effective for the United Nations: food (FAO); education, science and culture (UNESCO); health (WHO); labour (ILO); promotion of development (UNDP); children protection (UNICEF Fund).

The drafting of both the United Nations Charter and the Constitution of UNESCO, its intellectual branch, was entrusted to thinkers with a great ethical and political clairvoyance. The United Nations Charter begins with the following words "We the peoples...determined to save succeeding generations from the scourge of war". This sentence summarizes the solutions the world as a whole is claiming for today, because they should allow to effectively tackle the serious challenges we're currently facing. It is certainly the people who must take

the reins of their common destiny into their hands. And by doing so, they shall commit themselves with the succeeding generations, assuming a responsibility that is one of the most serious deficiencies of international political action. And they shall succeed in building peace, because to avoid war they will demand from the United Nations the peaceful resolution of conflicts by means of diplomacy, encounter and reconciliation.

"There will be transition from a culture of imposition, violence and war to a culture of reconciliation, understanding, alliance and peace."

But it took not very long for "the people" to be totally supplanted by the States as members of the UN General Assembly; soon the victors led by America replaced the vote by the veto and international cooperation – the verb "to share" should have been the key word for a new future – was superseded by exploitation. Another failed opportunity, because the Universal Declaration of Human Rights, clearly stated the glittering standards that could efficiently lead the humanity as a whole towards a new era where the very foundation of these standards could become true: the equal dignity of all human beings.

The Preamble of this Declaration – I've already mentioned it earlier – states that human rights should "free humanity from fear". With the arms race between the superpowers, United States and the Soviet Union, fear did not diminish, it rather became stronger, and military expenditure and the production of increasingly powerful war artefacts became essential features of a period when walls could have been broken down and bridges of understanding and friendship between all nations of the Earth could have been built, if only the United Nations System had evolved based on the "democratic principles" established in the Constitution of UNESCO.

The third opportunity, also spoiled by the Republican Party of the United States, with the United Kingdom as a coadjutor, came immediately after the end of the "Cold War". In 1989, when there were signs of peace everywhere, when the Soviet Union became – thanks to the talent of Mikhail Gorbachev – a Commonwealth of Independent States ready to start their long march towards public liberties; when the racial apartheid was eradicated thanks to the extraordinary magic of a prisoner who went out of prison with open arms and, instead of calling for revenge, cried out for reconciliation and forgiveness and managed to achieve them; when peace was reached in Mozambique, and in El Salvador and the peace process was restarted in Guatemala.

When there were signs of peace everywhere, President Reagan and Prime Minister Thatcher set off a globalizing neoliberal system that replaced democratic principles by the laws of the market, and the United Nations by plutocratic groups. In just a few years there was a real ethical and economic debacle. Markets became the masters of the situation and they relentlessly pressed and set aside political power. The consequence was inequality, poverty, arms race, the degradation of environment, thousands of deaths every day from hunger – dreadful "collateral effects" of a system where the poor become poorer and the

rich become richer. In terms of budget figures – we must insist on this and be ready to mend reality – every day millions of dollars are invested in weapons and military expenditure while many thousands of people die from hunger.

And inequalities are growing because centre-left parties are joining the neoliberal scheme led by big capital.⁹

4. Transitions that were inconceivable a few years ago have become possible today

It will now be citizen power that in a few years will lead the transition from an economy of speculation, production delocalization and war to an economy of global sustainable and humane development, based on knowledge and which shall take into account the specific labour and employment features that have resulted from mechanization, robotics and, in general, from digital technology.

There will be transition from a culture of imposition, violence and war to a culture of reconciliation, understanding, alliance and peace. The Declaration and Programme of Action on a Culture of Peace, approved at the United Nations General Assembly in September 1999, is the new path that will no doubt allow humanity to reach a "new beginning". Transition from subjects to citizens happened with the advent of a new world as a result of the implementation of the four "Contracts" I proposed, at the end of my mandate as Director General of UNESCO in 2000: a new social contract; a new natural contract; a new cultural contract; a new ethical contract.¹⁰

The transition from subjects to citizens specially requires the capacity for dialogue which includes both the ability to listen and to freely express our own opinions. It requires an *inter*cultural, *inter*religious dialogue but also, and maybe above all, an *intra*-religious dialogue, because when Huntington warned about the possibility of a "clash" between Islam and Christianity, he was driven by specific interests, he said precisely what was expected from him and what could please the ears of the magnates of the United States and its Republican Presidents. Today it is clear that the most pressing action is to settle conflicts between Sunnis, Shiites, Salafists...

Till now the great leaders of neoliberalism have been persuaded that actions taken to achieve their geostrategic and economic ambitions at any cost (even the intentional violation of all established standards to invade Iraq in 2003) would go unpunished because the vast majority of citizens would remain silent.

And besides, distraction has been used as a resort, trying to make the most of the huge power of media to uniformize people, to induce as many people as possible to compensate their political disaffection with an obsessive and abusive involvement in sports clubs and institutions. But all this will not last very long. Corruption, ethical abjuration found in so many politics professionals, who become flatterers, clappers instead of members of parliament ready to reinforce, to improve political representation and participation, will gradually discredit them and it will be the voice of people that will prevail.

Let's review history. The review will show that what deserves to be repeated happens again and what should have never happened doesn't occur ever again. Let's never forget,

in our everyday behaviour, the past that is so critical to be able to make the right decision about tomorrow's paths. Pablo Picasso said that "The quality of a painter depends on how much past he carries with him". We must be aware of the past, an ascertained past that will empower young people with the strength they need for high-flying.

5. Break Down Walls, Build Bridges

Walls must be broken down with the power of transparency, conceptual clarity, creative capacity, serenity, balance, consistent implementation of "democratic principles", justice, liberty, equality and solidarity so that a new framework for action including permanent citizen participation may be gradually set up. Nobody should fool himself: citizens will not keep still and continue to be angry, oppressed and silent. If there is no evolution, there will be a revolution. If there is no agreement, there will be a break-up. And that must be prevented at any price. The brilliant future where all human beings and not only a few will have a dignified life requires that, once and for all, it is up to "the people" to decide their own future.

To break down walls and build bridges it is essential to establish quick and consistent procedures that will allow justice, especially in specific cases, to be speedy and efficient. And it is essential to implement the major *social priorities at a worldwide scale*: food for everyone; access to drinking water; high quality health services; environmental protection; education for everyone during the whole life.

The result will be peace. "Peace is a specific behaviour" was said in Yamassoukro in 1989, 11 when the great transversal program of UNESCO on the Culture of Peace and Non-Violence was launched.

There is no peace without justice. There is no peace without human development. There is no peace without equality. Peace is incompatible with discrimination, arbitrariness...

According to José Saramago "The worst thing about patience is that it can be infinite". Therefore, patience must be exercised, but within well-defined boundaries. Today there are many "unattainable" goals that may become possible tomorrow. I like to repeat the sentence of a group of mountaineers who said "we succeeded because we didn't know it was impossible" – imagination, courage, knowledge.

Deep analysis, serenity, strength and the ability to say "no" when markets – behaving as imperatively as they have done lately – force politicians, with unprecedented and unacceptable pressure, to make decisions that should have never been made.

I know from experience that saying "no" when we are presented with and forced to take wrong paths not only causes enormous satisfaction and peace of mind but generally results in threats vanishing and unacceptable grounds becoming evident.

Tuesday, 28 October 2014, – wrote Ignacio Ramonet, 12 – was a historical day. In the first place, because in very few occasions has the Pope convened at the Vatican a World Meeting of Popular Movements; in the second place, because there have been even fewer occasions when the Pope has directly spoken to them, telling them he wants to hear "the voice of the poor because the poor not only suffer injustice, they struggle against it" and, praising solidarity, he also said: "The Pope wishes to accompany you on this journey". And

he wishes to do so because "the poor are no longer waiting with arms crossed for solutions that never arrive; now they want to be protagonists and find themselves the solutions for their problems... I hope the winds of protest will turn into a gale of hope... All this happens when the human being is placed at the centre of the system where the money has now been placed... That is why we must raise our voices".

"Democracy can neither be granted nor imposed. It cannot be established from the top down but rather from bottom up, thanks to citizen participation."

6. Democracy is the Solution

In the eighties it was agreed to replace democratic principles by the laws of the market. Now power moves away from the Western world and battles that need to be fought are no longer economic but mostly political. "We cannot live on our knees any longer. We cannot accept any further pressure from the markets. Politics must stand up", I wrote in 2011. And, once I had listed the most pressing actions to be taken at all levels, I ended by saying that "a Universal Declaration on Democracy¹³ would be particularly appropriate since only within this context could the full exercise of human rights be foreseeable."

The only solution is a real democracy at a global and local level. And democracy can neither be granted nor imposed. It cannot be established from the top down but rather from bottom up, thanks to citizen participation.

International democracy: We urgently need to restore a democratic multilateralism, putting an end to the inefficient and discretionary "oligarchic groups" imposed upon us by the globalizing neoliberalism once and for all. With a strong *United Nations*, endowed with the moral and formal integrity that is needed, the invasion of Iraq would have never happened, as I have already mentioned; the "Arab Spring" would have been adequately guided; the nuclear disarmament would had become a reality, and Mafia organizations trafficking with weapons, drugs and people would no longer benefit from their current impunity at the supranational level; the World Trade Organization would not have overstepped its boundaries and more funds would be allocated to aiding sustainable and humane development, and worldwide priorities (food, drinking water, health services, education ...) would most certainly have been implemented. Caring for environment, which is a pressing intergenerational responsibility, would no longer be a cause for alarm and a serious irresponsibility as it is today.

Critical objectives: To be able to complete, reorientate or rebuild, from a new United Nations System, ¹⁴ the current situation and trends (examples): promoting the excellent emancipation process that is being carried on in Latin America; in the European Union, ¹⁵ establishing political and economic union Treaties that will round off the current Monetary Union; circulating and implementing in all European countries the excellent Charter of Fundamental Rights¹⁶ and "inventing" a new Europe by reinforcing its status as a great champion of creativity, solidarity and vigilance; ¹⁷ contributing to China "transparency" and

to its speedy evolution towards a system of public liberties. An adequate evolution of the "giant dragon" – from the ethical, social, structural, environmental standpoint – is essential for the new era;¹⁸ in Africa, promoting the reinforcement of Pan-Africanism to allow this major continent to play at last in the worldwide scenario the role it deserves to play; paying special attention to India, a great country, who has been a champion of democracy under very difficult circumstances; coordinating action in case of natural or human-instigated disaster; resorting to "third-party intervention" to avoid massive violation of human rights (as was the case in Cambodia and Rwanda, for instance) or in specific cases that require the presence of Blue Helmets because there are no representatives of the people or no official negotiators at the international scale (as was the case of Somalia).

A matter of great concern at a worldwide scale is the rearmament of Japan and China, promoted as usual by the large arms industry corporations and also – I must insist on this once again because it is an essential element for the construction of a new future – by a United Nations System deprived of the means necessary to arbitrate the major processes that are already or will be shortly at stake.

With regards to the *environment*, the first thing that must be done is to limit the huge power of large energy corporations. Renewable energy should be encouraged, by carrying on a prior in-depth study. Regarding issues that can be irreversible, it would be totally irresponsible to look the other way as has been done till now.

At a national scale, we should encourage countries with a great cultural diversity, such as Spain, to implement a system allowing differences of all kinds to be compatible with the unanimous observance of "democratic principles", which ensure the necessary overall cohesion, as it is the case in federal and confederal systems.

Democracy is subject to continuous evolution and it must take into account in every historical period the distinctive conceptual and "physical" features (such as the ecological environment) it must not only adapt to but also anticipate. It is now clear that a new way of approaching work as well as labour, time and space is needed, and a new world energy map.

Among the proposals I have made at a global, regional and national level¹⁹ it is worthwhile stressing the prevention of tax evasion; immediate abolition of tax havens; computer transaction taxes; strict regulation of "instructed machines" in the stock market and industrial relocalization.

And above all, I insist, promoting at all levels a genuine democracy. The Universal Declaration on Democracy²⁰ includes sections dealing with *social democracy, political democracy, economic democracy, cultural and international democracy.* Article eleven deserves special attention because it states that *all dimensions and features of the economic democracy shall be subordinated to social justice.* It is said that a product is not altered by changing the order of its factors. This is not true in the case of social and economic facts. The United Nations ECOSOC Commission has always focused on economic aspects and has in very few occasions dealt with social issues. It was not until the 50th anniversary of the United Nations, in 1995, when a meeting on social development was finally held. It took place in Copenhagen, that same year, and the meeting concluded with eight major "commitments". But neoliberalism prevented the social aspects from prevailing.

Other essential aspects of democracy are universal jurisdiction, world citizenship, and permanent awareness of our common destiny. A matter of the utmost urgency is the establishment, and strict observance at a planetary scale, of laws ensuring an appropriate behaviour at different levels, so that the main requirements for a dignified life for all human beings are readily complied with. "Who if not everyone?"—I like to repeat this question posed by the great Catalan poet, Miquel Martí i Pol. It must be *everyone*. The time for disparities, for excruciating inequalities has come to an end because, in the anthropocene, points of no return may be reached that would be equally negative for everyone, regardless of their place of origin and social "status".

We should all see democracy as an everyday behaviour, as a rule and pattern of life. As mentioned earlier, democracy can neither be granted nor imposed.

A few years ago, in my book "Un mundo nuevo,"21 I wrote: "How can the appropriate preservation of the biosphere be reconciled with the development of the socio-sphere? Who will be responsible for transmitting the ecological wisdom to us? Who will show us the path towards a more balanced and supportive development?" A sustainable and humane development is certainly the best way to achieve a peaceful coexistence.

7. "Another world" is possible. Bearing the future in mind

For the first time in history, human beings have the possibility to invent new ways of living together to ensure their survival as a species. This global change on our living conditions generates new possibilities and at the same time compels us to face new difficulties that had never before arisen. Problems currently experienced by some human beings could very well transform the whole planet in a very short period of time. With scientific development, but also with its application to mass destruction, the future of every human being, regardless of his race or religion, is more than ever closely related to the future of all his fellows.

Extreme ignorance and poverty; racial, religious or ideological fanaticism; intolerance and contempt towards others; inequality and injustice are all a source of violence. These are the human situations that lead to marginalization, indifference, resentment and hate. Being able to tackle conflicts from the very beginning requires the capacity to identify root causes and to take timely action. Anticipation and prevention that may result from this capacity are the supreme conquest, a conquest that suits the distinctive faculties of the human species.

The computer revolution has given rise to a new relationship between labour, capital and technology. "How will the labour market be regulated in an era of automated production processes?" – wonders Diego Beas.²² It is worthwhile analysing the dysfunction caused by Google in the world of information and advertising; by Apple in mobile phones and music; by Amazon in books and product distribution, especially because very few employees are required by these companies as compared with "traditional" large companies; and, while admitting that many "habits" should be radically transformed, we should nonetheless promote a rational use of technologies that have already become an essential pillar of the "new era".

With appropriate advice, "the people" will make sure – through an active and constant participation – that the roots and common source of democracy are respected by "calling things by their proper name", and by letting us be citizens instead of mere subjects. In this regard, attention should be paid to "competitiveness" achieved by a highly skilled and

extremely inexpensive workforce which prevails over talent, patents and the promotion of R&D&I. In the new context, it will be up to knowledge and human creativity to provide, within a totally different labour and production framework, the major guidelines of a life worth living.

Yes, future must be invented because it is yet to be. Today we can rely on something as important as experience, which has to be supportive, proportionate to the extraordinary increase in longevity. It is an unexplored treasure that may now too, at last, contribute to radical changes at all scales. Somebody will surely tell us "this is impossible"; "nothing can be done about it". But now we will all be aware that we have to learn to see, to observe and to reflect in a different way. And to make the most of experience and solidarity gained throughout so many lives.

This process that can today be accelerated by citizen participation has already been discussed by Edgar Morin.²³ As long as we have seeds and we have furrows where they can be planted come wind or weather, there will be a few catalysts capable of shedding light on the horizons that seem so gloomy today.

In "Humanism: inventing the future", ^{24,25} I emphasize how confident I am in the capacity of humanity – based on global consciousness, gender equality and the ability of everyone to express himself – to take into its hands the reins of its own destiny and to eradicate any type of governance that has replaced universal values by financial interests. The XXI century will be the era of rebellion in cyberspace, and the prelude to liberty and equal dignity for everyone.

Yes, future must be invented because it is yet to be.

It is essential to take action based on our own reflections. Gorbachev, one of the most powerful men on earth at a given period of time, dared to take action according to his conscience. Today, 25 years after the fall of the Berlin Wall, he proclaims the power of civil society and the everlasting importance of freedom of speech and press, as well as the undeniable influence of internet and cyberspace. Succeeding generations need examples such as those provided by a nonagenarian Stéphane Hessel and an octogenarian Mikhail S. Gorbachev, who have mobilized young people and led them to tomorrow's paths.

These are some relevant paragraphs of the speech by former Soviet Union President Mikhail Gorbachev in Berlin on 9 November 2014 to commemorate the 25th Anniversary of the fall of the Wall: "The events of the past few months are the consequence of short-sighted policies, of seeking to impose one's criteria while ignoring the interests of one's partners. Instead of becoming a leader of change in a global world, Europe has turned into an arena of political upheaval, of competition for spheres of influence and of military conflict. If this continues, *Europe could gradually become irrelevant* at an international scale.

Gather together, listen to each other. The key to it is a strong political will to move in this direction and to establish jointly agreed action priorities. Dialogue, dialogue to enable us to work together to ensure our future. Future is the only thing that matters. We urgently need to activate cooperation to be able to address global challenges: extremism, poverty, inequality, environment and migration. Global challenges, no matter how different from each other, have all one common basic feature: there is military solution for none of them!"

It is now up to the scientific, academic, intellectual community to try to mobilize and give sense to all those subjects who will gradually become full citizens. If Europe does not react, the "culture of democracy" will settle in the south.

Political leaders today are still unaware of the fact that people are no longer a silent audience. Now they can express themselves. A new compass must be used to avoid bewilderment, every time events such as the emergence of "Podemos" highlight the monotony that has prevailed in the past and when the future is not as we expected it to be.

Our hope lies in the capacity of every unique human being to think and create; this should be the axis and the foundation of the future we are dreaming of.

This is why philosophy is so important. And longevity has so much increased that it will allow us, if we make a good use of it, to convey – as I have already mentioned – a big cumulus of experiences to young people.

Sowing! It is essential to plant seeds every day that will provide exceptionally good crops for the inhabitants of tomorrow. It's time for action. Time for personal commitment. I will conclude with a sentence by José Luis Sampedro: "Today's decline is an opportunity for us all to take action together, because another world is not only possible, it is a fact".

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Institutional Dealing with Scientific Misconduct

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Abstract

Since recent studies have shown that scientific misconduct is anything but a rare phenomenon, and given the harmful effects of such misconduct both for science itself and for the society at large, it is obvious that violations of integrity norms in scientific research should be taken seriously. The promotion of a culture of scientific integrity and the furthering of responsible research by their employees deserve a high priority within universities and research institutes. Proper disciplinary actions and preventive measures should be based on an analysis of the possible motives and causes underlying such misbehaviour. In this article three categories of causal factors are distinguished: Deceit as an individual vice, an existing culture of sloppiness and irresponsibility within certain disciplines or institutes, and the pernicious influence of today's research climate with its pressure for production and the 'metrification' of performance and output. Suggestions for dealing with cases of misconduct, resulting from these three distinct views, are presented and discussed.

1. Introduction*,1,2,3,4,5

Before the 90's of the last century the subject 'violations of scientific norms' did not get serious and systematic attention. Till then the world of scientists was rather closed and defensive on the issue of scientific misconduct. Of course, once in a while cases of misbehaviour reached the press, but these were seen as atypical anecdotes. Suggestions that these cases were only the tip of a much larger iceberg were put aside as exaggerations of a rapacious press. It was claimed that self-regulation and the system of peer review was able to keep matters under control.

Moreover, scientific institutions (universities, research institutes, funding agencies, scientific journals) were inclined to draw a veil over such cases of misconduct. Universities were reluctant to hang out dirty laundry, funding agencies hated to admit that allocated funds were being misused, scientific journals disliked retractions. They were all afraid of reputational damage and were, consequently, reluctant to allow full and transparent disclosure of cases of scientific misbehaviour.

In the meantime things have changed. In the first place, more systematic evidence has become available on scientific misconduct, suggesting that the earlier optimistic assumptions and reassuring statements were incorrect. Surveys of AAAS and BMJ, and investigations^{6,7,8,9,10,11,12,13} and others show that we deal with a substantial and structural

^{*} Much of what is discussed in this paper is founded on experience and committee work in which the author has been involved.

problem in present day science that needs serious attention. If Steneck's conclusion at the second world conference on research integrity in Singapore (2011) that at least 1% of the sponsored research suffers from violations of norms of research integrity is correct, we speak of some 1500 cases per annum in the US, and some 1000 cases in Europe. At present almost every country where a reasonable amount of research is carried out has its notorious cases of misconduct. There is even a ranking of mega-impostors, headed by the Japanese anaesthetist Yoshitaka with 172 and the American surgeon Dipak Das with 145 fraudulent publications. I have to confess that with 69 fraudulent publications my fellow-countryman the social psychologist Diederik Stapel is also on the list.

This increasing attention to research misconduct is not without reason. As I stated earlier, ^{14,15} its effects are very harmful. First and for all for science itself: It leads to fallacious insights and may create deceptive leads for other scientists. It is also harmful for individuals and the general society: fraudulent research may result in bad policy measures, deficient instruments or unsafe medical drugs. A third harmful consequence is that trust in science will be subverted. Cases of scientific fraud disclosed in the public press will result in loss of trust in science as a valuable source of information and a dependable basis for decision making.

In the meantime many universities and research institutes have developed a Code of Conduct or Guidelines for scientific integrity, often guided by the inspiring publication of the US National Academies of Sciences 'On being a scientist'. ¹⁶ Moreover, in quite some countries National Academies of Sciences or National Science Foundations, often in cooperation with the Association of Universities have composed a national Ethical Code of Conduct.

2. Internationalization

It is further widely realised that the norms for responsible research and the rules for good practice cannot be confined to national scientific communities. Recently international scientific collaboration has grown substantially. National boundaries never were limitations to scientific collaboration, but during the last few decades internationalisation of research has assumed considerable proportions, stimulated among others by many international funding bodies (such as the Framework Programmes of the European Union). It has become clear that the requirements of research integrity apply equally strongly in such international collaborative research, and that common agreement on norms, rules and standards within the collaborating parties is a prerequisite for the fostering of responsible international research and for the proper dealing with possible cases of misconduct. In other words, international agreement on and harmonisation of codes and procedures deserve high priority.

The international scientific community awoke to the realization of the urgency of this international approach. Three World Conferences on Research Integrity have taken place: in Lisbon in 2007, in Singapore in 2010 (resulting in the 'Singapore Statement' defining 4 principles and 14 responsibilities) and in Montreal in 2013 (resulting in the 'Montreal Statement' defining 20 responsibilities on research integrity in cross-boundary research collaborations). The fourth is planned for 2015 in Rio, Brazil. Scientific journals have founded a Committee on Publication Ethics (COPE) that published a Code of Conduct and best practice guidelines for journal editors (in 1999 and in 2011). The Global Science Forum of the OECD organised a conference in Tokyo, Japan, in 2007, and produced Recommendations on Facilitating International Research Misconduct Investigations in 2009.

The InterAcademy Panel (IAP, the World Association of National Academies of Sciences) published a substantial report on *Responsible Conduct in the Global Research Enterprise* in 2012. In 2013 the Global Research Council (a world organisation of national funding organisations) reached an agreement on the central importance of responsible research, and published a '*Statement of 7 Principles for Research Integrity*'. Likewise UNESCO and ICSU (International Council of Science) raised their voice on this issue at various occasions and in their policy statements.

In Europea, All European Academies (ALLEA) and the European Science Foundation (ESF) were of the opinion that the best way to international harmonization of integrity standards would be to start with the intermediate level and, in their case, focus in first instance on the European scientific community. This has resulted in a European wide accepted *European Code of Conduct for Research integrity'*. ¹⁷

The European Code of Conduct was developed by a working group of All European Academies (ALLEA) and the European Science Foundation (ESF), which I had the honour to chair. ¹⁸ Like most codes this Code of Conduct is not intended to have a legal character. It is not a body of law, but rather a canon for self-regulation. It is the own responsibility of the scientific community to formulate the principles of and norms for scientific and scholarly research, to define the criteria for proper research conduct, and to set its own house in order whenever scientific integrity is threatened.

3. Motives and Causes

A discussion of proper institutional responses to cases of scientific misconduct should reason from possible motives and causes of such behaviour. So the question is: why do people breach integrity norms in research? Answers given in the literature vary with different accents on the 'nature – nurture' dimension. Some see in the swindler a 'bad apple'. Deceit is seen as an individual misdemeanour and the deceiver is the one to be blamed. Others point to a culture of sloppiness and irresponsibility that may prevail in certain disciplines or research groups ('bad barrel'). In our investigation of the misconduct of Stapel* we have also pointed to the climate of sloppiness, lack of methodological rigour and insufficient discipline within social psychology in general. We have been criticized for this, ²⁰ but had good arguments to refute this reproach. Then again others put their finger on external corrupting forces or the perverting present-day research climate with its emphasis on output and deadlines and the compelling dependence on grants and sponsors ('bad barrel maker'). ²²

Let us make one thing clear: There is no question about individual responsibility for misbehaviour in research. Given identical tempting circumstances one scientist lapses into deceit and hundreds of others do not. On the other hand there are, as said, external conditions that may make misconduct 'understandable'. Of course, understanding does not imply that violations of the norms of integrity can be tolerated or excused.

What sparks and fuels misbehaviour in science? The following types of causal factors can be distinguished:

Opposition, condemnation or prohibition of powerful persons or institutions. The well-known and obvious examples such as the row between the Catholic Church and Galileo,

^{*} I was chairman of one of the three committees that investigated Stapel's fraudulent research practices

the concession of the biologist Lysenko to the misplaced ideas of Stalin, the implacable rejection of Darwin's evolution theory by fundamentalist Christian or Muslim religious leaders come to our mind. But there are also more subtle repressions by the powerful. Each country or discipline has its examples of research supervisors who are displeased with the research direction or outcomes of young researchers that contradict the prevailing school of thought or their own ideas or hypotheses, and thwart their further investigation.

- A second possible factor is the pressure caused by the merciless competition for funds.
 Positive and preferably spectacular outcomes further opportunities for further financial support. And since funds from sponsored and contract research are becoming an ever growing proportion of the budget of many university departments or research institutes the danger of unjustly 'avoiding the hand that feeds you' becomes immanent.
- Thirdly, there is the present reward and career system for scientists. Secure staff positions, tenure appointments, promotions, fellowships or memberships of prestigious associations or organisations (academies, editorial boards, advisory boards) are more and more dependent on research results, publications, citation indices, H-index and other quantitative measures. It is at this point that IAC/IAP warns: "research institutions need to embrace incentives that deter irresponsible actions" and "too much emphasis on such metrics can be misleading and can distort incentive systems in research in harmful ways."
- Finally we mention the researcher's own ambition, vanity, desire for recognition and fame, and the prospect for personal gain. Here we deal with a personal characteristic of some researchers. There is nothing wrong with stimulating ambition, but unhealthy and dysfunctional craving for scientific honour and fame can result in infringements of the norms.

"The primary responsibility for creating and maintaining an environment that fosters responsible conduct and good practices, and, consequently, for the handling of cases of misconduct lies in the hands of the employer of the researcher."

4. Institutional Reactions

All institutes which are involved in the research enterprise (universities and research institutes, funding agencies, academies of sciences and science journals) should feel obliged to respond to the disclosure of cases of misbehaviour in research, of course each one of them in conformity with its role and responsibilities. Elsewhere,²⁴ I have discussed the possible responses for the various actors, and in this article I like to focus more extensively on the universities and research institutes that employ the misbehaving researchers. After all, the primary responsibility for creating and maintaining an environment that fosters responsible conduct and good practices, and, consequently, for the handling of cases of misconduct lies in

the hands of the employer of the researcher: the university or the research institute. They have to create a climate in which the fundamental values of research are practiced and violations thereof are countered. They have to take actions to investigate allegations and suspected cases, and to pass proper sentences where such allegations or suspicions come true.

Suitable responses to violations of research integrity depend, of course, on the nature of the misconduct. The most serious violations are fabrication (making up results and recording or reporting them) and falsifying results (manipulating research processes or deliberately changing or omitting data). These two are capital sins. A third type of misconduct is *plagiarism*, the appropriation of another person's ideas, research results or words/figures/tables without giving appropriate credit. Plagiarism seems to be of a different order since it is thought to be injurious only to fellow scientists and does not affect the integrity of the research record. Still plagiarism is rightly classified as a violation of the ethos of science because - next to doing injustice to fellow scientists - it is harmful for the academic reward system and for science as such.²⁵ The European Code of Conduct also classified *improper dealing* with such violations (attempts to cover up, reprisals to whistle-blowers, violations of due process) as misconduct. A fifth category of unacceptable violations are minor misdemeanours, such as some biased 'adjustment' of data, favourably 'adapting' a figure, omitting or changing one or two unwelcome observations, summarising incorrectly, cutting a corner here and there.... It should be made clear that here we also deal with unacceptable misconduct. It is falsification in statu nascendi, and may lead to more serious infringements if it is not corrected.

Responses have to depend further on the seriousness of the misconduct. Extensive fabrication of data by a senior researcher should be treated differently from a masters student copying pieces from Wikipedia or Internet without proper reference. Culpability of an accused researcher should be based on preponderance of evidence. It should be pointedly stipulated that misconduct does not include honest errors or differences in opinion. The level of intent, the consequences of the misconduct, and other aggravating or mitigating factors should be taken into account, and 'it has to be shown that the misconduct was committed intentionally, knowingly, or recklessly'.²⁶

5. Dealing with Cases of Misconduct

As said before, the primary responsibility for investigating and handling serious cases of misconduct lies in the hands of the leadership of the institute (university or research institute) where the accused or suspected researcher works. In the following I describe in my view an exemplary procedure.

Requirements for a proper procedure dealing with a grave accusation or suspicion include a careful and objective investigation, a fair and sufficiently rapid process, and suitable decisions and corrective measures. Fairness of the process is fostered by a clear separation of roles and responsibilities during the three phases of the process:

After the reception of an allegation or suspicion of fraud this is referred to an integrity officer, confidential agent, or ombudsman (who should not be part of the hierarchy; therefore, not a dean, director or rector), who bears the responsibility to decide whether the accusation is admitted and further action has to be taken. In the first instance this is almost always to call for an independent investigation committee.

- This investigation committee is then appointed by the leadership of the institute, and consists of independent (and preferably one or two external) experts in the field of the accused researcher. This committee has to have access to all necessary information, carry out a thorough investigation, hearing both sides, and reach a conclusion which is offered to the leadership of the institute in the form of an advice on a possible conviction and further actions.
- The decision is then made by the management of the university or institute. Corrective measures and penalties may vary from a formal reprimand or warning, (temporary) refusal of admittance to funding, nullification of academic degrees (if based on fraud), to degradation or dismissal. In cases of fraud the publications (book or article) should always be retracted, preferably with an intimation of the reason. [Note: there should be an opportunity for appeal, usually with an external, national organisation (e.g. Academy of Sciences, National Research Council or National Committee for Research Integrity)].

In cases in which two or more scientists from different universities or institutes collaborate, duplicated investigations should be avoided. Mostly there is a leading person or a group that receives the biggest share of a grant; it would be natural to assign the task of investigation to their institution

How do suspicions arise? Who can submit allegations?

Informants who can start the ball rolling include:

- Reviewers of grant applications. Improbable claims and reporting unlikely results may raise suspicion.
- Editors and reviewers of scientific journals. Although the peer review system is not ultimately marked out to reveal fraud, nevertheless quite some indications and peculiarities in a submitted article may raise suspicion, including no missing data, no refusals in surveys, statistical defects, undefined samples, or, in general, results that are 'too good to be true'. COPE (the Committee on Publication Ethics of Science Journals) has offered a great number of suggestions for improvement of peer reviewing in this respect.*
- Colleagues as well as subordinates and PHD students. Immediate collaborators are probably the most suitable sources of information. They often see and know in great detail how their colleagues and supervisors operate, and are the first to discern possible irregularities and manipulations of data. It is natural that such informants nurse feelings of diffidence. They may dread accusations of disloyalty and ingratitude with respect to their institute, or even fear harmful repercussions for their future career. It is, therefore, important for the leadership of universities and research institutes to carry through measures of protection of whistle blowers, among others by allowing them to report their suspicion confidentially to the integrity officer, and to impress the necessity of reporting any violations of norms of integrity one may encounter.
- Outsiders. Sometimes complaints and accusations may come from outside: readers, journalists, clients, sponsors and others. Of course, not all of them have to lead to serious

^{*} www.publicationethics.org

follow-up. But some of these allegations may be enough severe and irrefutable for the integrity officer to make further inquiries.

An interesting question is how to deal with anonymous allegations.

Some informants do not trust the precautionary measures to protect whistle blowers and do not want to reveal their identity, even under confidential conditions. They still may submit their complaint or allegation, but anonymously. Can such an anonymous allegation be admitted? In Europe there is no agreement on this matter. Different countries, and even different institutes within the same country have diverging views. My suggestion is the following:

Let us first and foremost put the case that anonymous allegations are not desirable. Next to the above mentioned fear and diffidence all too often all kinds of unsympathetic motives, such as frustration, disappointment, resentment,

"Effective preventive measures will have to be built upon the causes of and motives for infringements of the norms of integrity."

jealousy, rivalry and rancour play a role. Therefore, integrity officers or committees would do right to exert themselves to try to identify the informant, if need be under condition of confidentiality.

Moreover, there are anonymous allegations that cannot be admitted as long as the accuser does not make him/herself known: think of vague accusations, accusations of misuse of power or sexual intimidation leading to infringements of norms of research integrity, accusations of running off with ideas of the accuser, refusals of deserved co-authorship and the like. For the investigation of such allegations hearing both sides, and therefore acquaintance with the identity of the accuser, is necessary.

But then there are anonymous accusations that are well traceable and testable, and that can be very well investigated on the basis of controllable facts, and therefore should be taken seriously.* A rector of a university would be reproachable if (s)he would not check anonymous, but traceable serious accusations; for instance the assertion that organisations in which an investigation is supposed to have taken place do not exist, or that patient identity numbers in a hospital sample cannot be found, or that substantial parts of the text of a dissertation are identical to exactly marked published texts of other uncited authors.

In short, in most cases anonymous allegations are undesired and should be discouraged. Sometimes anonymity is even prohibitive for admitting a complaint or accusation. But sometimes anonymity is no hindrance for the investigation of an allegation and do the cons of anonymity not counterbalance the pros of bringing to light grave infringements of research integrity norms. In such cases anonymous allegations should not be dismissed.

6. Prevention

Effective preventive measures will have to be built upon the causes of and motives for infringements of the norms of integrity, as discussed in section 3.

^{*} Here I am in agreement with Virginia Barbour, the Chair of the Committee on Publication Ethics (COPE) (publicationethics.org; Jan. 2013) and Cornelis Schuyt, the Chair of the Dutch National Organ for Scientific Integrity (LOWI).

- a. Following the 'bad apple' theory the emphasis will be on the individual researcher. Measures should intend to ensure that he or she is kept on the straight path. They include:
- The development and publication of a (national or institutional) Code of Conduct for Research Integrity, in which norms of integrity and rules of good practices are delineated.
 This Code should be made known to all students and staff. Employed researchers should be asked to sign a statement that they have taken cognizance of the Code and will comply with its norms and standards.
- Impartial, fair and strict mechanisms to investigate suspected or alleged cases of misconduct (as outlined in section 4), followed by appropriate actions against persons found to have breached the norms.
- Underlining staff member's duty to take action in case they observe or suspect serious violations of the rules of responsible research, of course stipulating the protection of whistle blowers from retaliation in their work or further career.
- The regular use of electronic plagiarism detection systems.
- Retraction of fraudulent or severely plagiarised publications, preferably stating its reason.

"It is the development and nurturing of the basic values and norms in science, rather than the risk of being caught and the fear of sanctions that will enable us to fight and prevent misconduct and fraudulent activities."

A caveat is appropriate here. Warnings, detection instruments, threats and sanctions, they are all important and useful. But of essence is the development of a matured scientific conscience and a basic sense of responsibility of the researcher him- or herself. It is the development and nurturing of the basic values and norms in science, rather than the risk of being caught and the fear of sanctions that will enable us to fight and prevent misconduct and fraudulent activities. And the fostering of this scientific conscience should take place through teaching ('responsible research' should be a mandatory subject in courses on experimental design and research methodology), through supervision and mentoring of students and junior staff, and through setting a compelling example in one's own research.

- b. The 'bad barrel' theory would lead to preventive measures that would focus on the collegial climate in 'weaker' disciplines. These would include:
- Concerted appeals to stir those disciplines and leaven the staff with the realisation that methodological rigour and procedural reliability are key-stones of responsible research.
- Increasing the alertness and sensitivity of reviewers of proposals, peer reviewers of submitted articles, supervisors and members of evaluation committees of doctoral dissertations, and urging them to be extra critical if results are 'too good to be true', if unlikely high correlations are reported, if samples are insufficiently defined, and the like.

- Emphasizing the necessity to share and discuss findings with colleagues and research group members; data collection and interpretation should never be an isolated, uncontrolled activity of one individual. Supervisors should critically follow all phases of the research endeayour.
- Emphasizing the full responsibility of co-authors for all aspects of the publication, unless explicitly expressed otherwise.
- The requirement for the researcher to deploy a system of data storage and archiving, while maintaining proper accessibility of the data, allowing other researchers to do a control or retest study.
- c. The approach emanating from the theory of the 'bad barrel maker' would focus on resistance to external corrupting forces, be they financial, political or ideological/religious, or inherent in the science reward system we have drifted into. At stake is here the independence and autonomy of science. If science can no longer define and follow its own laws and criteria and if the freedom to think and communicate is curtailed the essence of science is attacked. Without its independence, impartial and unaffiliated nature science will sooner or later become irrelevant and useless. As already indicated in section 3 we can list three categories of such constraining forces.
- First the political or religious interferences. Above we have already referred to the open or more subtle conflicts between governments, political leaders or dictators and scientists, and to the attempts of religious (Christian and Muslim) leaders to influence and control scientific interpretations and theories. In the West we have the examples of Galileo, Spinoza, Bruno, Voltaire and others. In the Muslim world it started with the influential Abu Hamid al-Ghazali who, contrary to his earlier views,* subordinated scientific cause and effect to divine revelations^{28,29} and called thoughts of the rational Muslim scientists Al-Kindi and Ibn-Sina (Avicenna) heretical and suchlike ideas even apostatical (kufr). Other Muslim scientists like Ibn-Sina (Averroes) and, in modern times, Abus Salam and Hoodbhoy have met with similar opposition. In his extended study Bürgel³⁰ concludes that orthodox Muslim theology I should say just like orthodox Christian theology has always tried to dominate rather than to inspire science.^{†,31}
- The second problem is the temptation to bend too much to the interests of sponsors or users of the research. It is here that universities that are too much dependent on financial support of sponsors and principals (too much contract research, too much patent oriented research) get in danger. The warning of the former President of Harvard University Derek Bok expressed some 12 years ago in his farewell address that "the intrusion of the market place into the university is eroding fundamental academic values" unfortunately has not lost much of its relevance.

^{*} Expressed in his Revivification of the science of religion.

[†] In a paper presented at the Islamic World Academy of Sciences, held in Doha, Qatar, 22-24 October, 2011, and published in Eruditio, I have defended the importance of the separation of science and religion. Scientific truths cannot be at odds with the 'truths' as revealed in holy scriptures. I quote: "The Bible, the Torah and the Quran are not historical, geological or biological textbooks. They on ot intend to give a scientific explanation of physical or social phenomena. They are imaginative texts that attempt to help people to understand the meaning of life, to guide and inspire them, to provide hope and consolation. (....) Science, on the other hand, is the world of falsifiable knowledge, of logical consistency and of verification and validation. These two worlds cannot be at variance any more than a poem can be at variance with experimental physics." Gould (1999) suggested something similar when he described the worlds of religion and science as two Non Overlapping Magisteria (NOMA).

Thirdly we should also aspire to alleviate the strong emphasis on quantity of output and number of publications, and to look for alternative, also qualitative, ways to appraise scientists' contributions (see the serious charge against the 'metrification of quality').³² As said in section 3 it is not unlikely that the 'publish or perish' culture contributed to the prevalence of irresponsible conduct. Breathless craving for 'high scores' may lead to behaviour that crosses the limits of what is permitted.

7. Concluding Remark

For universities and research institutes the discovery and revelation of fraud within their ranks is always painful and embarrassing. Often the recent wide and detailed discussions of fraudulent cases in the press are still experienced as distressing and unwelcome. But the positive side of the attention to and in depth analysis of cases of research misconduct is a sharpened focus on research integrity at all levels of the science community. If this increased attention and publicity would contribute to fostering a prevailing culture of responsible research and robust management methods that ensure awareness and application of high standards, it would be well worth it.

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Notes

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Book Briefs

Compiled by Michael Marien

Director, Global Foresight Books; Fellow, World Academy of Art and Science

1. Columbia University Press: Spring 2014

The Insect Cookbook: Food for a Sustainable Planet. Arnold van Huis (Prof of Tropical Entomology, Wageningen University), Henk van Gurp (Cooking Instructor, Rijn IJssel Hotel and Tourism School, Wageningen), and Marcel Dicke (Prof of Entomology, Wageningen University and Cornell University). NY: Columbia University Press, March 2014, 216p, \$27.95. Two entomologists and a chef make the case for insects as a sustainable source of protein for humans and a necessary part of our future diet. They provide consumers and chefs with the essential facts about insects for culinary use, with recipes simple enough to make at home yet boasting the international flair of the world's most chic dishes. Features recipes and interviews with top chefs, insect farmers, political figures, and nutrition experts. (FOOD/AGRICULTURE* SUSTAINABLE FOOD* INSECTS AS FOOD)

Creating a Learning Society: A New Approach to Growth, Development, and Social **Progress.** Joseph E. Stiglitz (University Prof. Columbia University; former Chair, Columbia University Committee on Global Thought; winner, 2001 Nobel Prize for Economics) and Bruce C. Greenwald (Prof of Finance and Asset Management, Columbia Business School). NY: Columbia University Press, June 2014, 680p, \$34.95. An improved standard of living results from advances in technology, not from the accumulation of capital. What truly separates developed from less-developed countries is not just a gap in resources or output but a gap in knowledge. Free trade may lead to stagnation whereas broad-based industrial protection and exchange rate interventions may bring benefits—not just to the industrial sector, but to the entire economy. In fact, the pace at which developing countries grow is largely a function of the pace at which they close that gap. Stiglitz and Greenwald explain why the production of knowledge differs from that of other goods and why market economies alone typically do not produce and transmit knowledge efficiently. They provide new models of "endogenous growth" and show how well-designed government trade and industrial policies can help create a learning society, and how poorly designed intellectual property regimes can retard learning. (LEARNING SOCIETY* ECONOMY AND KNOWLEDGE PRODUCTION* DEVELOPMENT AND LEARNING)

The Collapse of Western Civilization: A View from the Future. Naomi Oreskes (Prof of the History of Science, Harvard University) and Erik M. Conway (Historian of Science, California Institute of Technology). NY: Columbia University Press, July 2014, 89p (5x7"), \$9.95pb. A brief work of science-based fiction that imagines an unrecognizable world devastated by climate change. Clear warnings of climate catastrophe were ignored for decades, leading to soaring temperatures, rising sea levels, and widespread drought. "In

2023, the infamous 'year of perpetual summer,' lived up to its name, taking 500,000 lives worldwide and costing nearly \$500 billion in losses due to fires, crop failure, and the deaths of livestock and companion animals...what was anomalous in 2023 soon became the new normal." (pp 8-9). Wealthy nations fostered a delusion that natural gas from shale could offer a "bridge to renewables." As power plants based on gas were built, infrastructures based on fossil fuels were further locked in, global emissions continued to rise, and climate disruption accelerated. By 2060, Arctic summer ice was completely gone, and during the next decade release of Arctic methane doubled the total atmospheric carbon load. From 2073-2093, some 90% of the West Antarctic Ice Sheet melted, driving up sea level some five meters across most of the globe. The Greenland Ice Sheet began its own disintegration, adding another two meters to global sea level rise, which displaced 1.5 billion people. China, however, rapidly built new inland cities and relocated >250 million people to higher ground. "The development that the neoliberals most dreaded—centralized government and loss of personal choice—was rendered essential by the very policies that they had put in place." (p.49) Concludes with a 10-page "Lexicon of Archaic Terms" such as "bridge to renewables, capitalism, carbon combustion complex, environment, external costs, human adaptive optimism, positivism," etc. [NOTE: A brief but powerful critique of economists and "conservative" politicians, but not clear how China prevails while the West collapses.] (CLIMATE CHANGE IN 21ST **CENTURY: SCENARIO)**

Survivors of Slavery: Modern-Day Slave Narratives. Laura T. Murphy (Asst Prof of English, director of the Modern Slavery Research Project, Loyola University, New Orleans). NY: Columbia University Press, March, 2014, 344p, \$30pb. Slavery is not a crime confined to the far reaches of history. It continues to entrap 27 million people across the globe. Offers some 40 survivor narratives from Cambodia, Ghana, Lebanon, Macedonia, Mexico, Russia, Thailand, Ukraine, and the United States, describing the system that forces people to work without pay and against their will, under the threat of violence, with little or no means of escape. Topics covered include the need for work, punishment of defiance, and the move toward activism. Isolates the causes, mechanisms, and responses to slavery that allow the phenomenon to endure. (SLAVERY IN THE 21st CENTURY)

Foundations of the Earth: Global Ecological Change and the Book of Job. H. H. Shugart (Chair in Environmental Sciences, University of Virginia). NY: Columbia University Press, July 2014, 384p, \$35. "Where were you when I laid the foundation of the earth?" God asks Job in the "Whirlwind Speech," but Job cannot reply. Shugart explores the planetary system, animal domestication, sea-level rise, evolution, biodiversity, weather phenomena, and climate change, and calls attention to the rich resonance between the Earth's natural history and the workings of religious feeling, the wisdom of biblical scripture, and the arguments of Bible ethicists. Offers a universal framework for recognizing and confronting the global challenges humans now face. (ENVIRONMENT AND CHRISTIANITY* ECOLOGY AND SPIRTUALITY)

Crowded Orbits: Conflict and Cooperation in Space. James Clay Moltz (Prof of National Security, Naval Postgraduate School). NY: Columbia University Press, April 2014, 240 p, \$30. Space has become increasingly crowded since the end of the Cold War, with new countries, companies, and even private citizens operating satellites and becoming spacefarers. This primer on space policy from an international perspective examines space

competition and cooperation while providing readers with an understanding of the basics of space technology, diplomacy, commerce, science, and military applications. Includes policy recommendations for enhanced international collaboration in space situational awareness, scientific exploration, and restraining harmful military activities. (SECURITY AND SPACE EXPLORATION * SPACE: COOPERATION AND CONFLICT)

Understanding Environmental Policy (Second Edition). Steven Cohen (Executive Director, Earth Institute, Columbia University). NY: Columbia University Press, July 2014, 240p, \$34pb. Introduces a multidimensional framework for developing effective environmental policy within the United States and around the world, looking at ethical, political, technological, economic, and management aspects. Analyzes four case studies representing current challenges: 1) New York City's garbage crisis; 2) the problem of leaks from underground storage units; 3) toxic waste contamination and the Superfund program; and 4) global climate change. Considers how our current environmental policy and problems reflect the value we place on our ecosystems, whether science and technology can solve the environmental problems they create, and what policy is necessary to reduce environmentally damaging behaviors. Also discusses hydrofracking, congestion taxes, e-waste, recent US policy changes, and developments in US and global environmental issues. (ENVIRONMENTAL POLICY TEXTBOOK* CLIMATE CHANGE)

The Assault on Social Policy (Second Edition). William Roth (Prof Emeritus of Social Welfare and Public Policy, SUNY Albany) and Susan Peters (Associate Prof Emeritus, Michigan State University). NY: Columbia University Press, July 2014, 272p, \$30pb. The attack on US social policy has intensified over the past 10 years. American social policy today largely serves global corporate interests rather than the general public. Analyzes the rhetoric used to make poverty seem acceptable, shows how corporations affect the distribution of wealth and other resources, and considers the effect on disabled people, criminals, children, and health care. Increased transnational corporate power has created the need for large-scale systematic public policy changes. (SOCIAL POLICY IN U.S.: TEXTBOOK)

Alternative Economies and Spaces: New Perspectives for a Sustainable Economy. Edited by Hans-Martin Zademach and Sebastian Hillebrand (both Dept of Geography, Catholic University of Eichstätt-Ingolstadt, Germany). Transcript-Verlag (dist by NY: Columbia University Press), March 2014, 150p, \$25pb. Explores alternative modes of economic and social exchange, including credit unions, alternative currencies, sustainable consumption, and social enterprises, and their performance in relation to and beyond the economic mainstream. Also introduces a framework for transitioning to a more sustainable economic system while reconceptualizing the system itself in scholarly thinking and daily lives. (SUSTAINABLE ECONOMIES * ECONOMIC ALTERNATIVES)

Transnational Organized Crime: Analyses of a Global Challenge to Democracy. Edited by Heinrich-Böll-Stiftung (international network of 29 offices that fosters democracy and human rights) and Regine Schönenberg. Transcript-Verlag (dist by Columbia University Press), March 2014, 312p, \$35pb. Transnational organized crime interferes with the everyday lives of more and more people – and represents a serious threat to democracy. By now, organized crime has become an inherent feature of economic globalization, and the fine line between the legal and illegal operation of business networks is blurred. Moreover, few

experts could claim to have comprehensive knowledge and understanding of the laws and regulations governing the international flow of trade, and hence of the borderline towards criminal transactions. Contributions from 12 countries around the world by 25 experts provide a cross cultural and multi-disciplinary analysis of transnational organized crime, including a historical approach from different regional and cultural contexts. (TRANSNATIONAL ORGANIZED CRIME * CRIME/JUSTICE)

2. University of Pennsylvania Press: Fall 2013

Revitalizing American Cities. Edited by Susan M. Wachter (Prof of Real Estate and Finance, Wharton School, University of Pennsylvania) and Kimberly A. Zeuli (Senior VP and Director of Research, Initiative for a Competitive Inner City). The City in the 21st Century Series. Philadelphia: University of Pennsylvania Press, Dec 2013, 312p, \$69.95 (also as e-book). Small and midsized cities played a key role in America's Industrial Revolution as hubs for the shipping, warehousing, and distribution of manufactured products. But as the 20th century brought cheaper transportation and faster communication, these cities were hit hard by population losses and economic decline. In the 21st century, many former industrial hubs—such as Springfield, Wichita, Providence, and Columbus—are finding pathways to reinvention. With innovative urban policies and design, once-declining cities are becoming the unlikely pioneers of postindustrial urban revitalization. Explores the regional and political factors that have allowed some industrial cities to regain their footing in a changing economy, discusses national patterns and drivers of growth and decline, presents case studies and comparative analyses of decline and renewal, considers approaches to the problems that accompany the vacant land and blight common to many of the country's declining cities, and examines tactics that cities can use to prosper in a changing economy. (CITIES * CITY REVITALIZATION IN U.S.)

Rethinking the American City: An International Dialogue. Edited by Miles Orvell (Prof of English and American Studies, Temple University) and Klaus Benesch (Prof of English and American Studies, Ludwig Maximilian University of Munich). Foreword by Dolores Hayden (Yale University; former President, Urban History Association). Philadelphia: University of Pennsylvania Press, Nov 2013, 232p, \$45 (also as e-book). Whether struggling in the wake of postindustrial decay or reinventing themselves with new technologies and populations, cities have once again moved to the center of intellectual and political concern. Scholars from a range of disciplines examine an array of topics that illuminate the past, present, and future of cities. Topics include energy use, design, digital media, transportation systems, housing, public art, urban ruins, and futurist visions. (CITIES* CITY REVITALIZATION IN U.S.)

No Use: Nuclear Weapons and U.S. National Security. Thomas M. Nichols (Prof of National Security Affairs, U.S. Naval War College, Newport, RI). Philadelphia: University of Pennsylvania Press, Dec 2013, 232p, \$39.95 (also as e-book). For more than 40 years, the United States has maintained a public commitment to nuclear disarmament, and every president from Ronald Reagan to Barack Obama has gradually reduced the size of America's nuclear forces. Yet even now, over two decades after the end of the Cold War, the US maintains a huge nuclear arsenal on high alert and ready for war. The Americans, like the Russians, the Chinese, and other major nuclear powers, continue to retain a deep faith in the political and military value of nuclear force, and this belief remains enshrined at the center of US

defense policy regardless of the radical changes that have taken place in international politics. Nichols reexamines the role of nuclear weapons and their prominence in US security strategy, explains why strategies built for the Cold War have survived into the 21st century, and illustrates how America's nearly unshakable belief in the utility of nuclear arms has hindered US and international attempts to slow the nuclear programs of volatile regimes in North Korea and Iran. (SECURITY * NUCLEAR WEAPONS OUESTIONED)

Does Regulation Kill Jobs? Edited by Cary Coglianese (Prof of Law, University of Pennsylvania), Adam M. Finkel (Executive Director, Penn Program on Regulation), and Christopher Carrigan (Asst Prof of Public Policy, George Washington University). Philadelphia: University of Pennsylvania Press, Jan 2014, 312p, \$49.95 (also as e-book). As millions of Americans struggle to find work in the wake of the Great Recession, politicians from both parties look to regulation in search of an economic cure. Some claim that burdensome regulations undermine private sector competitiveness and job growth, while others argue that tough new regulations actually create jobs at the same time that they provide other benefits. Individual regulations can at times induce employment shifts across firms, sectors, and regions—but regulation overall is neither a prime job killer nor a key job creator. The challenge for policymakers is to look carefully at individual regulatory proposals to discern any job shifting they may cause and then to make regulatory decisions sensitive to anticipated employment effects. Contributors recommend methods for obtaining better estimates of job impacts when evaluating regulatory costs and benefits, and assess possible ways of reforming regulatory institutions and processes to take better account of employment effects in policy decision-making, (REGULATION AND JOB-CREATION* WORK* GOVERNMENT AND EMPLOYMENT IN THE U.S.)

Human Rights and Disability Advocacy. Edited by Maya Sabatello (Center for Global Affairs, New York University) and Marianne Schulze (Human Rights Consultant, Vienna). Philadelphia: University of Pennsylvania Press, Oct 2013, 320 pages, \$59.95 (also as e-book). The United Nations adoption of the Convention on the Rights of Persons with Disabilities (CRPD) constituted a paradigm shift in attitudes and approaches to disability rights, marking the first time in law-making history that persons with disabilities participated as civil society representatives and contributed to the drafting of an international treaty. On the way, they brought a new kind of diplomacy forward: empowering nongovernmental stakeholders, including persons with disabilities, within human rights discourse. Presents perspectives from individual representatives of the Disabled People's Organizations (DPOs), nongovernmental organizations (NGOs), indigenous peoples' organizations, states, and national institutions that played leading roles in the Convention's drafting process. Essays describe the nonnegotiable key issues for which they advocated, the extent of success in reaching their goals, and insights into the limitations they faced. (HUMAN RIGHTS AND DISABILITY RIGHTS)

Representation: Elections and Beyond. Edited by Jack H. Nagel (Prof Emeritus of Pol Sci, University of Pennsylvania) and Rogers M. Smith (Distinguished Prof of Pol Sci, University of Pennsylvania). Philadelphia: University of Pennsylvania Press, 2013, 352p, \$75 (also as e-book). In any democracy, the central problem of governance is how to inform, organize, and represent the opinions of the public in order to advance three goals: 1) popular control over leaders, 2) equality among citizens, and 3) competent governance. Voting is

emphasized as the central and essential process in achieving these goals. International scholars explore the 21st century innovations—in voting laws and practices, in electoral systems, in administrative, political, and civil organizations, and in communication processes and new technologies—that are altering how we understand democratic representation. Topics include traditional core elements of democratic representation, such as voting, electoral systems, and political parties, as well as the ways in which beliefs and preferences of citizens are influenced, expressed, and aggregated, and the effects of those methods and practices on political agendas and policy outcomes. (GOVERNMENT AND REPRESENTATION* DEMOCRACY AND VOTING* ELECTIONS: 21ST CENTURY INNOVATIONS)

Sex and International Tribunals: The Erasure of Gender from the War Narrative. Chiseche Salome Mibenge (faculty of international humanitarian law and human rights, CUNY Lehman College). Philadelphia: University of Pennsylvania Press, 2013, 248p, \$55 (also as e-book). In many cases, a single rape conviction constitutes sufficient proof that gender-based violence has been mainstreamed into the prosecution of war crimes. Mibenge, a former human rights consultant in Africa, identifies cultural assumptions behind the legal profession's claims to impartiality and universality and closely examines legal definitions of forced marriage, sexual enslavement, and the conscription of children that overlook the gendered experiences of armed conflict beyond the mass rape of women and girls. (JUSTICE AND GENDER* GENDER AND INTERNATIONAL TRIBUNALS)

3. Russell Sage Foundation: Spring 2014

Private Equity at Work: When Wall Street Manages Main Street. Eileen Applebaum (Senior Economist, Center for Economic and Policy Research, Washington; Visiting Prof, University of Leicester, UK), and Rosemary Batt (Prof of Women and Work, Industrial and Labor Relations School, Cornell University). NY: Russell Sage Foundation, May 2014, 396p, \$35pb. Private equity firms have long been at the center of public debates on the impact of the financial sector on Main Street companies. Are these firms financial innovators that save failing businesses, or financial predators that bankrupt otherwise healthy companies and destroy jobs? Appelbaum and Batt evaluate original case studies and interviews, legal documents, bankruptcy proceedings, media coverage, and existing academic scholarship to assess the effects of private equity on American businesses and workers. While private equity firms have had positive effects on the operations and growth of small and mid-sized companies and in turning around failing companies, the interventions of private equity more often than not lead to significant negative consequences for many businesses and workers. Concludes with policy recommendations to curb the negative effects of private equity while preserving its constructive role in the economy. (PRIVATE EQUITY FIRMS SCRUTINIZED* FINANCIAL INSTITUTIONS)

What Works for Workers? Public Policies and Innovative Strategies for Low-Wage Workers. Edited by Stephanie Luce (Assoc Prof of Labor Studies, CUNY School for Professional Studies), Jennifer Luff (Lecturer of History, Durham University), Joseph A. McCartin (Prof of History, Georgetown University), and Ruth Milkman (Prof of Sociology, CUNY Graduate Center). NY: Russell Sage Foundation, Jan 2014, 364p, \$47.50pb. The majority of new jobs created in the United States today are low-wage jobs, and a fourth of the labor force earns no more than poverty-level wages. Policymakers and citizens alike

agree that declining real wages and constrained spending among such a large segment of workers imperil economic prosperity and living standards for all Americans. Though many policies to assist low-wage workers have been proposed, there is little agreement across the political spectrum about which policies actually reduce poverty and raise income among the working poor. A group of social scientists evaluate the most high-profile strategies for poverty reduction, including innovative "living wage" ordinances, education programs for African American youth, and better regulation of labor laws pertaining to immigrants. Key issues include 1) labor unions' chance to reclaim their historic redistributive role if they move beyond traditional collective bargaining and establish new ties with other community actors; 2) the Affordable Care Act, which will substantially increase insurance coverage for low-wage workers; 3) living wage that do not cover most low-wage workers; 4) California's paid family leave program. (WORK* POVERTY AND LOW WAGES* LOW-WAGE WORKERS)

Restoring Opportunity: The Crisis of Inequality and the Challenge for American Education. Greg J. Duncan (Distinguished Prof of Education, University of California, Irvine), and Richard J. Murnane (Prof of Education and Society, Harvard Graduate School of Education). Cambridge MA: Harvard Education Press and NY: Russell Sage Foundation, Jan 2014, 200p, \$26.95pb. In a time of spiraling inequality, strategically targeted interventions and supports can help schools significantly improve the life chances of low-income children. The authors offer a synthesis of recent research on inequality and its effects on families, children, and schools. They present proven initiatives that are transforming the lives of low-income children from prekindergarten through high school. All featured programs are research-tested and have demonstrated sustained effectiveness over time and at significant scale. (EDUCATION AND INEQUALITY * INEQUALITY AND SCHOOLS)

4. Rowman & Littlefield: Spring 2014

Privacy in the Age of Big Data: Recognizing Threats, Defending Your Rights, and Protecting Your Family. Theresa M. Payton (White House Chief Information Officer, 2006-2008; founder, Fortalice, LLC) and Ted Claypoole (Technology attorney, leader, Privacy and Data Management team, Womble Carlyle). Lanham MD: Rowman & Littlefield, Jan 2014, 276p, \$35 (also as e-book). The devices we use to get just-in-time coupons, directions when we're lost, and maintain connections with loved ones no matter how far away, also invade our privacy in ways we might not even be aware of. Our devices send and collect data about us whenever we use them, but that data is not safeguarded the way we assume it would be. Many of us do not know the full extent to which data is collected, stored, aggregated, and used. We are subject to a level of data collection and surveillance never before imaginable. Highlights the many positive outcomes of digital surveillance and data collection while also outlining those forms of data collection to which we may not consent, and of which we are likely unaware. Suggests the tools, behavior changes, and political actions we can take to regain data and identity security. (BIG DATA* PRIVACY AND COMMUNICATIONS)

The Rise of the U.S. Environmental Health Movement. Kate Davies (Antioch University Seattle Center for Creative Change and Clinical Assoc, Prof, School of Public Health, University of Washington). Lanham MD: Rowman & Littlefield, March 2013, 280p, \$38 (also as e-book). Born in 1978 when Lois Gibbs organized her neighbors to protest the

health effects of a toxic waste dump in Love Canal, New York, the movement has spread across the United States and throughout the world. By placing human health at the center of its environmental argument, this movement has achieved many victories in community mobilization and legislative reform. Davies describes the movement's historical, ideological, and cultural roots, analyzes its strategies and successes, and focuses on ways toxic chemicals and other hazardous agents in the environment affect human health and well-being. (HEALTH AND ENVIRONMENT * ENVIRONMENTAL HEALTH MOVEMENT)

The Handbook of Environmental Health. Frank R. Spellman and Melissa L. Stoudt. Lanham MD: Scarecrow Press, Feb 2013, 424p, \$100 (also as e-book). Environmental issues, global warming, pollution, and chemical dumping are ever present in the news. But what about the health problems these issues pose? Spellman and Stoudt identify the hazardous environmental issues and explain the science behind the dangers to our health. They also provide solutions to control the factors that harm our health. The introduction defines environmental health, its concerns, and the consequences of contamination. Topics include ecology, toxicology, epidemiology, food-borne disease, vector-borne disease, air quality, water quality, radiation, and occupational health. Each chapter begins with a vignette illustrating a problem, followed by key concepts of the topic, discussion questions, and a bibliography. (HEALTH AND ENVIRONMENT* ENVIRONMENTAL HEALTH)

The End of Authority: How a Loss of Legitimacy and Broken Trust Are Endangering Our Future. Douglas E. Schoen. Lanham MD: Rowman & Littlefield, 2014, 268p, \$26 (also as e-book). A political analyst, pollster, and commentator argues that, around the world, citizens have lost faith in their political and economic institutions—leading to unprecedented levels of political instability and economic volatility. From Moscow to Brussels, from Washington to Cairo, the failure of democracies and autocracies to manage the fiscal and political crises facing us has led to a profound disquiet, spawning protest movements of the left, right, and center. Schoen analyzes the leadership crises facing democracies and autocratic governments alike; assesses why this collapse in trust happened; and offers a blueprint for how we can restore public trust in government and economic institutions in a world of division, dissension, and governments clearly lacking in responsiveness to citizen concerns. Also offers practical steps to fix democracy and rebuild international institutions. (DEMOCRACY AND TRUST* GOVERNMENT AND BROKEN TRUST)

The Small Nation Solution: How the World's Smallest Nations Can Solve the World's Biggest Problems. John H. Bodley (Regents Prof of Anthropology, Washington State University). Lanham MD: AltaMira Press, May 2013, 314p, \$45. Argues that many contemporary global problems can be mitigated—even resolved—by reshaping the political and economic order. Central to this is the issue of scale: "Small nations can solve human problems because they are the right size, because they have the right priorities, and because if they grow too large they can segment rather than concentrate social power." Ten million people is the rough upper limit for small nations. In documenting his solution to all manner of ills, Bodley embarks on a global tour that ranges from Scandinavia to Costa Rica, and from indigenous communities in the Americas to island peoples in the Caribbean and Pacific. A society's size, he believes, is more important than levels of technology or ideological detail. That small societies offer advantages, particularly that of propinquity, is unquestionable, but

many of the relatively small states that Bodley cites also have a long history of democratic governance. (GOVERNMENT* SMALL NATIONS)

Freedom in the World 2013: The Annual Survey of Political Rights and Civil Liberties. Freedom House (Washington). Lanham MD: Rowman & Littlefield, Jan 2014, 894p, \$55pb (also as e-book). The Freedom House flagship survey, whose findings have been published annually since 1972, is the standard-setting comparative assessment of global political rights and civil liberties. The survey ratings and narrative reports on 195 countries and 14 territories are used by policymakers, the media, international corporations, civic activists, and human rights defenders to monitor trends in democracy and track improvements and setbacks in freedom worldwide. The political rights and civil liberties ratings are determined through a multi-layered process of research and evaluation by a team of regional analysts and eminent scholars. The analysts used a broad range of sources of information, including foreign and domestic news reports, academic studies, nongovernmental organizations, think tanks, individual professional contacts, and visits to the region. The methodology of the survey is derived in large measure from the Universal Declaration of Human Rights, and these standards are applied to all countries and territories, irrespective of geographical location, ethnic or religious composition, or level of economic development. The key finding: "The state of freedom declined for the eighth consecutive year in 2013," notably in Egypt, Russia, Ukraine, and Turkey. Overall, 54 countries showed decline, while 40 countries showed gains. Notes development of "modern authoritarianism," to cripple political opposition and flout the law. (GOVERNMENT* DEMOCRACY* FREEDOM IN THE WORLD SURVEY)

Nations in Transit 2013: Democratization from Central Europe to Eurasia. Freedom House (Washington) Lanham MD: Rowman & Littlefield, Dec 2013, 634p, \$90pb. Since 1995, this series has monitored the status of democratic change from Central Europe to Eurasia, pinpointing the region's greatest reform opportunities and challenges for the benefit of policymakers, researchers, journalists, and democracy advocates. Covering 29 countries, Nations in Transit provides comparative ratings and in-depth analysis of electoral process, civil society, independent media, national and local democratic governance, judicial framework, and corruption. The 2013 edition evaluates developments in these areas from January 1 to December 31, 2012. This report plays a critical role in monitoring democratic progress in Central and Eastern Europe and the former Soviet Union and seeks to sound an early warning to policymakers. (DEMOCRACY IN CENTRAL EUROPE/EURASIA* REGIONS AND NATIONS)

5. Polity Press 2013

Sustainability. Leslie Paul Thiele (Prof of Political Science and Director of Sustainability Studies, University of Florida). Cambridge, UK: Polity Books, April 2013, 242p, \$22.95pb (also as e-book). Provides a broad-ranging introduction to the concept and practice of sustainability today. Addresses the history, scope, and contested meanings of sustainability as an ethical ideal, an ascendant ideology, and a common sense approach to living in an ever more crowded world of increasingly scarce resources. Key topics include environmental health and ecological resilience, the promise and unintended consequences of technology, political and legal challenges, economic limits and opportunities, and cultural change. Sustainability

requires innovation and adaptation as much as the conservation of resources. It increasingly provides a common language and goal for diverse peoples and nations. Yet the meaning of sustainability remains unsettled. (SUSTAINABILITY OVERVIEW)

Theories of Globalization. Barrie Axford (Oxford Brookes University). Cambridge, UK: Polity Books, Oct 2013, 240p, \$26.95pb. This comprehensive and critical introduction to the concept of globalization draws out the common threads between competing theories, as well as pinpointing the problems that challenge our understanding of globalization. Explains key terms such as 'globalism' and 'globality', and explores central themes like capitalism, governance, culture and history. Axford's account also sheds new light on several crucial current issues: 1) the changing shape of democracy, citizen engagement, governance, 2) issues surrounding 'just war' and humane intervention, and 3) problems relating to empire and post-colonialism. (GLOBALIZATION: THEORIES AND ISSUES)

Global Energy Dilemmas. Michael Bradshaw (Prof of Global Energy, Warwick Business School; Prof of Human Geography, University of Leicester). Cambridge, UK: Polity Books, Nov 2013, 240p, \$26.95pb. Today's global energy system faces two major challenges: how to secure the supply of reliable and affordable energy; and how to rapidly transform to a low-carbon, efficient, and environmentally harmless energy supply. Bradshaw explores the key aspects of the current global energy dilemma and examines how it is playing out across the major regions and countries of the world. Topics include: 1) development of the current global energy system (with a focus on energy security and the relationship between energy, economic development and climate change); and 2) four distinct global energy dilemmas in different parts of the world. *Developed World:* the challenge of sustaining affluence and decarbonising energy services in their high-energy economies. *Post-Socialist World:* facing the legacies of the centrally planned economy and the consequences of liberalization. *Emerging Regions:* meeting growing energy demand and coping with emissions growth. *Developing World:* providing universal access to modern energy services in a manner that is both economically and environmentally sustainable. (ENERGY* GLOBAL ENERGY DILEMMAS)

Climate Governance in the Developing World. David Held (Durham University), Charles Roger (University of British Columbia) and Eva-Maria Nag (London School of Economics and Political Science). Cambridge, UK: Polity Books, Aug 2013, 272p, \$24.95pb. Since 2009, a diverse group of developing states that includes China, Brazil, Ethiopia and Costa Rica has been advancing unprecedented pledges to mitigate greenhouse gas emissions, offering new, unexpected signs of climate leadership. These targets are now even more ambitious than those put forward by their wealthier counterparts. But what really lies behind these new pledges? What actions are being taken to meet them? And what stumbling blocks lie in the way of their realization? The authors map the evolution of climate policies in each country and examine the complex array of actors, interests, institutions and ideas that has shaped their approaches to reveal the political, economic and environmental realities that underpin the pledges made by developing states, and which together determine the chances of success and failure. (CLIMATE GOVERNANCE* DEVELOPING STATES AND CLIMATE POLICY)

The End of the American Century: From 9/11 to the Arab Spring. David Held (Master of University College and Prof of Politics and International Relations, Durham University)

and Kristian Coates Ulrichsen (London School of Economics and Political Science). Cambridge, UK: Polity Books, Dec 2013, 144p, 14.95pb. Addresses the major issues at the heart of a decade of transition-- from the terrorist attacks on September 11, 2001 to the onset of the Arab Spring. Documents the great rebalancing of the international order and anchors it in the context of intense globalizing processes and complex global challenge. (AMERICAN CENTURY AT END)

The Global Development Crisis. Ben Selwyn (Senior Lecturer in International Relations, University of Sussex). Cambridge, UK: Polity Books, March 2014, 224p, \$24.95pb. The central paradox of the contemporary world is the simultaneous presence of wealth on an unprecedented scale, and mass poverty. Liberal theory explains the relationship between capitalism and poverty as one based around the dichotomy of inclusion (into capitalism) vs exclusion (from capitalism). Within this discourse, the global capitalist system is portrayed as a sphere of economic dynamism and as a source of developmental opportunities for less developed countries and their populations. Development policy should, therefore, seek to integrate the poor into the global capitalist system. In response, Selwyn argues that class relations are the central cause of poverty and inequality within and between countries, and advocates the concept of labor-centered development. (DEVELOPMENT CRISIS)

Gridlock: Why Global Cooperation is Failing When We Need It Most. Thomas Hale (University of Oxford), David Held (Durham University), and Kevin Young (University of Massachusetts-Amherst). Cambridge, UK: Polity Books, Aug 2013, 368p, \$26.95pb (also as e-book). To manage the global economy, prevent runaway environmental destruction, reign in nuclear proliferation, or confront other global challenges, we must cooperate. But at the same time, our tools for global policymaking--chiefly state-to-state negotiations over treaties and international institutions--have broken down. The result is gridlock, which manifests across areas via a number of common mechanisms. The rise of new powers representing a more diverse array of interests makes agreement more difficult. Examines these mechanisms of gridlock and pathways beyond them. (GLOBAL GRIDLOCK* WORLD GOVERNANCE BREAKDOWN)

6. Lynne Rienner Publishers: 2013-14

Responding to Genocide: The Politics of International Action. Adam Lupel (Senior Fellow, International Peace Institute) and Ernesto Verdeja (Asst Prof of Pol Sci and Peace Studies, University of Notre Dame). Boulder, CO: Lynne Rienner, June 2013, 299p, \$22pb. What are the causes of genocide and mass atrocities? How can we prevent these atrocities or, when that is no longer possible, intervene to stop them? What are the impediments to timely and robust action? In what ways do political factors shape the nature, and results, of international responses? The authors explore these questions, examining the many challenges involved in forging effective international policies to combat genocidal violence. Topics include: Genocide Definitions; Causes of Civil War and Genocide; Detection and Early Warning; Mediation and Diplomacy in Preventing Genocide; The Role of Transnational Civil Society; Role of Regional Organizations; Role of the UN Security Council; Politics, the U.N., and the Halting of Mass Atrocities; and Developing the Political Will to Respond. (GENOCIDE* WORLD GOVERNANCE AND GENOCIDE)

Annual Review of Global Peace Operations, 2013. Center on International Cooperation (New York University). Boulder, CO: Lynne Rienner, Aug 2013, 475p (8 1/2" x 11"), \$27.50pb. Provides comprehensive information on all current military and civilian peace operations (more than 130 missions), launched by the United Nations, by regional organizations, and by coalitions. Presents the most detailed collection of data on peace operations available. The 2013 volume includes: 1) an analysis of the strategic and political implications of shifting trends in conflict for the leadership of both civilian and military peace operations; 2) a review of the deterrent effect of peace operations; 3) a summary analysis of trends and developments in peace operations in 2012; 3) concise analyses of all peacekeeping and political missions on the ground in 2012; 4) in-depth explorations of key missions, focusing on those that faced significant challenges or underwent major developments in 2012; 5) extensive full-color maps, figures, and photographs. (SECURITY* GLOBAL PEACE OPERATIONS)

Prohibiting Chemical and Biological Weapons: Multilateral Regimes and Their Evolution. Alexander Kelle (Senior Policy Officer, Office of Strategy and Policy, Organisation for the Prohibition of Chemical Weapons). Boulder, CO: Lynne Rienner, Oct 2013, 287p, \$63. Whether in the arsenals of states or of terrorist groups, chemical and biological weapons (CBW) are increasingly seen as one of the major threats to global security. Assesses the multilateral prohibition regimes that have been established to confront the risks posed by CBW in the context of rapid scientific and technological advances. Topics covered include: Institutionalism and the CBW Prohibition Regimes; Chemical and Biological Weapons; The Biological Weapons Prohibition Regime; The Chemical Weapons Prohibition Regime; Export Controls and International Cooperation; Terrorism with Chemical and Biological Weapons; Complementing the Multilateral Conventions; and Science, Policy, and Institutional Change. (SECURITY* CHEMICAL AND BIOLOGICAL WEAPONS)

US National Security: Policymakers, Processes, and Politics (5th Edition). Sam C. Sarkesian (Prof Emeritus of Pol Sci, Loyola University, Chicago), John Allen Williams (Prof of Pol Sci, Lovola University; Chair and President, Inter-University Seminar on Armed Forces and Society), and Stephen J. Cimbala (Distinguished Prof of Pol Sci, Pennsylvania State University-Brandywine Campus). Boulder, CO: Lynne Rienner, 2013, 347p, \$26.50pb. The 5th edition has been updated to reflect challenges faced by the Obama administration: the choices necessary in an increasingly budget-constrained environment, the broader range of national security issues, and the evolving nature of counterinsurgency doctrine and practice. Sections discuss 1) The National Security Context (Who's Who in the International System; The Conflict Spectrum; National Security, Nuclear Weapons, and Arms Control; The US Political System); 2) The National Security Establishment (The President and the Presidency; The Policy Triad and the National Security Council; The Military Establishment; The Intelligence Establishment); 3) The National Security System and the Policy Process (The Policy Process; The President and Congress; Empowering the People; Civil-Military Relations); 4) Looking to the Future (Long-Range Issues of National Security; Making the System Work). (U.S. NATIONAL SECURITY* SECURITY)

Introducing Global Issues (5th edition). Edited by Michael T. Snarr (Assoc Prof of Social and Political Studies, Wilmington College) and D. Neil Snarr (Prof Emeritus of Sociology, Wilmington College). Boulder, CO: Lynne Rienner, 2012, 371p, \$26.50. The conflict in

Libya, concerns over Iran's nuclear program, the global recession, debates about climate change, the importance of human security, and the growing impact of technology all are reflected in this revised and updated edition. Covers the full range of global issues, from conflict and security, to the economy and economic development, to the environment. Each chapter provides an analytical overview of the issues addressed, identifies the central actors and perspectives, and outlines past progress and future prospects. Discussion questions are posed to enhance students' appreciation of the complexities involved, and suggestions for further reading additionally enrich the text. (GLOBAL ISSUES TEXTBOOK* WORLD FUTURES)

Will This Be China's Century? A Skeptic's View. Mel Gurtov (Prof Emeritus of Pol Sci, Portland State University; Editor in chief, *Asian Perspective*). Boulder, CO: Lynne Rienner, 2013, 205p, \$19.95pb. Gurtov takes issue with the widespread view that China is on the way to rivaling or even displacing the United States as the dominant world power. Serious constraints will keep the country's leadership focused for the foreseeable future on challenges at home. China's economic rise has exacerbated problems of social inequality, environmental degradation, official corruption, and more—and its military capabilities and ambitions are far more limited than many observers have suggested. The most productive US policy will be one of engagement on issues of common concern, rather than confrontation or containment. [NOTE: For an extensive review, see GlobalForesightBooks.org Book of the Month, Dec 2013.] (THE U.S. AND CHINA * CHINA'S CENTURY?)

Debating Human Rights. Daniel P. L. Chong (Asst Prof of Pol Sci, Rollins College). Boulder, CO: Lynne Rienner, April 2014, 277p, \$25 (textbook binding). Even as human rights provide the most widely shared moral language of our time, they also spark highly contested debates among scholars and policymakers. When should states protect human rights? Does the global war on terror necessitate the violation of some rights? Are food, housing, and health care valid human rights? Chong examines 14 controversies in the field and presents the major arguments on both sides of each debate. Designed for classroom use, the structure of the book makes it easy for students to become familiar with the major political and legal actors in the global human rights system and to understand the practical challenges of protecting civil, political, social, and economic rights. (HUMAN RIGHTS DEBATES: TEXTBOOK)

Exploring the Global Financial Crisis. Edited by Alan W. Cafruny (Prof of International Affairs, Hamilton College) and Herman M. Schwartz (Prof of Politics, University of Virginia). Boulder, CO: Lynne Rienner, 2013, 263p, \$59.95. Have the financial crisis of 2008 and the subsequent recession rearranged the basic structures of the global economy? To answer that fundamental question, the authors tackle a number of related questions: What has happened to global flows of people, goods, and capital? Will the euro and the dollar persist as global currencies? Can governments that bailed out failing banks by vastly expanding public debt manage to regain solvency, and at what political cost? Both mainstream and critical views on the central issues involved are presented. (ECONOMIC CRISIS* GLOBAL FINANCIAL CRISIS)

Development and Underdevelopment: The Political Economy of Global Inequality (5th edition). Edited by Mitchell A. Seligson (Prof of Pol Sci, Vanderbilt University) and

John T Passé-Smith (Prof of Pol Sci, University of Central Arkansas). Boulder, CO: Lynne Rienner, 2013, 461p, \$28.50pb. This edition includes 14 new chapters that look even more deeply at long-term factors that help to explain the origins and current trends in the gap between rich and poor. An entirely new section focuses on natural resource and environmental issues, and the appendix of wealth and inequality indicators has been fully revised. A short introduction to each selection highlights its significance. Topics include the gap between rich and poor countries, historical origins of the gap, income inequality within nations, different views on convergence or divergence, culture and underdevelopment, world systems theory and dependency, what makes countries rich or poor, the natural resource curse, and climate change and economic growth. (DEVELOPMENT* GLOBAL INEQUALITY)

Humane Migration: Establishing Legitimacy and Rights for Displaced People. Christine G.T. Ho (School of Human and Organization Development, Fielding Graduate University) and James Loucky (Prof of Anthropology, Western Washington University). Boulder CO: Kumarian Press/Lynne Rienner, 2012, 215p, \$24.95pb. Arguing that migration should be considered a human right, not a criminal act, the authors discuss why groups migrate, the obstacles that they face, and the benefits that they bring to their adopted communities. They also explore the impact of the anti-immigration rhetoric that is prevalent in the United States, Canada, and Europe. Topics include: The Humanity of Migration, Why Migration Happens during globalization, The Global Immigration Panic, Criminalizing Migrants and Containing Migration, Learning From Others and Living With Others, the Right to Move, and The Right to Be. (HUMANE MIGRATION* MIGRATION AND HUMAN RIGHTS)

Curtailing Corruption: People Power for Accountability and Justice. Shaazka Beyerle (Senior Adviser, International Center on Nonviolent Conflict and visiting scholar, Center for Transatlantic Relations, Johns Hopkins University). Boulder, CO: Lynne Rienner, July 2014, 325p, \$25pb. How do citizens counter corruption and exact accountability from power holders? What strategic value does people power bring to the anticorruption struggle? Can bottom-up, citizen-based strategies complement and reinforce top-down anticorruption efforts? Beyerle explores how millions of people around the world have refused to be victims of corruption and become instead the protagonists of successful nonviolent civic movements to gain accountability and promote positive political, social, and economic change. Chapters discuss The Anti-Corruption Paradigm Shift, Approaches to Curbing Corruption, Blacklisting Corrupt Candidates in Korea, Digital Resistance for Clean Politicians in Brazil, Citizens Protecting an Anticorruption Commission in Indonesia, Nonviolent Resistance Against the Mafia in Italy, Community Monitoring for Postwar Transformation in Afghanistan, Citizens Against Corruption in India, Curbing Police Corruption in Uganda, etc. (CORRUPTION AND GOVERNANCE* ANTI-CORRUPTION: CITIZEN STRATEGIES)

7. Polity/Environmental Studies: 2012

The Governance of Climate Change. Edited by David Held (Prof of Political Science, London School of Economics and Political Science), Marika Theros (Research Officer, LSE Global Governance), and Angus Fane-Hervey (Ph.D. Candidate, London School of Economics and Political Science). Cambridge UK: Polity Books, April 2011, 256p, \$24.95pb (also as e-book). How should we manage the types of risk posed by anthropogenic climate

change? The problem is multi-faceted, and involves not only technical and policy-specific approaches, but also questions of social justice and sustainability. Contributors examine the intersection between the science, politics, economics and ethics of climate change, offer a critical new approach to thinking about climate change, and help express a common desire for a more equitable society and a more sustainable way of life. (CLIMATE CHANGE GOVERNANCE)

Disasters Without Borders: The International Politics of Natural Disasters. John Hannigan (Prof of Sociology, University of Toronto). Cambridge, UK: Polity Books, Oct 2012, 256p, \$24.95pb (also as e-book). Dramatic scenes of devastation and suffering caused by disasters, such as the 2011 Japanese earthquake and tsunami, are viewed with shock and horror by millions across the world. The less visible international politics of disaster aid, mitigation and prevention condition the collective response to natural catastrophes around the world. Hannigan argues that the global community of nations has failed time and again in establishing an effective and binding multilateral mechanism for coping with disasters, especially in the more vulnerable countries of the South. Tracing the historical evolution of this policy field from its humanitarian origins in WWI to current efforts that cast climate change as the prime global driver of disaster risk, Hannigan highlights the ongoing mismatch between the way disaster has been conceptualized and the institutional architecture in place to manage it. The confluence of four emerging trends – politicization/militarization, catastrophic scenario building, privatization of risk, and quantification-- could create a new system of disaster management wherein 'insurance logic' will replace humanitarian concern as the guiding principle. (DISASTER POLITICS * DISASTER MITIGATION/ PREVENTION)

8. Transaction: Spring-Summer 2014

Mandate Madness: How Congress Forces States and Localities to Do Its Bidding and Pay for the Privilege. James T. Bennett (Prof of Economics, George Mason University; founder and editor, *Journal of Labor Research*). Piscataway NJ: Transaction Publishers, May 2014, 301p, \$39.95pb (also as e-book). What do drivers' licenses that function as national ID cards, nationwide standardized tests for third graders, the late unlamented 55 mile per hour speed limit, the outlawing of the eighteen-year-old beer drinker, and the disappearing mechanical lever voting machine have in common? Each is the product of an unfunded federal mandate: a concept that politicians of both parties profess to oppose in theory but which in practice they often find irresistible as a means of forcing state and local governments to do their bidding, while paying for the privilege. Explores the history, debate, and political gamesmanship surrounding unfunded federal mandates, examines legislative efforts to rein in or repeal unfunded federal mandates, and reviews the treatment of unfunded mandates by the federal courts. (GOVERNMENT * FEDERAL MANDATES QUESTIONED)

Hatred, Lies, and Violence in the World of Islam. Raphael Israeli (Prof of Islamic, Chinese, and Middle Eastern History, Hebrew University). Piscataway NJ: Transaction Publishers, June 2014, 358p, \$39.95 (also as e-book). Examines the flood of anti-Israeli, anti-Jewish, and anti-Zionist propaganda that permeates many Muslim societies, and locates the source of this anti-Semitic sentiment in the inadequacies and insecurities of Muslim states. By demonizing and delegitimizing Israel and Jews, Israeli claims, they seek to eliminate a

successful counterexample of their own failures, thus putting an end to their own "humiliation." Case-studies illustrate the premises of this study: the Palestinians, who have a direct stake in battling Israel; Turkey, which now claims leadership of the Arab and Sunni Muslim worlds; and Shi'ite Iran, which provides a more extreme example of both hatred and disregard for fact and history while threatening to destroy Israel. (ANTI-SEMITISM* MUSLIM STATES * MIDDLE EAST)

Totalitarianism, Globalization, Colonialism: The Destruction of Civilization since 1914. Harry Redner (Reader, Monash University, Australia; Former Visiting Professor, Yale University, University of California–Berkeley, and Harvard University). Piscataway NJ: Transaction Publishers, May 2014, 353p, \$44.95 (also as e-book). The century that began in 1914 with the outbreak of the First World War has been catastrophic. Over the course of that one-hundred year span, civilizations were destroyed in the Old World, the New World, and the Third World, the latter represented by China, India, and Islam. In Europe the main agent of destruction was totalitarianism; in America it was globalization, ushered in by modernity; and in the non-Western world it was colonialism, followed later by totalitarianism and globalization. Redner examines each of these processes, providing theoretical and historical accounts of their emergence. In the midst of unprecedented material affluence and organizational efficiency, one that uses advanced technologies and cutting-edge scientific knowledge, we are also sinking into an unprecedented cultural, moral, intellectual, and spiritual decline. (CIVILIZATION DESTROYED IN 20TH CENTURY* WORLD FUTURES* TOTALITARIAN* GLOBALIZATION* COLONIALISM)

Environment Reporters in the 21st Century. David B. Sachsman (Chair of Excellence in Communication and Public Affairs, University of Tennessee-Chattanooga), James Simon (Chair and Prof of English, Fairfield University), and JoAnn Meyer Valenti (Fellow, American Association for the Advancement of Science). Piscataway NJ: Transaction Publishers, April 2010, 256p, \$45.95 (pb edition, June 2014, \$24.95; also as e-book). Explores development of the environmental beat as a specialty during the last 30 years, and discusses broader trends within American journalism resulting from technological changes that challenge traditional mediums, especially newspapers and magazines. The authors review the literature, describe the results of their research, and provide in-depth accounts of environment reporters at work. Journalists mediate the constant struggle among thousands of scientists, environmental activist, corporate public relations people, and government officials. (ENVIRONMENTAL JOURNALISTS* JOURNALISM AND THE ENVIRONMENT)

Government Abuse: Fraud, Waste, and Incompetence in Awarding Contracts in the United States. William Sims Curry (Fellow, National Contract Management Association). Piscataway NJ: Transaction Publishers, May 2014, 249p, \$54.95 (also as e-book). A certified professional contracts manager writes that government contracting is plagued by nefarious, amateurish, and criminal behavior. By awarding government contracts to corporations as compensation for lavish gifts and personal favors, the United States government fails to serve the public interest effectively and honestly. Curry identifies and categorizes multiple deficiencies in how government contractors are selected, and proposes how reforms can be instituted. Since much abuse originates from the mandated but ineffective practice of color coding rating proposals and a subjective ratings system, Curry calls for replacing the current practice with a scoring system that weighs contractor selection criteria according

to government needs. (GOVERNMENT CONTRACTING FRAUD* CONTRACTING REFORM NEEDED)

Globalization: Interdependencies & Coordination. Jan-Erik Lane (Prof of Comparative Politics, University of Umea, University of Oslo, and University of Geneva). Piscataway NJ: Transaction Publishers, July 2014, 376p, \$59.95 (also as e-book). Efforts at coordination between nations are at the heart of the challenges of globalization. Despite steadily growing interdependencies, individual nations still have specific interests that present obstacles to globalization. Lane analyzes four kinds of challenges to interdependency, all of which are growing in geopolitical relevance: 1) countries need to diminish their dependency on fossil fuel and shift to a reliable supply of energy; 2) environmental degradation must be addressed, because it is accelerating under the strain of earth's population; 3) a single global market economy and its complexities must be addressed, as national economies are increasingly opened; and 4) as traditional state sovereignty weakens, foreign military intervention in both international and intra-state conflicts increases. Discusses international organizations and regionalism, reviews international law, warns against utopian hopes of global constitutionalism, and examines potential consequences of failing to address the need for coordination in efforts to address shared global challenges. (GLOBALIZATION: COORDINATION CHALLENGES* INTERDEPENDENCY AND GLOBALIZATION)

Sports, Peacebuilding and Ethics. Edited by Linda M. Johnston (Executive Director, Siegel Institute for Leadership, Ethics, and Character; Prof, Kennesaw State University; President, International Peace Research Association Foundation). Peace & Policy Series, Vol. 18. Piscataway NJ: Transaction Publishers, Feb 2014, 211p, \$40pb (also as e-book). Sports can be an effective mechanism for peacebuilding, especially when incorporated into conflict-resolution programs. Such programs have been designed to bring children together in post-conflict situations with an ultimate goal of reducing future violence. To examine their effectiveness, contributors look at various aspects of culture and how they can help shape sports programs; the role of a coach in creating a culture of peace, and how this culture can fit into a peacebuilding process; the role of sports in trauma relief programs in Rwanda; the role of universities in sports; and the role of sports in the demilitarization of child soldiers. (SPORTS AND PEACEBUILDING* SECURITY)

Green Energy Economies: The Search for Clean and Renewable Energy. Energy and Environmental Policy, Vol. 10. Edited by John Byrne (Distinguished Prof of Energy and Climate Policy, University of Delaware; Chairman of the Board, Foundation for Renewable Energy and Environment) and Young-Doo Wang (Assoc Director, Center for Energy and Environmental Policy, University of Delaware). Piscataway NJ: Transaction Publishers, May 2014, 381p, \$49.95pb (also as e-book). Discusses the major drivers that are shaping a new future powered by clean energy sources. Details the promises and problems of a green energy transition, explores the economic benefits that a comprehensive strategy toward a green energy economy might create, investigates how communities will be affected, suggests the social and cultural changes that are likely to result, and describes the shift toward new technologies. Concludes with policy options that support a transition to a better energy, environmental, and economic future. (GREEN ENERGY TRANSITION* RENEWABLE ENERGY)

Understanding Globalization: A Multi-Dimensional Approach. Kavous Ardalan (Prof of Finance, Marist College). Piscataway NJ: Transaction Publishers, June 2014, 301p, \$54.95 (also as e-book). Discusses eight dimensions of globalization—world order, culture, the state, information technology, economics, production, development, and Bretton Woods Institutions—from the perspective of four diverse sociological paradigms: functionalist, interpretive, radical humanist, and radical structuralist. Each of these four paradigms is founded on different assumptions about the nature of social science, and each one generates useful theories, concepts, and analytical tools. Ardalan's method facilitates distancing from one's favored paradigm and appreciating other approaches to view globalization through new eyes. (GLOBALIZATION: ALTERNATIVE VIEWS)

Seeking Balance: Philosophical Issues in Globalization and Policy Making. A. Pablo Iannone (Prof of Philosophy, Central Connecticut State University). Piscataway NJ: Transaction Publishers, July 2014, 360p, \$59.95 (also as e-book). Provides a taxonomy of globalization processes, investigates the consequences of each, and formulates a comprehensive approach for dealing with them. Focuses on concrete and current cases, from the global economic and financial issues posed by the multi-centered nature of contemporary business and technology, through the pressures of ever increasing information overload across the planet. Explores the environmental and social challenges associated with current Amazonian development and its significance to weather patterns on Earth. Iannone's approach, while based on theoretical concerns, is grounded in highly practical applications that are global in their implications. (GLOBALIZATION ISSUES)

9. Transaction: Fall-Winter 2013

From Arab Spring to Islamic Winter. Raphael Israeli (Prof of Islamic, Chinese, and Middle Eastern History, Hebrew University). Piscataway NJ: Transaction Publishers, Sept 2013, 338p, \$39.95 (also as e-book). The term "Arab Spring" associates the unrest with ideas of renewal, revival, and democratic thought and deed. While many hoped the overthrow of authoritarian leaders signaled a promising new beginning for the Arab world, Israeli argues that instead of paving a path toward liberal democracy, the Arab Spring in fact launched a power struggle. In Tunisia, Egypt, Yemen, Syria, and Libya, it appears that Islamic governments will fill the vacuum in leadership. It becomes increasingly clear that democratic outcomes are not on the horizon. The West seems to have abandoned its hopes for democracy and freedom in the region, instead making peace with the idea that Islamic governments must be accepted as the lesser of evil options. (MIDDLE EAST* ISLAMIC GOVERNMENTS)

Reflections on the Modern and the Global. Bruce Mazlish (Emeritus Prof of History, MIT; Fellow, American Academy of Arts and Sciences). Piscataway NJ: Transaction Publishers, Oct 2013, 170p, \$39.95 (also as e-book). Over the past 500 years, historians and other social scientists have perceived an extraordinary occurrence: the transition from the Middle Ages, via the Renaissance, to modernity. Equally remarkable has been the transition taking place in the last 50 years from modernity to globalization, a period marked by increasing interdependency and interconnectivity, as evidenced by events such as the advent of the computer. Mazlish sees modernity as strongly marked by its insistence on freedom of political and religious thought and the rights of man (later expanded to include women). Such changes did not happen all at once, but as a gradual development. While some prefer to

contemplate the transition from the modern to the global as a continuous, seamless development, Mazlish argues that post-WWII developments are best understood in terms of a break or a "rupture." The process was further accelerated by the computer revolution, the launching of artificial satellites, and the events of 1989. (WORLD FUTURES* MODERNITY * GLOBALIZATION)

Suspicious Gifts: Bribery, Morality, and Professional Ethics. Malin Åkerström (Prof of Sociology, Lund University, Sweden). Piscataway NJ: Transaction Publishers, Nov 2013, 208p, \$49.95 (also as e-book). Gifts have been given and received in all eras and societies; they are part of a universal human exchange. The importance of creating and sustaining social bonds with the help of gifts is widely acknowledged by social scientists, not only from anthropological but also from economic, sociological, and political science perspectives. Contemporary anti-corruption campaigns, however, have led gifts to be viewed with ever-increasing suspicion, because it is feared that the social bonds created by gift giving may contaminate professional decision-making. Investigates the sensitive issue of gift exchanges and how they become an object of contention; considers the moral dilemmas presented by bribes and gift giving as experienced by Swedish aid workers and professionals working in the public sector, business, and adoption agencies; and highlights the tensions between strict regulations designed to prevent corruption with the human affection for the institution of gift giving. (GIFTS AND BRIBERY* CORRUPTION* ETHICS)

A Treatise on Good Robots. Edited by Krzysztof Tchon (Professor of Automation and Robotics, Institute of Computer Engineering, Control and Robotics, Wroclaw University of Technology, Poland), and Wojciech W. Gasparski (Professor Emeritus of Humanities, Institute of Philosophy and Sociology, Polish Academy of Sciences, Warsaw). Piscataway NJ: Transaction Publishers, Dec 2013, 216p, \$59.95 (also as e-book). Robots will become involved not only in mundane domestic tasks such as washing dishes, but also in providing health care to the disabled and companionship to the elderly. Investigates the ways emerging technologies in the fields of robotics and bio-robotics are influencing society. Considers both philosophical and technological study of robots, including what it means for robots to exist as good and moral entities, and how they benefit humans and enhance their quality of life. Contributors address artificial intelligence and social functions as well as technical matters. (ROBOTICS AND SOCIETY* ARTIFICIAL INTELLIGENCE AND ETHICS)

Multi-Secularism: A New Agenda. Paul Kurtz (President, Prometheus Books and Prof Emeritus of Philosophy, State University of New York-Buffalo). Piscataway NJ: Transaction Publishers, March 2010, 271p, \$45.95 (pb. Edition, Jan 2014; also as e-book). The contemporary world is witness to an intense controversy about secularism. This controversy has intensified due to the presence of fundamentalism, which challenges secular society, and the secularization of philosophical ideas and ethical values. Secularists maintain that the state should not impose a religious creed upon citizens and should respect freedom of conscience, and the right to believe or disbelieve in the prevailing orthodoxy. Kurtz argues that secularism needs to be allied to the emergence of democratic institutions that respect individual freedom and the pluralistic society. A defense of secularism entails a defense of the civic virtues of democracy, which include toleration of dissent and alternative lifestyles and the willingness to negotiate differences. Secularism will take different forms in

different societies; the term multi-secularism best describes these forms. (SECULARISM EVOLVING* MULTI-SECULARISM)

Predicting the Unthinkable, Anticipating the Impossible: From the Fall of the Berlin Wall to America in the New Century. Georgie Anne Geyer (foreign correspondent; syndicated columnist, currently with Universal Press Syndicate). Piscataway NJ: Transaction Publishers, Dec 2013, 345p, \$29.95p (also as e-book; first published, in 2011). Geyer argues that during this era of "indispensable power" as the "greatest power the world has known," the United States actually had started on the road to decline. It had won the Cold War, but immediately embarked upon more Vietnam-like small wars of tremendous cost in Iraq and Afghanistan. Across the board, it is no longer paying its way, while its domestic culture is being vulgarized at every turn. Geyer explains how, when, and where these declines happened. [NOTE: This paperback edition includes a new preface by the author.] (AMERICAN PREEMINENCE CHALLENGED* AMERICAN DECLINE* WORLD FUTURES)

1. University of Chicago: Spring 2014

House of Debt: How They (and You) Caused the Great Recession, and How We Can Prevent It from Happening Again. Atif Mian (Prof of Economics and Public Policy, Princeton University) and Amir Sufi (Prof of Finance, University of Chicago School of Business). Chicago IL: University of Chicago Press, May 2014, 192p, \$26 (also as e-book). The Great American Recession resulted in the loss of eight million jobs between 2007 and 2009. More than four million homes were lost to foreclosures. The Great Recession and Great Depression, as well as the current economic malaise in Europe, were caused by a large run-up in household debt followed by a significantly large drop in household spending. Current policy is too heavily biased toward protecting banks and creditors. Increasing the flow of credit is disastrously counterproductive when the fundamental problem is too much debt. Excessive household debt leads to foreclosures, causing individuals to spend less and save more. Less spending means less demand for goods, followed by declines in production and huge job losses. We can end such a cycle with a direct attack on debt. More aggressive debt forgiveness after the crash helps, but we can be rid of painful bubble-and-bust episodes only if the financial system moves away from its reliance on inflexible debt contracts. The authors advocate new mortgage contracts that are built on the principle of risk-sharing. (ECONOMY* FINANCIAL CRISIS * DEBT AND RISK-SHARING)

Hope on Earth: A Conversation. Paul R. Ehrlich (Prof of Population Studies and President, Center for Conservation Biology, Stanford University) and Michael Charles Tobias (Ecologist, author, filmmaker, and President, Dancing Star Foundation). Chicago IL: University of Chicago Press, April 2014, 200p, \$20 (also as e-book). We are on the verge of environmental catastrophe, as the human population continues to grow without restraint and without significant attempts to deal with overconsumption and the vast depletion of resources and climate problems it creates. For Ehrlich and Tobias, ethics involve not only how we treat other people directly, but how we treat them and other organisms indirectly through our effects on the environment. The authors break down complex social problems and discuss many controversial topics such as circumcision, religion, reproduction, abortion, animal rights,

diet, and gun control. (ENVIRONMENTAL CATASTROPHE* OVERPOPULATION AND THE ENVIRONMENT* OVERCONSUMPTION AND THE ENVIRONMENT)

Second Growth: The Promise of Tropical Forest Regeneration in an Age of Deforestation. Robin L. Chazdon (Prof of Ecology and Evolutionary Biology, University of Connecticut). Chicago IL: University of Chicago Press, May 2014, 472p, \$45pb. For decades, conservation and research initiatives in tropical forests have focused almost exclusively on old-growth forests, because scientists believed that these "pristine" ecosystems housed superior levels of biodiversity. Chazdon reveals those assumptions to be largely false, bringing to the fore the previously overlooked counterpart to old-growth forest: second growth. Even as human activities result in extensive fragmentation and deforestation, tropical forests demonstrate a great capacity for natural and human-aided regeneration. Although these damaged landscapes can take centuries to regain the characteristics of old growth, regenerating—or second-growth—forests are vital, dynamic reservoirs of biodiversity and environmental services. Chapters focus on the roles these forests play in carbon and nutrient cycling, and underscore the need to conserve regenerating tropical forests in an attempt to inspire a new age of local and global stewardship. (FOREST REGENERATION* TROPICAL FORESTS)

Arresting Citizenship: The Democratic Consequences of American Crime Control. Amy E. Lerman (Asst Prof of Public Policy, University of California, Berkeley) and Vesla M. Weaver (Asst Prof of African American Studies and Political Science, Yale University). Chicago IL: University of Chicago Press, April 2014, 312p, \$25pb (also as e-book). Never before has the American government maintained so vast a network of institutions dedicated solely to the control and confinement of its citizens. One-third of America's adult population has passed through the criminal justice system and now has a criminal record. Many more were never convicted, but are nonetheless subject to surveillance by the state. The broad reach of the criminal justice system has fundamentally recast the relation between citizen and state, resulting in a sizable—and growing—group of second-class citizens. From police stops to court cases and incarceration, at each stage of the criminal justice system individuals belonging to this disempowered group come to experience a state-within-a-state that reflects few of the country's core democratic values. This contact with police, courts, and prisons decreases faith in the capacity of American political institutions to respond to citizens' concerns and diminishes the sense of full and equal citizenship. Lerman and Weaver offer concrete proposals for reforms to reincorporate this large group of citizens as active participants in American civic and political life. (CRIME CONTROL AND CITIZENSHIP* CRIMINAL JUSTICE IN U.S. QUESTIONED)

The American Warfare State: The Domestic Politics of Military Spending. Rebecca U. Thorpe (Asst Prof of Political Science, University of Washington). Chicago IL: University of Chicago Press, April 2014, 248p, \$25pb. How is it that the United States—a country founded on a distrust of standing armies and strong centralized power—came to have the most powerful military in history? Thorpe argues that there are profound relationships among the size and persistence of the American military complex, the growth in presidential power to launch military actions, and the decline of congressional willingness to check this power. The public costs of military mobilization and war, including the need for conscription and higher tax rates, served as political constraints on warfare for most of American history. But the vast defense industry that emerged from World War II also created new political interests

that the framers of the Constitution did not anticipate. Many rural and semirural areas became economically reliant on defense-sector jobs and capital, which gave the legislators representing them powerful incentives to press for ongoing defense spending regardless of national security circumstances or goals. At the same time, the costs of war are now borne overwhelmingly by a minority of soldiers who volunteer to fight, future generations of taxpayers, and foreign populations in whose lands wars often take place. This new incentive structure has profoundly reshaped the balance of wartime powers between Congress and the president, resulting in a defense industry perennially poised for war and an executive branch that enjoys unprecedented discretion to take military action.(SECURITY* MILITARY SPENDING IN U.S.* WARFARE STATE IN U.S.)

The Good Project: Humanitarian Relief NGOs and the Fragmentation of Reason. Monika Krause (Dept of Sociology, Goldsmiths, University of London). Chicago IL: University of Chicago Press, May 2014, 240p, \$27,50pb (also as e-book). NGOs set out to save lives, relieve suffering, and attend to basic human needs. They are committed to serving people across national borders, without regard to race, ethnicity, gender, or religion. And they offer crucial help during earthquakes, tsunamis, wars, and pandemics. But with so many ailing areas in need of assistance, how do these organizations decide where to go-and who gets the aid? Relief agencies try to help people but, in practical terms, the main focus of their work is to produce projects. Agencies sell projects to key institutional donors, and in the process the project and its beneficiaries become commodities. In an effort to guarantee a successful project, organizations are incentivized to help those who are easy to help, while those who are hardest to help often receive no assistance at all. The poorest of the world are made to compete against each other to become projects—and in exchange they offer legitimacy to aid agencies and donor governments. Explains how NGOs succeed and fail on a local and global level. (NGO HELP: EFFECTIVENESS OUESTIONED* HUMANITARIANISM AND NGOS)

American School Reform: What Works, What Fails, and Why. Joseph P. McDonald (Prof of Teaching and Learning, New York University) and the Cities and Schools Research Group. Chicago IL: University of Chicago Press, April 2014, 208p, \$25pb (also as e-book). Education policy often gets so ambitious that implementing it becomes a near impossibility. Action space, however, is what takes shape when talented educators, leaders, and reformers guide the social capital of civic leaders and the financial capital of governments, foundations, corporations, and other backers toward true results. The authors explore such extraordinary collaborations and their influences on future efforts, showing that reform efforts can work, and that our schools can be made better. Specifically, McDonald and his colleagues evaluate the half-billion-dollar Annenberg Challenge launched in 1994, alongside other large-scale reform efforts that have taken place in New York, Chicago, Philadelphia, and the San Francisco Bay Area. (SCHOOL REFORM* EDUCATION POLICY)

Measuring Economic Sustainability and Progress. Edited by Dale W. Jorgenson (University Prof of Economics, Harvard University), J. Steven Landefeld (Director, Bureau of Economic Analysis, US Dept of Commerce), and Paul Schreyer (Deputy Chief Statistician, OECD). National Bureau of Economic Research, July 2014, 808p, \$130 (also as e-book). Since the Great Depression, researchers and statisticians have recognized the need for more extensive methods for measuring economic growth and sustainability. The latest volume in

the NBER's Studies in Income and Wealth series explores collaborative solutions between academics, policy researchers, and official statisticians to some of today's most important economic measurement challenges. Contributors extend past research on the integration and extension of national accounts to establish an even more comprehensive understanding of the distribution of economic growth and its impact on well-being, including health, human capital, and the environment. (ECONOMIC SUSTAINABILITY STATISTICS* WELL-BEING STATISTICS* ECONOMIC GROWTH MEASURES)

Economic Regulation and Its Reform: What Have We Learned? Edited by Nancy L. Rose (Prof of Economics, MIT). National Bureau of Economic Research, July 2014, 704p, \$110 (also as e-book). The past thirty years have witnessed a transformation of government economic intervention in broad segments of industry throughout the world. Many industries historically subject to economic price and entry controls have been largely deregulated, including natural gas, trucking, airlines, and commercial banking. However, recent concerns about market power in restructured electricity markets, airline industry instability amid chronic financial stress, and the challenges created by the repeal of the Glass-Steagall Act have led to calls for renewed market intervention. Chapters discuss Antitrust and Regulation; Regulatory Reform in the Airline Industry; Cable Regulation in the Internet Era; Regulating Competition in Wholesale Electricity Supply; Electricity Distribution and Transmission Networks; Telecommunications Regulation; Regulation of the Pharmaceutical-Biotechnology Industry; Regulation and Deregulation of the US Banking Industry; and Retail Securities Regulation in the Aftermath of the Bubble. (ECONOMIC REGULATION: REFORM)

The Thinking Person's Guide to Climate Change. Robert Henson (Editor, National Center for Atmospheric Research, Boulder CO; contributing editor, Weatherwise magazine). Boston: American Meteorological Society, April 2014, 497p, \$30pb. Part 1: "The Basics" offers a primer on climate change, the greenhouse effect, and who is responsible. Part 2: "Symptoms" covers signs such as melting ice and extreme weather. Part 3: "Science" lays out what we know and how we figured it out. Part 4: "Debates and Solutions" tackles the arguments and counterarguments, what is needed to fix global warming, political solutions on the global level, and technological solutions (CCS, renewables, nuclear, efficiency). Part 5: "What Can You Do" discusses what we can do as individuals and communities to create the best possible future. Full-color illustrations offer explanations of everything from how the greenhouse effect traps heat to which activities in everyday life emit the most carbon. Special-feature boxes zoom in on locations across the globe already experiencing the effects of a shifting climate. The Guide combines years of data with recent research, including conclusions from the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. In the Foreword, we are advised that "Society has reached a critical point with climate change... The choices we make over the next several years will help set the direction for civilization (and Earth's climate) for decades and centuries to come." (p. xi) [NOTE: A well-written and fair-minded treatment of this complex, overriding issue, assisted by a 30-page index. Highly recommended. This is an updated and expanded edition of Henson's Rough Guide to Climate Change, previously published in the UK.] (CLIMATE CHANGE: INTRODUCTION)

Early School Leaving and Youth Unemployment. Edited by Saskia de Groof (Coordinator, P&V Foundation, Brussels) and Mark Elchardus (Prof Emeritus of Sociology,

Free University in Brussels; Chairman, P&V Foundation). Amsterdam University Press, Feb 2014, 320p, \$37.50pb. School dropout rates and youth unemployment top social and political agendas throughout Europe. Observers fear that educational failure and chronic joblessness will give rise to a lost generation of young people with seriously diminished prospects. Contributors explore the causes and effects of high dropout rates and youth unemployment, and suggest evidence-based strategies for combating the two problems. (YOUTH UNEMPLOYMENT* SCHOOL DROPOUTS)

Making Migration Work: The Future of Labour Migration in the European Union. Edited by Jan Willem Holtslag, Monique Kremer, and Erik Schrijvers (all Scientific Council for Government Policy, Netherlands). Amsterdam University Press, May 2014, 126p, \$33.50pb. Largely because of the European Union's two-phase expansion in 2004 and 2007, labor migration across the continent has changed significantly in recent years. Notably, the EU's policy of open borders has enabled a growing stream of workers to leave new member states in search of higher wages. As a result, the nature, scale, and direction of migration flows have changed dramatically. Explores how policy can—and should—address these changes as well as considers the future trajectory of a phenomenon that has become an increasingly sensitive political issue in many European nations. Key topics include: How to Make Migration Work?; The Global and European Neighbourhood Migration Systems; Trends, Policy Choices, Governance Challenges and a Look Ahead; Satisfying Labour Needs in an Ageing Society; Migrant Workers: Inevitability or Policy Choice?; Intra-EU Labour Mobility after Eastern Enlargement and During the Crisis: Main Trends and Controversies; Labour Migration from Central and Eastern Europe and the Implications for Integration Policy; and More Differentiated Integration Policy. (LABOR MIGRATION IN THE EU)

The Essence of Corporate Scenarios: Learning from the Shell Experience. Angela Wilkinson (Counselor for Strategic Foresight, Organization for Economic Co-operation and Development) and Roland Kupers (Associate Fellow, Smith School of Enterprise and the Environment, University of Oxford). Amsterdam University Press, March 2014, 185p, \$37.50pb. In 1965, Royal Dutch Shell started experimenting with a new approach to preparing for the future. This approach, called scenario planning, eschewed forecasting in favor of plausible alternative stories. By using scenarios, Shell aimed to avoid the false assumption that the future would look much like the present—an assumption that marred most corporate planning at the time. Offers insight into the company's innovative practice, which still has a huge influence on the way businesses, governments, and other organizations think about and plan for the future. Describes the qualities of successful scenarios, which above all must be plausible stories with logical trajectories. Wilkinson (formerly on the Shell scenario staff) and Kupers demonstrate the value of scenario planning as a sustained practice, rather than as a one-off exercise. (SCENARIO PLANNING* SHELL'S SCENARIOS)

The Domestic Sources of European Foreign Policy: Defence and Enlargement. Omar Serrano (Senior Researcher and Lecturer, University of Lucerne, Switzerland). Amsterdam University Press, Feb 2014, 200p, \$56.50pb. When it comes to formulating foreign and pan-European policies, the European Union faces myriad challenges. These difficulties and their origins, with particular attention to the ways internal EU debates are influenced by domestic politics and political actors who legitimize or constrain support for shared policies. Also discusses whether a democratic deficit exists in EU foreign policy, the domestic

approach to European foreign policy, security and defence policies, the Lisbon Treaty, national priorities and capabilities, statistical analysis, EU enlargement, etc. (EUROPEAN FOREIGN POLICY* SECURITY IN THE EU)

Work and Care under Pressure: Care Arrangements Across Europe. Edited by Blanche Le Bihan (Prof of Political Science, School of Public Health – EHESP, Paris), Claude Martin (Research Prof, National Center for Scientific Research and Chair of Social Care, School of Public Health – EHESP, Paris), and Trudie Knijn (Prof of Interdisciplinary Social Science and Head, Center for Social Policy and Intervention Studies, Utrecht University, Netherlands). Amsterdam University Press, Feb 2014, 200p, \$37.50pb. In many European countries tensions have arisen between the demands of the labor market and the caregiving responsibilities workers must fulfill at home. Examining these tensions, the authors focus on two groups of people who must juggle work and caregiving: parents of young children who work nonstandard hours, and working adults who care for older parents. Sheds light on the social effects of national policies and the choices made by caregivers. (CAREGIVING IN THE EU* CAREGIVING AND LABOR MARKET)

Mobility in Transition: Migration Patterns after EU Enlargement. Edited by Birgit Glorius (Assoc Prof of Human Geography of Central Eastern Europe, Chemnitz University of Technology, Germany), Izabela Grabowska-Lusinska (Research Fellow, Center of Migration Research, University of Warsaw), and Aimee Kuvik (doctoral student, University of Amsterdam). Amsterdam University Press, June 2014, 332p, \$49.95pb. Ten central and eastern European countries, along with Cyprus and Malta, joined the European Union in two waves between 2004 and 2007. Presents new research on the patterns of migration that resulted from the EU's enlargement; identifies and analyzes several new groups of migrants, notably young people without family obligations or clear plans for the future; and includes case studies on migrants from Poland, Romania, Hungary, and Latvia—as well as on destination countries such as the United Kingdom and Germany. (MIGRATION TRENDS IN THE EU)

The Shame of It: Global Perspectives on Anti-Poverty Policies. Edited by Erika K. Gubrium (Asst Prof, Oslo University College, Norway), Sony Pellissery (Assoc Prof, National Law School, India University, Bangalore), and Ivar Lødemel (Prof, Oslo University College). Policy Press at the University of Bristol, Feb 2014, 256p, \$42.95pb. Poverty carries a tremendous feeling of shame. However, few have let this overwhelming fact actually influence the making and implementation of anti-poverty policies. For anti-poverty policies to be truly effective, they must take into account the psychological trauma that poverty creates. Drawing on pioneering empirical research from a diverse group of countries, including the United Kingdom, Uganda, Norway, Pakistan, India, South Korea, and China, the contributors outline core principles that can bring policy makers greater sensitivity to the power of shame and, thus, the foundations for more effective ways of combating poverty. (POVERTY* ANTI-POVERTY POLICIES* SHAME AND POVERTY)

The Transport Debate (Policy and Politics in the Twenty-First Century). Jon Shaw (Prof of Geography, Plymouth University) and Iain Docherty (Prof of Public Policy and Governance, University of Glasgow). Policy Press at the University of Bristol, Feb 2014, 240p, \$26pb. Explains how we have arrived at the transportation systems we have today, covering both local and global issues. Celebrates the advantages that modern transportation

systems have brought, with criticism of the many poor conceptions and executions of transportation policy. Centering the study around the notion of the journey, the authors follow the fictitious Smith family on a trip, documenting the many transportation issues they face and explaining how those issues have come about, what policy trade-offs were responsible for them, and what can be done to fix them. (TRANSPORTATION SYSTEMS: PROS AND CONS)

The Short Guide to Environmental Policy. Carolyn Snell (Lecturer in Social Policy, University of York) and Gary Haq (Stockholm Environment Institute, University of York). Policy Press at the University of Bristol, June 2014, 176p, \$20pb. The rate and scale of environmental change caused by humans is so significant that it has warranted the ushering of a new geological epoch: the Anthropocene. More than ever, we need effective policies that address our current environmental challenges: climate change; preservation of biodiversity; shortages in food, water, and energy; and environmental equity. The Guide provides a concise introduction to environmental policies over the last 60 years, bringing together perspectives from a range of fields, including economics, sociology, politics, and social policy. Looks at the causes and effects of contemporary environmental issues, the ways different policies have addressed them, the challenges of implementing such policies, and what the future holds. (ENVIRONMENTAL POLICY HISTORY)

Understanding Global Social Policy (Second Edition). Edited by Nicola Yeates (Prof of Social Policy, Open University, Milton Keynes). Policy Press at the University of Bristol, May 2014, 368p, \$36.95pb. An international team of social policy analysts examine how global social policies are constructed, and explore how the globalizing strategies of state and non-state actors intersect with social policy concerns. The second edition contains systematically updated chapters that reflect major new developments—including the United Nation's Millennium Development Goals, the Social Protection Floor, and green global social policy—as well as new chapters on global poverty and inequality, social protection, criminal justice, and education. (GLOBAL SOCIAL POLICY* POVERTY* MDG* INEQUALITY* CRIMINAL JUSTICE* EDUCATION)

The Short Guide to Urban Policy. Claire Edwards (Lecturer, School of Applied Social Studies, University College Cork, Ireland) and Rob Imrie (Chair of Sociology, Goldsmiths College, University of London). Policy Press at the University of Bristol, June 2014, 176p, \$20pb. With more and more of the world's population living in urban environments, the management of cities has posed increasing challenges to governments and policy makers. Presents the multiple ways that urban issues and problems have been defined and addressed in different places and at different times; covers initiatives that focus on social tensions to those that focus on economic development; and discusses key concerns that have characterized urban policy around the globe. (CITY MANAGEMENT OVERVIEW)

Social Inclusion and Higher Education. Edited by Tehmina N. Basit (Prof of Education and Director, Institute for Education Policy Research, Staffordshire University) and Sally Tomlinson (Emeritus Prof of Education, Goldsmiths College, London University and senior research fellow, Dept of Education, University of Oxford). Policy Press at the University of Bristol, April 2014, 325p, \$45.95pb. As higher education has made deliberate strides in recent decades to become more inclusive and accessible, the number of students from non-traditional backgrounds has increased dramatically. There has been much study of the

effects of higher education on previously underserved populations, showing that it can lead to higher lifetime income and higher status. But there has been little research on what happens to those students once they are in a university. Examines the problems that face non-traditional students, the resources they and their families are able to draw on, and the ways that administrators and staff can help them succeed. (HIGHER EDUCATION AND NON-TRADITIONAL STUDENTS)

Achieving Environmental Justice: A Cross-National Analysis. Karen Bell (Research Assoc, Centre for the Study of Poverty and Social Justice, University of Bristol). Policy Press at the University of Bristol, June 2014, 224p, \$110. Examines environmental justice—which focuses on inclusive processes of environmental decision-making for local communities—in the United States, United Kingdom, Sweden, South Korea, China, Bolivia, and Cuba. Discusses environmental issues as they relate to a number of other topics, including race, class, industrialization, and politics, with a particular focus on the role of capitalism. (ENVIRONMENTAL JUSTICE)

Think Tanks in America. Thomas Medvetz (Asst Prof of Sociology, University of California, San Diego). Chicago: University of Chicago Press, March 2014, 324p, \$25pb (hardcover, 2012). Over the past half-century, think tanks have become fixtures of American politics, supplying advice to presidents and policy makers, expert testimony on Capitol Hill, and convenient facts and figures to journalists and media specialists. The unsettling ambiguity of the think tank is less an accidental feature of its existence than the very key to its impact. By combining elements of more established sources of public knowledge—universities, government agencies, businesses, and the media—think tanks exert a tremendous amount of influence on the way citizens and lawmakers perceive the world, unbound by the more clearly defined roles of those other institutions. In the process, they transform the government, the press, and the political role of intellectuals. [NOTE: Other than several superficial mentions of the Worldwatch Institute, there is no recognition of any other US-based environmental think tank, let alone the scores of international research groups that are increasingly concerned with climate change and sustainability and other global problems. In other words, Medvetz is missing a lot, in this rather stilted "sociological theory of think tanks"!] (THINK TANKS IN THE U.S.)

Green Documentary: Environmental Documentary Film in the 21st Century. Helen Hughes (Senior Lecturer in Film Studies, University of Surrey). Intellect Books, July 2014, 152p, \$36pb. During the first decade of the 21st century, a stunning array of documentary films focusing on environmental issues and representing the world on the brink of ecological catastrophe, has been met with critical and popular acclaim. Comments on environmental documentary filmmaking, and offers an analysis of controversial and high-profile documentary films such as Gasland, An Inconvenient Truth, Manufactured Landscapes, and The Cove. (GREEN DOCUMENTARY FILMS)* ENVIRONMENT & DOCUMENTARY FILMS)

2. Routledge: Sociology 2013

Routledge Handbook of Surveillance Studies. Edited by Kirstie Ball (Reader in Surveillance and Organization, The Open University Business School), Kevin Haggerty (Editor, Canadian Journal of Sociology; Book review editor, Surveillance & Society; Prof of Sociology and Criminology, University of Alberta), David Lyon (Research Chair in

Surveillance Studies; Prof of Sociology; Director, Surveillance Studies Centre, Queen's University, Canada). NY: Routledge, Feb 2014, 460p, \$61.95pb (also as e-book). Surveillance is a central organizing practice. Gathering personal data and processing them in searchable databases drives administrative efficiency, but also raises questions about security, governance, civil liberties and privacy. Surveillance is both globalized in cooperative schemes, such as sharing biometric data, and localized in the daily minutiae of social life. Explores the empirical, theoretical and ethical issues around surveillance and its use in daily life. Key topics include: surveillance and population control, policing, intelligence and war, production and consumption, new media, security, identification, regulation and resistance. (SURVEILLANCE AND SECURITY* BUSINESS AND SURVEILLANCE)

Interdisciplinarity: Reconfigurations of the Social and Natural Sciences. Edited by Andrew Barry (Prof of Political Geography, University of Oxford), and Georgina Born (Prof of Music and Anthropology, University of Oxford). NY: Routledge, June 2013, 296p, \$135. The idea that research should become more interdisciplinary has become commonplace. The unprecedented complexity of problems such as climate change or the social implications of biomedicine demand interdisciplinary efforts integrating both the social and natural sciences. Offers a new approach to theorizing interdisciplinarity, showing how the boundaries between the social and natural sciences are being reconfigured; examines the current preoccupation with interdisciplinarity, particularly when associated with a transformation in the relations between science, technology and society; calls for collaboration between the natural sciences and engineering and between the social sciences, arts, and humanities. (INTERDISCIPLINARITY* METHODS)

The Treadmill of Crime: Political Economy and Green Criminology. Paul B. Stretesky (Assoc Prof of Public Affairs, University of Colorado, Denver), Michael A. Long (Asst Prof of Sociology, Oklahoma State University), and Michael J Lynch (Prof of Criminology, University of South Florida). NY: Routledge, Aug 2013, 156p, \$42.95pb. Examines how the expansion of capitalism shapes environmental law, crime, and justice and discusses crime in the energy sector, release of toxic waste into the environment and its impact on ecosystems. Highlights problems of ecological disorganization for animal abuse and social disorganization. Chapter topics: Production for Green Criminology, Crimes of Ecological Withdrawals, Crimes of Ecological Additions, Ecological and Social Disorganization, Animal Abuse, Non-State Actors and Environmental Enforcement, etc. (GREEN CRIMINOLOGY* ENVIRONMENT CRIMES)

Routledge International Handbook of Green Criminology. Edited by Nigel South (Prof of Sociology; and Vice-Chancellor, University of Essex), Avi Brisman (Asst Prof of Justice Studies, Eastern Kentucky University). NY: Routledge, Dec 2012, 450p, \$225. International green criminologists and scholars examine substantive issues, including: climate change, corporate criminality and impacts on the environment, environmental justice, media representations, air and water pollution, questions of responsibility and risk, wildlife trafficking, etc. Key themes include green criminology in depth (its theory, history and development), as well as methodological concerns for this area of academic interest. Features examples of environmental crimes, harms, and threats from Africa, Asia, Australia, Eastern Europe, South America, the United Kingdom, and the United States. Chapters cover topics such as: Comparing Environmental and Criminal Victimization and Considering Crime

from an Eco-city Perspective; Ordinary Acts that Contribute to Ecocide: Contemporary Horizons of Green Criminology; Conservation Criminology and the "General Accident" of Climate Change; Criminogenic Consequences of Climate Change; Air Crimes and Atmospheric Justice; Criminal Liability for Oil Discharges in Navigable Waters; Food Crime -- A Green Criminology Perspective; Eco-Global Criminology and the Political Economy of Environmental Harm; Evading Responsibility for Green Harm; State-Corporate Exploitation of Race, Class, and Gender Inequality; Public Perceptions of Corporate Environmental Crime; Assessing the Impact of Economic Insecurity on Willingness to Impose Punishment for Pollution; Victimization of Women, Children and Non-Human Species Through Trafficking and Trade; How Green Criminology Can Help Us Learn From Experience and Contribute to Our Future, etc. (GREEN CRIMINOLOGY* ENVIRONMENT CRIMES)

The Routledge Handbook of International Crime and Justice Studies. Edited by Bruce Arrigo (Prof of Criminal Justice and Criminology, University of North Carolina – Charlotte), and Heather Bersot (University of North Carolina – Charlotte). NY: Routledge, Aug 2013, 696p, \$225. Presents the enduring debates and emerging challenges in crime and justice studies from an international and multi-disciplinary perspective; focuses on the role that consumerism, politics, technology, and culture assume in shaping these debates and in organizing these challenges. Thematic sections include: theory, culture, and society; industries of crime and justice: systems of policing, law, corrections and punishment; the criminal enterprise; global technologies; media, crime, and culture; green criminology; political violence; public health criminology; and the political economy of crime and justice. Chapters discuss such issues as Currents of Criminological Thought; the Need for an International Feminist Criminology; International Trends and Issues in Policing; Politics of International Criminal Justice; Challenges of International Criminal Law in Addressing Mass Atrocity; Animal Cruelty and Criminal Justice in a Globalized World; Isolative Confinement: Effective Method for Behavior Change or Punishment for Punishment's Sake?; Global White-Collar Crime; Current and Emerging Technologies Employed to Abate Crime and to Promote Security; Green Criminology and Green Victimization; What is to be Done about Environmental Crime?; Redressing Violence in Sub-Sahara Africa; Fundamentalism, Extremism, Terrorism: Commonalities, Differences and Policy Implications of 'Blacklisting'; Crimmigration: Criminal Justice, Refugee Protection and the Securitization of Migration, etc. (CRIME/JUSTICE OVERVIEW* WHITE COLLAR CRIME)

Sentencing: Time for a Paradigm Shift. Ralph Henham (Prof of Criminal Justice, Nottingham Law School, Nottingham Trent University). NY: Routledge, July 2013, 216p, \$50.95pb. Sentencing is the process through which the legitimacy of punishment is declared and justified; this social activity should be more responsive to the pluralistic needs and values of individuals and communities in contemporary society. Thus it will need to adapt to perceptions of what justice is and how it should be delivered, as well as different sensitivities and emotional responses to sentencing processes and outcomes. Calls for a profound normative understanding of the relationship between sentencing and its perception by citizens. Themes covered include the treatment of gender and race in sentencing, the future role of sentencing in criminal justice governance, and development of new criteria for evaluating sentencing within a more socially-inclusive framework. A greater focus on the relationship between penal ideology and the impact of sentencing in the wider community is essential for effective

future policy-making in this area. This book is aimed at both undergraduate and postgraduate students of law, criminology, criminal justice and sociology, as well as for academics and criminal justice policymakers. (SENTENCING* CRIME/JUSTICE AND SOCIETY)

3. Georgetown University Press: Fall/Winter 2013

Water: Asia's New Battleground. Brahma Chellaney (Prof, Centre for Policy Research, New Delhi; adviser to India's National Security Council; former appointments at Harvard University, Brookings Institution, Johns Hopkins University, and Australian National University). Washington: Georgetown University Press, Sept 2013, 400p, \$21.95pb (also as e-book). The battles of yesterday were fought over land. Those of today are over energy. But the battles of tomorrow may be over water. Nowhere is that danger greater than in water-distressed Asia. Its huge population and exploding economic and agricultural demand for water make it the most water-scarce continent on a per capita basis. Many of Asia's water sources cross national boundaries, and as less and less water is available, international tensions will rise. Studies Asia's water politics and the relationships between fresh water, peace, and security. (WATER* ASIA'S WATER* WATER SECURITY IN ASIA)

Just War: Authority, Tradition, and Practice. Edited by Anthony F. Lang Jr. (Reader, School of International Relations, University of St. Andrews; Director, Centre for Global Constitutionalism), Cian O'Driscoll (Lecturer in international politics, School of Social and Political Sciences, University of Glasgow), and John Williams (Prof of International Relations, Durham University). Washington: Georgetown University Press, Oct 2013, 336p, \$34.95pb (also as e-book). The just war tradition is central to the practice of international relations, in questions of war, peace, and the conduct of war in the contemporary world. Explores questions of authority surrounding the just war tradition. Authority is critical in two key senses: 1) it is central to framing the ethical debate about the justice or injustice of war, raising questions about the universality of just war and the tradition's relationship to religion, law, and democracy; 2) who has the legitimate authority to make just-war claims and declare and prosecute war? Such authority has traditionally been located in the sovereign state, but non-state and supra-state claims to legitimate authority have become increasingly important over the last 20 years as the just war tradition has been used to think about multilateral military operations, terrorism, guerrilla warfare, and sub-state violence. The chapters reassess authority issue's centrality in how we can, do, and ought to think about war in contemporary global politics. (JUST WAR* SECURITY AND ETHICS* WAR: LEGITIMATE **AUTHORITY**)

Work and the Welfare State: Street-Level Organizations and Workfare Politics. Edited by Evelyn Z. Brodkin (Assoc Prof, University of Chicago, School of Social Service Administration) and Gregory Marston (Prof of Social Policy, School of Public Health and Social Work, Queensland University of Technology; Australia) Washington: Georgetown University Press, Oct 2013. 272p, \$36.95pb (also as e-book). Places street-level organizations at the analytic center of welfare-state politics, policy, and management and examines efforts to change the welfare state to a workfare state by looking at on-the-ground issues in six countries: the US, UK, Australia, Denmark, Germany, and the Netherlands. Scholars of organizational studies investigate what really goes on in the name of workfare and activation policies and what that means for the poor, unemployed, and marginalized populations subject to these policies and reveal the critical, yet largely hidden, role of governance and management reforms in the evolution of the global workfare project. (WORK* WORKFARE VS. WELFARE)

The Future of Ethics: Sustainability, Social Justice, and Religious Creativity. Willis Jenkins (Assoc Prof of Religious Studies, University of Virginia). Washington: Georgetown University Press, Oct 2013, 304p, \$34.95pb (also as e-book). Traditional religious ethics examines texts and traditions and highlights principles and virtuous behaviors that can apply to particular issues. Religious thought is significant to the development of interdisciplinary responses to sustainability issues and how this calls for a new style of religious ethics. Jenkins develops lines of practical inquiry through "prophetic pragmatism," an approach to ethics that begins with concrete problems and adapts to changing circumstances. By integrating environmental sciences and theological ethics into problem-based engagements with philosophy, economics, and other disciplines, Jenkins illustrates the wide understanding and moral creativity needed to live well in the new conditions of human power. (SUSTAINABILITY AND RELIGION* ETHICS AND SUSTAINABILITY)

Restored to Earth: Christianity, Environmental Ethics, and Ecological Restoration. Gretel Van Wieren (Asst Prof of Religious Studies, Michigan State University). Washington: Georgetown University Press, July 2013, 224p, \$29.95pb (also as e-book). Ecological restoration integrates the science and art of repairing ecosystems damaged by human activities. Despite relatively little attention from environmental ethicists, restoration projects continue to gain significance, drawing on citizen volunteers and large amounts of public funds, providing an important model of responding to ecological crisis. Projects include the massive, multi-billion dollar Kissimmee River project; restoring 25,000 acres of Everglades' wetlands; the \$30 million effort to restore selected wetlands in industrial Brownfield sites in Chicago's south side Lake Calumet area; and the reintroduction of tall grass prairie ecosystems in various communities in the Midwest. Van Wieren examines the religious and ethical dimensions and significance of contemporary restoration practice, an ethical framework that advances the field of environmental ethics in a more positive, action-oriented, experience-based direction. (ECOLOGICAL RESTORATION* ENVIRONMENTAL ETHICS* RESTAURATION AND ETHICS)

4. Georgetown University Press: Fall/Winter 2014

Cyber Blockades. Alison Lawlor Russell (Fletcher School of Law and Diplomacy, Tufts University; Nonresident research scientist, Center for Naval Analyses). Washington: Georgetown University Press, Nov 2014, 176p, \$29.95pb (also as e-book). Blockade operations in cyberspace are large-scale attacks on infrastructure or systems that aim to prevent an entire state from sending or receiving electronic data. Cyber blockades can take place through digital, physical, and/or electromagnetic means. Blockade operations have historically been considered acts of war, thus their emergence in cyberspace has significant implications for international law and for our understanding of cyber warfare. Russell defines

and explains the emerging concept of "cyber blockades" and presents a unique comparison of blockade operations in five different domains—on land, at sea, in the air, in space, and in cyberspace—identifying common elements as well as important distinctions. Case studies cover cyber-attacks on Estonia in 2007 and on Georgia during the 2008 Georgia-Russia War. Includes recommendations for policymakers contemplating or confronted by such attacks. (CYBER SECURITY * CYBER BLOCKADES * SECURITY)

Health Care as a Social Good: Religious Values and American Democracy. David M. Craig (Assoc Prof of Religious Studies, Indiana University-Purdue University Indianapolis –IUPUI). Washington: Georgetown University Press, Sept 2014, 240p, 240pb. Craig traveled across the United States to assess health care access, delivery and finance in this country to conclude that health care in the US is not a private good or a public good. Decades of public policy and philanthropic service have made health care a shared social good. Escalating health costs absorb more and more of family income and government budgets, therefore we need to create a different and more affordable community-based health care system. Community engagement around the common religious conviction that healing is a shared responsibility can help us achieve this transformation—one that will not only help us realize a new and better system, but one that reflects the ideals of American democracy and the common good. (HEALTH CARE AS A SOCIAL GOOD* COMMUNITY-BASED HELATH CARE* HEALTH AND RELIGION * HEALTH AND DEMOCRACY)

Human Dignity and the Future of Global Institutions. Edited by Mark P. Lagon (Global Politics and Security Chair, Foreign Service Program, Georgetown University; Adjunct Senior Fellow, Council on Foreign Relations; former US ambassador at large to Combat Trafficking in Persons) and Anthony Clark Arend (Director, Foreign Service Program, Prof of Government and Foreign Service, Georgetown University). Washington: Georgetown University Press, Oct 2014, 320p, \$32.95pb. In recent decades, global institutions have proliferated—from intergovernmental organizations to hybrid partnerships. The specific missions of these institutions are varied, but there seems to be a common animating principle to inform their goals: human dignity consists of the agency of individuals to apply their gifts to thrive, and requires social recognition of each person's inherent value and claim to equal access to opportunity. Contributors examine how traditional and emerging institutions are already advancing human dignity, and then identify strategies to make human dignity more central to the work of global institutions. They explore traditional state-created entities, as well as emergent, hybrid institutions and faith-based organizations; and lay out a path for a cross-cultural dialogue on human dignity. (HUMAN DIGNITY AND INTERNATIONAL INSTITUTIONS * WORLD GOVERNANCE AND HUMAN DIGNITY)

Mission Creep: The Militarization of US Foreign Policy. Edited by Gordon Adams (Prof, School of International Service, American University; Assoc Director for National Security and International Affairs, Office of Management and Budget, 1993-1997) and Shoon Murray (Assoc Prof, American University; Director, US Foreign Policy and National Security master's degree program). Washington: Georgetown University Press, Dec 2014, 256p, \$34.95pb. Examines the question of whether the US Department of Defense (DOD) has assumed too large a role in influencing and implementing US foreign policy, which resulted in a militarization of US foreign policy. "Militarization" here entails a subtle phenomenon

wherein the military increasingly becomes the primary actor and face of US policy abroad. After the Cold War, and accelerating after September 11, the United States has drawn upon the enormous resources of DOD in adjusting to the new global environment and challenges arising from terrorism, Islamic radicalism, insurgencies, ethnic conflicts, and failed states. Issues policy recommendations about how to rebalance the role of civilian agencies in foreign policy decision making and implementation. (SECURITY* MILITARIZED U.S. FOREIGN POLICY* MISSION CREEP)

5. MISCELLANEOUS PUBLISHERS

The Human Capacity for Transformational Change: Harnessing the Collective Mind. Valerie A. Brown (Emeritus Prof of Environmental Health, Australian National University) and John A. Harris (ANU Local Sustainability Project). Routledge, April 2014, 249p, \$48.95pb. (www.routledge.com/9781138800632) Pressures for transformational change are growing, leading to reframing existing divisions as connecting relationship and reframing opposites as interconnected wholes. "This book offers ways and means of creating the synergies that are crucial in influencing a desired transformational change towards a just and sustainable future." Chapters are in three parts: 1) Changing Minds: living with transformational change, the next step in human evolution, the Gaian mind: people and planet as a self-organizing system, the cybernetic mind: human social networks in cyberspace, the Herculean mind: seven challenging tasks, the collective mind: asking reflective questions; 2) Changing Society: inclusive language that hears all voices, "transformation science" as the science of change, collective governance (democracy for the next millennium), collaborative economy and gift relationships, lifelong education: learning without limits, the collective self: asking introspective questions; 3) Changing Worlds: utopian thinking in a connected world. (METHODS* TRANSFORMATIONAL CHANGE* COLLECTIVE MIND)

Turn Down the Heat: Confronting the New Climate Normal. Hans Joachim Schellnhuber et al. (Potsdam Institute for Climate Impact Research, Germany). Washington: World Bank Group, Nov 2014, 320p (download at http://documents.worldbank.org/curated/ en/2014/11/20404287). The third report in a series, following Turn Down the Heat: Climate Extremes, Regional Impacts and the Case for Resilience (June 2013) and Turn Down the Heat: Why a 4°C World Must be Avoided (November 2012). This report, produced by a team of 45 researchers at the Potsdam Institute, with contributions by several dozen others at the World Bank, describes the growing challenges for development and poverty reduction under anthropogenic climate change in Latin America and the Caribbean, the Middle East and North Africa, and Europe and Central Asia. Climate change projections are presented for each region (based on the recent Fifth Assessment Report of the IPCC) along with an assessment of projected impacts in key sectors for different warming levels, from the current baseline of 0.8° C to 2° C and 4° C above pre-industrial levels in 2100. These impacts are then discussed in relation to existing social vulnerabilities. "Climate change impacts are increasingly being experienced on all continents and across a range of human and natural systems. More severe impacts are projected with further warming, and the resulting challenges for eradicating poverty and promoting human wellbeing could be immense. If efforts and achievements in reducing greenhouse gas emissions continue at the current pace, warming levels of higher than 4°C cannot be ruled out. Recent efforts to project the effects of current national policies indicate that there is about a 40% chance of exceeding 4°C warming above pre-industrial levels by about 2100. Critically, timing is of the essence. With rising temperatures, the risk for human lives and development trajectories increase, and a number of impacts will soon be locked in for decades, if not for centuries to come." (p.1) Warming of 4°C by 2100 would commit the world to much higher warming levels exceeding 6°C or more in the long term. Chapters discuss such topics as the global picture, trends in extreme temperatures and precipitation, aridity and water scarcity, droughts, agricultural yields, ocean acidification, ice sheet instability, socioeconomic vulnerability, Amazon rainforest dieback and tipping point, Russia's forests as a potential tipping point, coastal infrastructure, human security, and regional development narratives. [NOTE: This report updates, expands, and amplifies the findings in Climate Change and National Security: A Country-Level Analysis edited by Daniel Moran (Georgetown University Press, April 2011; GlobalForesightBooks.org Book of the Month, March 2013), which analyses 19 countries and regions through a security lens, rather than a development lens, with a generally pessimistic outlook.] (CLIMATE CHANGE* LATIN AMERICA AND CLIMATE* MIDDLE EAST AND CLIMATE* EUROPE AND CLIMATE)

Descent Pathways (Special Issue). Edited by Joshua Floyd (Centre for Australian Foresight, Melbourne) and Richard A. Slaughter (Foresight International, Brisbane). Foresight: The Journal of Futures Studies, Strategic Thinking and Policy, 16:6, 2014, pp 485-607. Six essays that seek "to highlight the need for wider understanding of the 'civilizational challenge' facing humanity, as it encounters and then exceeds significant limits to growth," proposing policies, actions, and strategies to avoid the most disastrous manifestations of "overshoot and collapse," which could be imminent. 1) Jim Dator (University of Hawaii) revisits his 2009 formulation of "The Unholy Trinity, Plus One" (energy, environment, and economics + governance), now seen as part of a "new normal" that must be considered in the four alternative future archetypes (Grow, Collapse, Discipline, Transform) in the Anthropocene epoch where humans are the major geological/biological force; "humans are changing the world faster than we are understanding it...vet we go on changing the world" (p501); 2) Patrick Moriarty and Damon Honnery (both Monash University) argue that alternative energy is growing too slowly and faces too many problems to significantly change the energy mix in coming decades, and that technical fixes will not be sufficient to prevent climate change; rather, social change is needed for sustainability; 3) Richard A. Slaughter describes the ways that humanity is tracking towards dystopian overshootand-collapse futures and the parallel rise of climate change denialism that makes effective responses difficult; proposes moving from a collapse/crash/breakdown discourse to one characterized by notions of "descent" that recognize a range of factors ignored in more fatalistic accounts; also proposes a globally connected network of foresight institutions that assemble the bits and pieces of positive innovations that contribute to intelligent public policy; 4) Samuel Alexander (University of Melbourne) notes that the global industrialized economy is in "gross ecological overshoot," but questions arguments against "voluntary simplification" made by Joseph Tainter in The Collapse of Complex Societies (1988), as a strategy to avoid collapse; 5) Ozzie Zehner (Northwestern University), author of Green Illusions (University of Nebraska Press, 2012), questions the pervasive energy production ethos and the viability of alternative energy technologies; rather, "energy reduction strategies, degrowth, economic contraction and other decline pathways remind people of their reliance on finite resources, and their own vulnerability to the imminent contraction"

(p.582); 6) Joshua Floyd asserts that the narrative of industrial progress over the past 300 years is unlikely to continue serving humanity well, and that descent does not necessarily imply decline in human well-being; nor does he argue for a "simplistic return to the past." (WORLD FUTURES* DESCENT VS. INDUSTRIAL "PROGRESS" * OVERSHOOT)

State of the World 2014: Governing for Sustainability. Worldwatch Institute (Tom Prugh and Michael Renner, Project Directors). Washington: Island Press, 2014, 294p, \$23pb. The 30th annual volume in the SOTW series founded by Lester R. Brown begins with a Foreword by David W. Orr on how "we have entered the rapids of the human journey" and an Introduction by the editors on failing governance for an unsustainable planet, climate policy's Tower of Babel, and confronting petro-power of the fossil fuel companies. The 19 essays that follow are in two sections: 1) Political Governance: sustainability and evolution, expanding ecoliteracy, obstacles to learning and action, factors contributing to eco-complacency and disbelief, digitization and sustainability, governance in the Anthropocene, governing people as members of the earth community, listening to the voices of young and future generations, advancing stewardship via the commons and human rights, making the transition to a new paradigm of governance based on respect for nature and integrated global and local citizenship (by David Bollier and Burns Weston), understanding the failure to pass US climate legislation, China's environmental governance challenge (now at a crisis point, despite "Ecological Civilization" and "Beautiful China" as prominent slogans), assessing the outcomes of Rio+20, how local governments and their networks have become a factor in global sustainability; 2) Economic Governance: scrutinizing the corporate role in the post-2015 development agenda (so as to avoid "corporate capture"), making finance serve the real economy, climate governance and the resource curse, the political-economic foundations of a sustainable system (by Gar Alperovitz, on various emerging strategies to build a truly democratic economy), the rise of "Triple-Bottom-Line" businesses (prioritizing people and the planet, while also promoting profits; these new "public benefit corporations" consider all stakeholders rather than shareholders only), working toward energy democracy by resisting the fossil fuel agenda, trade unions and the sustainability transition. [ALSO SEE SOTW2013: Is Sustainability Still Possible? (on planetary boundaries, the sustainability metric, getting to true sustainability, building an enduring movement, etc.), SOTW2012: Moving Toward Sustainable Prosperity (on making the green economy work for all, degrowth in overdeveloped countries, global architecture for sustainability governance, population strategies to stop short of 9 billion, ecosystem services, etc.), and SOTW2011: Innovations that Nourish the Planet (on ending hungers, mainstreaming ecoagriculture, the potential of vegetables, more crop per drop, post-harvest losses, etc). All of these volumes are outstanding.] (SUSTAINABILITY* GOVERNANCE)

Taking Control: Pathways to Drug Policies That Work. Global Commission on Drug Policy (Fernando Henrique Cardoso, Chair). www.GlobalCommissiononDrugs.org, Sept 2014, 45p. An update and expansion to War on Drugs: Report of the Global Commission (2011, 24p), asking policymakers to break the 50-year taboo on talking about more effective and humane ways to manage drugs. A genuine debate on new approaches is now underway, and many governments are taking action based on evidence. Past approaches based on a punitive law enforcement paradigm have failed emphatically, resulting in more violence, larger prison populations, worsened health harms, and the erosion of governance around the world. Instead, the Commission calls for policy that puts public health, community safety,

human rights, and development at the center, with no one-size-fits-all reform. Five pathways to improving the global drug policy regime are proposed: 1) Put people's health and safety first (traditional goals and measures have failed to produce positive outcomes); 2) Ensure equitable access to essential medicines and pain control (more than 80% of the world's population carries a huge burden of avoidable pain and suffering with little or no access to opiate-based medications); 3) End the criminalization and incarceration of people who use or possess drugs (it has little or no impact on levels of drug use, while encouraging highrisk behaviors, deterring drug users from seeking treatment, and diverting law enforcement resources from focusing on serious criminality); 4) Refocus enforcement responses to drug trafficking and organized crime (re-orient the goals of supply-side away from unachievable market eradication; rely on alternatives to incarceration for non-violent, low-level participants in illegal drug markets such as farmers and couriers); 5) Regulate drug markets to put governments in control (allow and encourage diverse experiments in legally regulating currently illicit drugs, starting with cannabis, coca leaf, and some novel psychoactive substances; much can be learned from successes and failures in regulating alcohol, tobacco, and pharmaceutical drugs). Concludes that the upcoming UN General Assembly Special Session on the World Drug Problem (UNGASS) in 2016 is "an unprecedented opportunity to review and re-direct national drug control policies and the future of the global drug control regime, so as to promote the UN mandate to ensure security, human rights, and development. NOTE: Transformation of the drug control paradigm appears to be underway and amply justified; in turn, it will brighten prospects for both security (mentioned in passing) and sustainability (not mentioned at all). Members of the 21-person Commission include Cardoso (former President of Brazil), seven other former presidents or prime ministers (Ruth Dreifuss/Switzerland, Cesar Gaviria/Columbia, Aleksander Kwasniewski/Poland, Ricardo Lagos/Chile, George Papandreau/Greece, Jorge Sampaio/Portugal, Ernesto Zedillo/Mexico), George Shultz (former US Secretary of State), Paul Volcker (former US Federal Reserve Chair), John Whitehead (former Deputy Secretary of State and co-chair of Goldman Sachs), Louise Arbour (former UN High Commissioner for Human Rights), and Richard Branson (UK entrepreneur).] (DRUG POLICY* CRIME & JUSTICE* SECURITY* HEALTH)

Sustainability: A **History.** Jeremy L. Caradonna (Associate Prof of History, University of Alberta). NY: Oxford University Press Sept 2014, 331p, \$27.95. (www.jeremycaradonna.com). The words "sustainable" and "sustainability" are nearly ubiquitous today, but it is hard to find books published before 1976 with these words as titles or even as keywords. After the mid-1970s, books with either word in the title took off, and now total nearly 5,000 as of 2012 (see chart, p.3). Sustainability is a buzzword, but it is not "buzzless," as governments, communities, organizations, and individuals worldwide seek to align themselves with the basic principles of "sustainability," creating a society that is safe, stable, prosperous, and ecologically minded. "The practices inspired by the concept of sustainability could give rise to the world's third major socio-economic transformation," (pp2-3, italics added) after the agricultural revolution of 10,000 years ago and the industrial revolution of the 18th and 19th centuries. This book is about the making of the sustainability "movement" in the broadest sense of the word.

"To sustainists, sustainability means planning for the future and rejecting that which threatens the lives and well-being of future generations." (p.5) It means creating a green, low-carbon, and resilient economy that runs on renewable energy, and does not support growth

that impairs the ability of humans and other organisms to live in perpetuity on Earth. And for many, it also has "a utopic dimension of decentralized forms of democracy that support peace and social justice."

Chapters discuss early use of the terms (e.g.nachhaltig/sustainable and Nachhaltigkeit/ sustainability both entered the Saxon dialect of German in the 18th century via works on sustained yield forestry), four main principles of sustainability (the interconnectedness of human society/economic/natural environment, the need to respect ecological limits or face collapse, planning wisely for the future, and localization/decentralization where possible), sources of sustainability in the early modern world, the industrial revolution and its discontents (e.g., pollution and greenhouse gases), the environmental movement and the growth of ecological wisdom in the 1960s and 1970s, ecological economics, the Club of Rome, United Nations conferences and commissions, "the first detailed blueprint for constructing a sustainable society" (Lester R. Brown's Building a Sustainable Society, 1981), sustainability since 2000 (it 'has gone from marginal ecological idea to mainstream movement in a surprisingly short amount of time"), a sampling of sustainability measurement tools (carbon footprint, various ecolabels, ecological footprint analysis, energy return on investment or EROI, Genuine Progress Indicator, Genuine Wealth, Happy Planet Index, Triple Bottom Line), sustainable design and green buildings, the greening of business and finance, and social sustainability (equality, social justice, ending poverty).

Concludes with discussion of 10 challenges faced by "sustainists": creating a shared vision for the future out of multiple perspectives, moving past the unhelpful tools of neoclassical economics, facing up to impending resource shortages, harmonizing the needs of rich and poor, safeguarding ecosystem services and restoring natural capital, acknowledging climate change as a gigantic problem, acknowledging other ecological issues that threaten sustainability (species extinction, topsoil loss, desertification, endocrine disruption, overconsumption, etc.), fighting greenwashing (abuse of sustainability language) and the denial industry, galvanizing political support and political action, and financing the revolution. [NOTE: Highly recommended background, despite some superficialities (e.g. underestimating the huge number of "sustainability" organizations, while overestimating their political impact to date), and a few important missing titles from the very useful bibliography of c.300 items (e.g., the works of Hazel Henderson and Lester Milbrath). Notably, no mention is made of the "futures movement," which embraced some of the sustainists but peaked around 1980, just as the sustainability movement began to take off. The futurists had a broader view of probable, possible, and preferable futures (often ignoring or downplaying the latter), while sustainists clearly focus on the preferable, anchored by the forecasts of the IPCC. But the range of preferred futures under the sustainability umbrella is ignored by Caradonna, who mentions the more idealized "degrowth" side but ignores the more politically palatable "green growth" advocated by the UN, OECD, World Bank, and Global Green Growth Institute (www.gggi. org).] (SUSTAINABILITY HISTORY)

Degrowth: A Vocabulary for a New Era. Edited by Giacomo D'Alisa, Federico Demaria, and Giorgos Kallas (all Research & Degrowth, Autonomous University of Barcelona, Spain). Routledge: Nov 2014, 220p, \$40.95pb. (www.degrowth.org) "Degrowth" or "Decroissance" rejects the illusion of growth and has come to signify the desired direction of societies that will use less natural resources, abolish economic growth as a social objective, and organize to live

in a radically different way. This is the first English-language book to cover the literature on degrowth, and the words that express what a degrowth society might look like: "simplicity," "conviviality," "care," "the commons," etc. The 45 brief essays are grouped in four parts: 1) Lines of Thought: bio-economics, environmental justice, steady-state economics, etc.; 2) The Core: autonomy, capitalism, commodification, dematerialization, entropy, GDP, happiness, peak oil, etc.; 3) The Action: back-to-the-landers, basic and maximum income, community currencies, cooperatives, debt audit, eco-communities, job guarantee, new economy, nowtopians, post-normal science, urban gardening, work sharing, etc.; 4) Alliances: economy of permanence, feminist economics, Ubuntu (the Nguni Bantu term for human kindness), and Buen Vivir (Latin America's new concepts for the good life and the rights of nature). [NOTE: "Sustainability" not listed, but all of these actions and concepts support it. Research & Degrowth (R&D) has already promoted and organized five International Conferences on Degrowth (Paris/2008, Barcelona/2010, Montreal/2012, Venice/2012, and Leipzig/2014), and hopes to facilitate another conference on "Degrowth for Ecological Sustainability and Social Equity" in 2016.] (SUSTAINABILITY VOCABULARY* DEGROWTH SOCIETY)

Climate Change: A Very Short Introduction (Third Edition). Mark Maslin (Prof of Physical Geography, University College London). Very Short Introductions Series. NY: Oxford University Press, Oct 2014, 187p (4.3"x6.8"), \$11.95pb. The latest IPCC report (2014) presents "unequivocal" evidence for climate change. Global temperatures have risen by 0.8° C over the past 100 years, and could rise by 2.8° C to 5.4° C by 2100. Sea level has risen 22 cm in the past 100 years, and could rise by 52 cm to 98 cm, and there will be significant changes in weather patterns with more extreme climate events. This is not the end of the world as envisaged by some, "but it does mean a huge increase in misery for billions of people." There is a strong economic argument for taking action: tackling climate change now would cost 2-3% of world GDP, as opposed to >20% if we put off action until 2050. Chapters discuss the nature of climate change, past variations in CO₂, the authoritative IPCC reports (drafted by some 500 experts, with >2000 expert reviewers), climate change and the media, the evidence for climate change, the main greenhouse gases, arguments of the "skeptics", modeling future climate, modeling uncertainty and extreme events, climate change impacts (coasts, small island states, storms and floods, heat waves and droughts, human health, biodiversity, agriculture, ocean acidification), possible climate surprises (thresholds and tipping points, melting icesheets, deep-ocean circulation, methane hydrates, Amazon dieback), the Kyoto Protocol, the disappointing Copenhagen conference (COP 15) in 2009, carbon trading, the UN's REDD program (Reducing Emissions from Deforestation and Forest Degradation), solutions (adaptation, mitigation, alternative energy, carbon capture and storage, carbon trading and offsetting, subsidies, geoengineering), global population growth, and the broader "planetary boundaries" concept of nine boundaries (three of which have already been crossed: climate, biodiversity, and anthropogenic nitrogen and phosphorus), which provides "a current view of the state of the global environment." [NOTE: A pocket-size overview that is especially useful for the discussion of possible surprises and planetary boundaries. Also see Robert Henson, The Thinking Person's Guide to Climate Change (American Meteorological Society, Sept 2014, 497p, \$30pb), which is longer and somewhat more popularized.] (CLIMATE CHANGE: INTRODUCTION)

Urban Protected Areas: Profiles and Best Practice Guidelines. Ted Trzyna (InterEnvironment Institute, Claremont Graduate University) and six others. Gland,

Switzerland: International Union for Conservation of Nature, Global Protected Areas Programme, 2014, 110p (8x12"); www.iucn-urban.org. Describes the growing interest in urban protected areas, what they are (areas with large numbers of visitors in or at the edge of large population areas), and why they matter: to promote human health and well-being, define a city's identity, build urban constituencies for nature conservation, offer opportunities to learn about nature and sustainability, provide ecosystem services, bolster resilience to climate change, and support the local economy with tourist income, Profiles are provided of 15 such areas in Sydney (Royal National Park), Rio de Janeiro (Tijuca National Park), Sao Paulo, Hong Kong (Country Parks), Taipei, Marseille, Mumbai, Kingston (Jamaica), Kenya (Nairobi National Park), Seoul, Gwangju (Korea), Cape Town, London's Wetland Centre, Los Angeles, and San Francisco. Concludes with 30 best practice guidelines, such as provide access for all, engender a local sense of ownership, take advantage of volunteers and support groups, control invasive species, promote connections to other natural areas, control encroachment, cast a wide net for advocates and allies, cooperate with universities, seek funding from a wide range of sources, and work to make urban protected areas national and global conservation priorities. (CITIES AND PARKS* CONSERVATION* PROTECTED AREAS)

Public Health 2030: A Scenario Exploration. Clement Bezold (Chairman, IAF), Jonathan Peck (President, IAF) and four others. Alexandria VA: Institute for Alternative Futures, May 2014, 54p (8x11"). Download at www.altfutures.org/publichealth2030. Public health is currently at the fulcrum of many of society's greatest challenges: population health, chronic and disease, and emergency preparedness. But there are many uncertainties in the years ahead, as illustrated by four scenarios: 1) One Step Forward, Half a Step Back: public health agencies and health care slowly advance their capabilities amidst fiscal constraints; many use automation and advanced analytics, but climate change challenges continue to grow, health care costs continue to rise, and there are great variations in funding and approaches to prevention; 2) Overwhelmed, Under-Resourced: funding cuts and a hostile political context undermine the role of agencies, as public health crises grow worse and more frequent, largely due to climate change; technological and economic disparities grow, and public health institutions cannot do much about it; 3) Sea Change for Health Equity: national and local economies gradually grow, and changes in values and demographics lead to "common sense" policies and support for health equity; public health agencies evolve into "health development agencies' that use advanced analytics and diverse partnerships to identify problems and opportunities and catalyze action to improve community health; 4) Community-Driven Health and Equity: public health agencies, partners, and local initiatives coalesce into a national web of community health-enhancing networks that exchange innovations and best practices; the US government supports legislation to create a more equitable society, and new community economic models that help households improve health and wellbeing, in the face of more intense and variable weather extremes. [NOTE: This project, involving interviews with some 40 experts and a two-day national workshop, was supported by the Robert Wood Johnson Foundation and the Kresge Foundation.] (PUBLIC **HEALTH: FOUR SCENARIOS)**

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