



2009

V o l u m e 9

**Prof Dr Timi Ecimovic and Prof Emeritus DDr Matjaz
Mulej**

Multilingual digital book

A n t h o l o g y 2 – 2001 – 2014

Content:

- 1. THREE APPLICATIONS OF THE SYSTEM THINKING**
- 2. THE PHILOSOPHY OF THE ENVIRONMENT**
- 3. THE SUSTAINABLE FUTURE OF MANKIND III**
- 4. PREDLOG PROJEKTA “KROG”**

81 PAGES

2014

Anthology 2 – 2001 - 2014



2009 was concluding year for our research on the basics of the Nature. We have published our results in the bilingual book “The Three Applications of the System Thinking” and in Slovene “Tri aplikacije sistemskega razmišljanja”, Timi Ećimovic, 105 pages, paper book with soft cover and CD. ISBN 978-961-92786-0-4, December 2009.

The findings of our research have proved vulnerability of present global community of humankind. The truth, the time, the physics, our philosophy, our knowledge, our approach to important contents of the life, our research and science, our culture and habitation have lost qualities needed for longevity.

1.

The book “Three Applications of the System Thinking – Tri aplikacije sistemskega razmišljanja” (The Nobel Prize nomination book) follows: CD front cover,





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&

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In co-operation with

SEM Institute for Climate Change, Korte, Slovenia

The book in Slovenian and English on:

Knjiga v slovenščini in angleščini o:

The Three Applications of the System Thinking:

The Environment Theory of the Nature, the Information

Theory of the Nature, and the Climate Change System

Introduction

Tri aplikacije systemskega razmišljanja:

okoljska teorija narave, informacijska teorija narave in

uvod v sistem klimatskih sprememb

Zg. Medoši, Korte, Slovenija/Slovenia

December/december 2009



Prof. Dr. Dr. h. c. Timi Ećimović

**The Three Applications of the System Thinking:
The Environment Theory of the Nature, The Information Theory
of the Nature, and The Climate Change System Introduction**

**Tri aplikacije sistemskega razmišljanja:
okoljska teorija narave, informacijska teorija narave in
uvod v sistem klimatskih sprememb**



Penang, Malaysia/Malezia, and/in Zg. Medosi, Korte, Slovenia/Slovenija

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Anthology 2 – 2001 - 2014



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The Three Applications of the System Thinking: The Environment Theory of the Nature, the Information Theory of the Nature, and the Climate Change System Introduction

Tri aplikacije systemskega razmišljanja: okoljska teorija narave, informacijska teorija narave in uvod v sistem klimatskih sprememb

Tisk knjige: 500 izvodov, CD-ji 50 izvodov.

Prof. Dr. Dr. h. c. Timi Ećimović,

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Knjigo posvečam Nobelovi fundaciji ob moji tretji nominaciji.

The book is dedicated to The Nobel Foundation on occasion of my third nomination.

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Vsebina (Slovenščina – Slovene):

1. Predgovor
2. Povzetek
3. Okoljska teorija narave
4. Informacijska teorija narave
5. Uvod v sistem klimatskih/podnebnih sprememb
6. Kratka zgodovina planeta Zemlja, kot podrejenega sistema vesolja
7. Medsebojna odvisnost, medsebojno delovanje in sodelovanje narave in življenja, sistema klimatskih/podnebnih sprememb in biosfere oziroma našega naravnega okolja
8. Sistem planeta Zemlja
9. Potreba celostno/sistemskega razmišljanja kot osnovni princip razumevanja sistema klimatskih/podnebnih sprememb
10. Krog vode – pomembna vsebina sistema klimatskih/podnebnih sprememb
11. Zrak in atmosfera - še ena pomembna vsebina sistema klimatskih ali podnebnih sprememb
12. Naša civilizacija kot motnja v delovanju sistema klimatskih/podnebnih sprememb
13. Sposobnost uporabe potrebne in zadostne – primerne – celovitosti kot pomembne lastnosti in predpostavke za razumevanje sistema klimatskih/podnebnih sprememb je potrebo še doseči
14. Potrebna in zadostna – primerna – celovitost kot možnost izhoda iz današnje slepe ulice
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Predgovor

Po 26 letih raziskav zaključujem delo na področju filozofije narave. Želim spodbuditi znanost, da prevzame družbeno odgovornost za našo civilizacijo.

Dvotirnost človeške družbe in narave je fascinantna. Nista si podobni in še manj harmonični.

Na srečo ali nesrečo si je človeštvo določilo mesto edinega gospodarja planeta Zemlja in se ob tem niti ne zaveda, da je v resnici gospodar vsega človeštva monstrozen vladar »denar«. Ta ni potreboval revolucije za prevzem vladavine. V praksi si je podredil tako dobre, kot slabe ljudi. S tranzicijo finančne dejavnosti v industrijsko proizvodnjo denarja brez podlage je omogočil dodatno spremembo družbe na privilegirane in ostale. Celo politiki so zamudili tranzicijo in so se našli v situaciji brez izhoda. Totalno razvrednotenje denarja po vrednosti in izhodiščnih podlagah je omogočilo nerazumno visoke dohodke finančnikom, upraviteljem, športnikom, politikom, kriminalnim združbam, zabaviščnikom in birokraciji. Edino merilo uspeha je količina denarja.

Poleg denarja je razvrednoteno tudi delo in temu primerno vsa družba. Kvaliteta je izgubljena na račun kvantitete. Tretji list deteljice zaključuje odgovornost, tako družbena odgovornost korporacij, kakor tudi družbena odgovornost posameznika.

Krizi družbe sledi kriza znanosti. Ni več pomembno, kaj znaš, ampak kako in koga poznaš. Znanstveniki delajo za denar in gospodarje družbe. Opravljajo delo, ki jim ga ti narekujejo. Znanosti delijo denar politika, vojaška industrija in administracija. Najboljše univerze niso najboljše zaradi kvalitete, ampak zaradi količine denarja, ki se pretaka po poteh univerzitetne birokracije.

Mislim, da potrebujemo prenovno izhodišč medsebojnega spoštovanja. Spoštovanja vrednot človeka in človeštva ter zavračanje vrednot, ki so nas pripeljale tako daleč, da ne spoštujemo narave lastnega okolja v katerem živimo.

Upam, da je še čas, da se prebudimo iz lagodja, ki si ga domišljamo, ki pa ga v resnici ni.

Prof. dr. Timi Ećimović



Povzetek

Vizija trajnostne sonaravne prihodnosti človeštva ima čarobno moč, saj predstavlja samo naravo in človeka ne kot posameznika ampak daje odgovor na to kako smo prišli do danes, kdo smo danes in kaj bomo v prihodnje, če!

Okoljska teorija narave odpira nove meje spoznavanja sedanjosti in narave.

Informacijska teorija narave omogoča spoznavanje sistemov, procesov in vzrokov za to kar smo.

Pojem sistem ima veliko vsebin. Tukaj ne bo pomenil niti miselne slike o obravnavanem pojavu ali procesu niti običajne metode dela niti družbeno-gospodarske ali kakšne druge trajne ureditve niti spleta rastlin ali kamenin ali ljudi, ki nekako spadajo skupaj, ampak pojav, ki je tako zapleten po svojih sestavinah, povezavah in vplivih med njimi ter posledicah, da ga je težko povsem dojeti in še težje obvladati¹.

Zato govorimo o sistemu klimatskih/podnebnih sprememb.

Ne pomaga nam veliko, če ga dojamemo in/ali obvladamo po delih, saj ima kot celota bistveno drugačne lastnosti, kot jih imajo deli vsak zase.

Resnico bomo lažje spoznali in težave ter razvoj lažje obvladali, če obravnavamo pojav čim bolj celovito namesto po posamičnih delih. Pogoji za to je čim bolj celovito obnašanje ljudi, t.j. opazovanje, dožemanje, razmišljanje, čustveno in duhovno življenje, odločanje in uresničevanje odločitev, iz česar izidejo čim bolj celovita spoznanja in drugi izidi. Temu rečemo sistemski pristop.

Popolne celovitosti običajno nismo sposobni doseči, ena sama specializacija – en sam poklic ali en sam vidik – pa nas omejuje na navidezno celovitost. Zato upoštevamo Mulej/Kajzerjeva (1998) zakon zadostne in potrebne, t.j. primerne celovitosti.

Klimatske/podnebnne spremembe z učinki globalnega segrevanja, nenadnih naravnih katastrof od cunamijev, poplav, viharov, sušnih obdobjih do sprememb v klimi/podnebnju v lokalnih območjih, kjer ljudje živijo v lokalnih skupnostih, so danes najpomembnejša sprememba v biosferi planeta Zemlje. Ogrožajo današnjo svetovno človeško skupnost.

Sistemski pristop k raziskovanju klimatskih/podnebnih sprememb mora zato v sinergiji upoštevati marsikaj, kar kažejo sodobna znanost, obdobje globalizacije - ki prihaja, sedanja razvitost človeškega družbenega sistema, življenje v velikih mestih, ki se po vsebini močno oddaljuje od narave, upravljanje tehnologij brez trajnostne ali sonaravne

¹ Po učenju zaslužnega prof. dr. dr. Matjaža Muleja, Univerza v Mariboru.



vsebine, pomanjkanje družbene odgovornosti² posameznikov in gospodarskih subjektov, nekontrolirana eksplozija reprodukcije človeštva, poznavanje kratkoročnih in od časa do časa mogoče srednjeročno ali celo dolgoročno škodljivih učinkov sintetičnih kemičnih izdelkov, modernih tehnologij, vojaških tehnologij, eksplozijskih motorjev, transportnega sistema, nuklearnih tehnologij, industrije in kmetijstva, lokalne, nacionalne in mednarodne razdelitve politične in administrativne oblasti in njihovo delovanje na usmerjanje dela znanstvenikov ter posledičnega usmerjanja razvoja znanosti; vse to namreč povzroča čedalje večji razmak med življenjem ljudi in človeškimi globalnimi, nacionalnimi ter lokalnimi skupnostmi in naravo planeta Zemlja.

Ta razmak grozi, da bo sedanja človeška civilizacija propadla.

V zadnjih letih vidimo v jeziku politikov in birokratov čedalje večjo manipulacijo pojmovnih in vsebinskih pomenov klimatskih/podnebnih sprememb, globalnega segrevanja, a jih uporabljajo sicer z veliko samozavestjo, vendar brez pravega poznavanja resničnosti sistema klimatskih/podnebnih sprememb.

Trajnostna/sonaravna prihodnost človeštva ali harmonija človeškega sistema s sistemom narave/biosfere (Ećimović 2005; Ećimović Mulej, Mayur 2002; Božičnik, Ećimović, Mulej 2008) ni možna brez ustvarjalnega sodelovanja vseh ljudi za sinergijo – primerno celovitost.

Zato je pomembno predstaviti sistem klimatskih/podnebnih sprememb tako, da ga razume navadni človek, ki naj bi aktivno sodeloval pri procesih, delu, ukrepih, vsebinah in spremembah v življenjskih navadah ljudi, ki so potrebne za trajnostno/sonaravno prihodnost človeštva.

Še bolj je pomembno, da sistem klimatskih/podnebnih sprememb razumejo politiki in administracija/birokrati, ki krojijo svojo prihodnost in tako tudi prihodnost nas vseh pripadnikov človeštva na Zemlji.

Namen mi je, da predstavim sodobni pogled znanosti na naravo in sistem klimatskih/podnebnih sprememb v slovenščini in v angleščini kot jeziku širokega spektra govorečih ljudi na svetu; v drugih izvedbah tega zapisa pa tudi v mnogih drugih jezikih.

² Družbena odgovornost je lastnost ljudi in njihovih organizacij. Preprečuje ali vsaj lajša nevarnost, da bi ljudje zlorabili svoj vpliv in s tem škodovali sodelavcem, drugim poslovnim ali osebnim partnerjem, širši družbi ali naravi, od katere sta odvisna obstoj ali vsaj kakovost življenja ljudi. Taka je kratko povzeta opredelitev v mednarodnih uradnih dokumentih. Po drugih virih gre za nadgradnjo truda za inoviranje pod imenom izboljševanja in doseganja popolne kakovosti ali odličnosti. Tretji viri jo tesno povezujejo s celovitim obnašanjem, četrti pa tudi s trudom za mir na svetu (Hrast idr., 2006, 2007, 2008, itd.). Sedanje nevarno stanje klimatskih/podnebnih sprememb je v bistveni meri (draga!) posledica premalo odgovornega obnašanja ljudi v stoletjih industrializacije in tudi danes. Družbeno odgovorno obnašanje stane manj od družbene neodgovornosti vsaj na daljši rok in ob manj ozkem pogledu na lastno korist ljudi in njihovih pripomočkov, imenovanih podjetja in/ali druge organizacije, lokalne in globalne.



Predstavitve v posameznih jezikih niso prevodi, ampak izvirni prispevki z zelo podobno vsebino.

Upam, da bo ta prispevek doprinesel k možnosti sonaravne/trajnostne prihodnosti našega območja, območja naše države in vsega globalnega človeškega sistema. Trajnostna/sonaravna prihodnost lokalne skupnosti je pot do globalne sonaravne/trajnostne prihodnosti človeštva (Ećimović 1989).

Upam, da bomo odgovorili na izzive sedanjosti in prosim, da me obvestite, če niste zadovoljni s to predstavitvijo. Saj tako lažje dosežemo napredek v medsebojnem sporazumevanju.

Del knjige v angleščini začenjava s predgovorom in nadaljujeva s kratko vsebino.

Executive Foreword by: *H. E., Baron, Col. Chev., Acad., Brig. Gen.(R) Prof. Dr. Roger Haw Boon Hong*

In this book, Prof. Dr. Dr. h.c. Timi Ecimovic has provided an amazingly comprehensive overview of the important processes for the three system thinking applications which consists of Environment Theory of the Nature, The Information Theory of the Nature, and The Climate Change System Introduction.

Each single word, theory, concept, idea, mission, vision, calculation, methodology and even solution is derived from his hard work cum passion of putting huge interest and great effort on the research studies in this particular field of subject through countless of hours since 1980.

The main-line of argument in his research works are to demonstrate the scientific activity field in the Environmental Sciences both technology and theory. The significance of the argumentation consists in the fact that theories of personality are notoriously ungrounded in Theory of Knowledge. The signal contribution however, is only a part of the research work. In the process of developing his argument, Prof. Dr. Ecimovics' drawing upon his specialized knowledge of the scientific activity field in the Information Theory of Nature processes both technical and theory, devised a simulacrum of the mind which serves the shed light both on effective and productive stages. Although, the project works main line of argument could stand alone independently of the simulacrum discussion, from a logical point of view modelling, and is several degrees of abstraction above existing models.

He has contributed his great talent in the Environmental Sciences in the area of Climate Change System by his development of the equation and The Information Theory of Nature processes and its applications, particularly the equation for the information theory based



on the proper protective mechanism of the System Theory, System Thinking, analysis and synthesis and Climate change system as processes within the Nature, when holistic thinking at all levels and dimensions could be assistant to the science. This book will illustrate the knowhow of this subject matter.

In line with this topic, the base of the applications of The Information Theory of Nature processes developed by him from holistic system thinking and the climate change system as in the book “System Thinking and Climate Change System (Against a Big “Tragedy of Commons” of all of us)” 2002, and book “Our Common Enemy - The Climate Change Threat” 2006 to its recent unavoidable position in the field of the holistic thinking and Environmental sciences and first Chapter of the book of Physics Prof. Dr. Timi Ecimovic has made great contributions with excellent results to mankind in the physics and environmental sciences, production technologies, research methodologies and, especially in the Information theory of Nature. In the last field of activity, his Information theory of Nature is now the new platform for evolution of the sciences.

Indeed he has made a significant positive contribution to mankind, culture and leadership, one which has been highly acknowledged by many international institutions, associations and organizations globally.

It is hoped this book will be useful for policy makers, national planners, administrators, all field of scientists and experts, universities, Companies and individual at large. The non-government organization can play a great role in creating awareness about Environment Theory of the Nature, The Information Theory of the Nature, and the Climate Change System through publicising the contents of the book. There are elements in this book which illustrated many lessons here for all countries, both rich and poor. Now is high time to promote a green world to prevent ‘end of the world disaster’ coming to us too soon beyond our expectation.

Life is full of adventures and thrills. Be appreciative and thankful because things in this world may not last forever. Also be responsible and take care of our environment for the benefit of society at large. Although things may change gradually or as a result of an external force or a sudden natural disaster, humans have managed to learn numerous big lessons from all kinds of natural disasters and manmade problems. Therefore, it is everyone’s duty to protect the Earth and love all the living, instead of purposely destroying life. We may leave behind each other one day. However we should value every single second and everything surrounding us whether be it near or far away.

This book is an excellent piece of document written by Prof. Dr. Timi Ecimovic, Programme Director for Ansted University School of Environmental Sciences. His brilliant research works merit special attention as he has shown us the nature reaction brings climate change issues.



Brief profile of Prof. Dr. Roger Haw Boon Hong



Professor Dr. Roger Haw Boon Hong (Malaysian) is a well-respected international academician, institution and organization developer, visionary leader cum sustainability expert. Professor Haw has demonstrated a visionary commitment to Corporate Social Responsibility (CSR) Practices, Education and Environmental Sciences Development activities. He has co-authored several books and research papers in the areas of CSR, Business Management, Education, Environmental Sciences, Learning Organizations, Culture and peace, and Distance/Virtual Learning Programs which were published by various publishers in the UK, Canada, European Countries, USA, Middle East, Africa, India, Korea, Thailand, and Malaysia, etc. Prof. Roger Haw has obtained over 100 local and

international prestigious awards recognition in different disciplines. He is a holder of seven Honorary Doctorate degrees from various Universities and also obtained 18 Fellowship from different Professional bodies in various countries. As an Ambassador for his profession he has given his time and expertise to twelve reputable institutions in twelve countries of which he is serving as an Honorary Member of the Academic Board of Advisors and Board of Governors.

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Executive summary³

The vision of the sustainable future of humankind has a magic power, because it is presenting the Nature and humankind not as separate issues, systems, requisitely holistic approach, but it is letting us know how we have come to the present, what the present is, and what shall we be in the future.

The environment theory of the Nature is opening new frontiers for understanding present and the Nature.

The information theory of the Nature makes possibility for understanding of systems, processes and reasons for what we are.

³ From the book »The Climate Change System Introduction«, Ecimovic, Timi, and Mulej, Matjaz, October 2008, ISBN 978-961-91826-5-9



The term system has many contents. Here it will mean to us neither the mental picture about the event or process dealt with nor a usual method of neither work, nor a socio-economic or other order nor a network/complex of plants or stones or humans fitting together somehow.

The term system will here rather mean to us a feature/event/process that is so complex in its components, relations and influences between them and their consequences that it is difficult to comprehend and even more difficult to control.

This is why I call the climate change a system.

Understanding and/or controlling it per parts is not very helpful, because as a whole a system has attributes that differ essentially from attributes of each one of its parts alone. Clear cases: the edible salt is a synergy/system of two poisons; water is a synergy/system of two gases; an organization is a synergy/system of many – different from each other, unavoidably, and hence complementary – professionals; a house is a synergy/system of bricks/concrete/wood, doors, windows, electric, water and other installations etc.

Synergies emerging from their attributes provide to the new whole/system new attributes. Therefore, the truth will be easier to discover, and difficulties and development easier to control, if the feature/event/process is considered as holistically as possible rather than per single parts. This is called systemic or systems thinking. A total holism of human behaviour, i.e. monitoring, perception, thinking, emotional and spiritual life, decision making and action, and a total wholeness of insights and outcomes, is usually impossible to attain, but a single specialization – a single viewpoint of profession – limits humans to fictitious holism providing for fictitious wholeness.

This fact makes us apply the Mulej/Kajzer (1998) law of requisite holism as the suitable one. In the case of the climate change system this would mean the understanding that synergies of insights from physics, chemistry, biology, history, technology, economy and several more disciplines and practices are needed. One would chose and collect professions and viewpoints that one would consider essential and interdependent for mutual completing up by differences.

Following the ancient Greek philosophy one would link them on the basis of their interdependence or – in the Greek wording – dialectics. A dialectical system would show up (Mulej, 1974, see Mulej 2008). In this case a system is not meant to be a complex feature, but a mental picture about it, which we introduce in order to attain the requisite holism of human behaviour and requisite wholeness of its outcomes.

A systemic approach to the climate change must consider “The Age of Globalization”, the present status of our civilization, unnatural life of humans in poly/mega and similar urban centres, management of technologies without sustainability, lack of individual and



corporate social responsibility⁴, uncontrollable human-population explosion, short- and often medium- and even long-term ('side'-)effects of the: synthetic chemicals; modern technologies, weapons, combustion engines, transport system, nuclear technologies, industrial and agricultural production, national and international political distribution of power and administration, and their influences on the scientific global, national and local communities; they are causing a gap between needs and results of the cohabitation of Homo-sapiens-civilization with the nature on the planet Earth. This gap threatens this civilization to disappear.

This gap surfaces as the climate change system and global human community impacts, and consequences are: strong winds, large droughts and floods, tsunamis, earthquakes, large air pollutions by industrial, city life's and transport system's emissions, changes in local climatic patterns, global warming, depletion of the ozone layer, pollution of all three basic parts of the biosphere: soil, seas/oceans and air.

They are due to huge misunderstanding of the climate change system by the population in local communities around the Globe.

Simple language for simple people and understandable explanations are needed for sustainable future of mankind or harmony of humankind civilization with the nature on the planet Earth.

It is as it is; we are, at least, trying to present the contemporary scientific approach to the present most important issue of humankind.

Whether we shall understand the climate change system or not has a crucial importance for the local community life, and gives questionable chances to the long-term of survival of humankind – it requires sustainable future. Sustainability of local communities leads to the sustainable future of global human civilization⁵.

⁴ Social responsibility is an attribute of humans and their organizations. It prevents or diminishes, at least, the danger of humans' abuse of their influence leading to damage experienced by their coworkers, other business or personal partners, broader society or nature on which the human existence or quality of life, at least, depend. This is a short summary of definitions in international official documents. Other references see in social responsibility an upgrading of the innovation effort/support called improvement or total quality management or business excellence. Further references see it closely linked with systemic behavior; yet further ones link it with efforts aimed at peace in the world (Hrast et al., ed., 2006, 2007, 2008, etc.). The current dangerous state of climate change system results to an essential extent from a lack of responsible behavior of humans over centuries of industrialization and all times until today.

⁵ For details see our publications: »Our Common Enemy (The Climate Change System Threat)« by Ećimovic et al, 2006, and recent books: »The Sustainable (Development) Future of Mankind« by Ećimovic et al, 2007, and »Sustainable Future, Requisite Holism, and Social Responsibility« by Božičnik, Ećimović and Mulej, 2008; all are displayed at: www.institut-climatechange.si



2.

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Zg. Medosi, September 2009

The Philosophy of the Environment

»The Philosophy of the Environment« was written because of need for understanding of the Nature. Also I have concluded research on the environment as from the system theory, and system thinking, and as result I am presenting “The Theory of the Environment”.

The Abstract:

»The Philosophy of the Environment« is another philosophic research issue as search for knowledge and understanding of the nature and meaning of the universe and life.

Term environment or surrounding has many meanings and in my opinion it needs definitions and classifications of different meanings. To my research connected with the Nature it has more important place for understanding the philosophy of the Nature, as any other known meaning.

The Keywords:

Environment, Evolvment, History, Information, Invention and Innovation, Nature, Philosophy, System thinking.

The Introduction and the Discussion:

Discussing that the philosophy is the search for knowledge and understanding of the Nature, and meaning of the universe and life, I would rather say »The Philosophy of the



Environment« is commencement of systemic approach to the meaning of the environment, *“basic environment”*⁶, Universe and Cosmos as precondition for existence of the Nature.

Let me present the case studies of two recent theories »The Theory of the Environment« and »The Information Theory of the Nature«, which are most recent research results of my thinking and researching.

Mankind⁷ local communities are variety of many different contents of the mankind life styles, etc. Major part of it has connections with origin of the people living within the local community, and with the nature characteristics of the environment, within which the local community is. Geography, biology, physics, chemistry, and history are in general main deciding contents. Common thinking and understanding are day by day life issues, local happenings and communal life stories. All of us we are living in the local community, but very seldom we are understanding individuality of the local community. Countless local communities of the humans on the planet Earth are countless individual approaches of the humans to make living. Beside the family the local community is basic unit of present human civilization.

It is very difficult not to see similarity with star systems, planets, galaxies and other energy/matter forms within known Universe. As we seldom have opportunity to see individuality of the local community of mankind on the planet Earth, so it is even more difficult or impossible to understand individuality of the planets and the planet Earth,

To the countless number of the planets within the Milky Way Galaxy we have to add even more countless number of the planets within the rest of the Universe. To do it more complex, I have to say, that what we understand of the Universe is very small part of it, and even more it is to us unknown how small part of it is in reality.

The Nature⁸, the origin of the Earth, the origin of humans etc. are parts of large content we call it »The Nature«. It is hard to know answers to all questions of the Nature. But some of them need to be answered for sake of philosophy and understanding of the life

⁶ *“The basic environment”* is novelty of understanding of the Universe as environmental precondition for having anything – The Nature and evolvments within it.

⁷ From the book »The Sustainable Future of Mankind III« first draft, Ecimovic at all please see at: www.institute-climatechange.si.

⁸ From the book »The Sustainable Future of Mankind III« first draft, September 2009, and partly from the books »The Sustainable (Development) Future of Mankind«, Ecimovic at all, 2007, and digital book »Sustainable Future, Requisite Holism, and Social Responsibility (Against the current abuse of free market society) Bozicnik, Ecimovic, Mulej, 2008, both displayed at: www.institut-climatechange.si



and other issues connected with it. Present science has to undergo future evolvement to be able to answer basic questions about the Nature. That is why I am putting my recent research in this presentation as to put on records new theories and possibilities for tomorrow. And of course tomorrow I expect better environment for mankind and sustainable future⁹ for our descendants.

»The Information Theory of Nature« has been published during 2006 and here I will present recent research and new theory »The Theory of the Environment«, which is opening new horizons for research of all issues of the Nature. It is environment centric theory, which is offering understanding of present in general and allowing new dimension of research of the Nature.

The theory of the environment is taking environment as precondition for anything. »Basic environment« of the Nature is Universe or Cosmos. Within it the Nature exist in countless forms, dimensions and contents as **»interdependence, interaction and co-operation«** of all matter, energy, information, light, rays, powers, forces, particles and yet unknown contents of the Nature. The beginning or end of the basic environment does not exist, but it is **»continuum«** of the Nature, which makes/holds/transforms all contents. Basic environment (the Universe or the Cosmos) should get proper description, which according to system thinking do not commence with beginning and end but exist as **»continuum«**

The present thinking ability of humans could not accept reality of the immensity of the basic environment the Universe or the Cosmos. For present researching techniques the basic environment is immeasurable. At present we have researching possibilities for exploring our neighbourhood within the basic environment the Universe or the Cosmos. Our horizon is limited with our techniques and researching abilities/possibilities. Also for our understanding of the dimensions within the Universe, we are limited by our scientific language – mathematics, which is not yet evolved for the needs of the Universe researching. That is why we have discovered the Big – bang theory, black holes, unified theory, strings and many more brilliant thinking and applications of the researchers, but could not properly describe the basic environment or the Universe.

Putting the continuum at center of the Nature is making large difference in possibilities for research.

⁹ The sustainable future of mankind is harmony of our civilization with the nature of the planet Earth; please see at foot note 2.



So we have now the basic environment and the continuum, we have basic relationships as interdependence, interaction, and co-operation of all matter, energy, information, light, rays, powers, forces, particles, dimensions and yet unknown contents of the Nature, where some of statements need to be described, for instance the information theory of the Nature.

Present understanding of the Nature has been going on as long as present civilization has been evolving. As mentioned before during 2006 the book “The Information Theory of the Nature, and” Ecimovic, ISBN961 – 91826 – 1 - 8 has been published with the Information Theory of the Nature, and before within this presentation “The Environment Theory” was discussed. The novelty of the information theory of the nature is research of the term “information”, which has been researched in connection of the system thinking, and the philosophy. The “information” was understood as a system of the abilities, quantities, qualities, relationships, instructions of each and all matter, energy, light, rays, powers, forces, particles, dimensions and yet unknown contents of the Nature under prerequisite of interdependence, interaction and co-operation.

During the transformation of the matter and energy with their information, it is happening simultaneously according to the environment qualities the information? New transformation has its information in same manner as the genetic code of living creatures. It is precondition of their continuum, and it is composed at the moment of transformation. At living creatures it is according to prearranged (by the nature) genetic structure, and at other parts of the Nature the genetic structure is exchanged for abilities, qualities, quantities and other characteristics of the environment, within which the transformation of matter and energy is taking place. By the continuum the systemic process is upgrading all characteristics of the Nature.

For instance after “Big – bang” (Hawking) happened, which has been responsible for our part of the Universe, the transformation of matter and energy has resulted with formation of the Milky Way Galaxy, countless star systems and our star Sun system. From commencement of the Big – bang the energy and matter transformation resulted with new transformed contents, and it has been simultaneously enriched with information of its abilities, and so on. We think major part of the information is composed by characteristics of the environment, within which the process were and are going on. Of course also the environment characteristics are changing or transforming accordingly. Finally some 4.560.000.000 years ago the star Sun system evolved the planetary systems among with our planet the Earth. Each part of the system has its own information according to which the evolvments are possible. In our research we think it is possibility which is opening the door for researching further contents of the Nature.

To be able to conclude these cases studies I have to put short discussion about the time.

Here we have to rethink/discuss our human achievement called the TIME. We humans we have a long history of use of the time as practiced. At present the time is very important



dimension of our living. Practically it is very difficult to imagine our living without the time practically in use.

And looking at the Nature viewpoint, we may see it does not use the time. **The Nature is always in the present.** We may discuss it as the Nature is taking as much time as needed for certain process. And due to system abilities the Nature is evolving in only one direction – “the multidimensional evolvement ahead”. Direction of the evolvement is not known, but it is result of interdependences, interaction and co-operation in case.

We think the TIME is our civilization imaginative dimension, which is very useful to our living, thinking, discussing, researching, etc., but the Nature does not have the time as dimension. Processes in the nature are having their evolvement according to the direction of the evolvement and the information, which is assisting it, and it exist only at present. Due to systemic quality and understanding the requisite holistic principle, the system qualities, and environment within which the requisite holistic the nature case is existing THE PRESENT has viable (to our understanding) or not continuum, but it has constant continuum to us understandable or not.

The environment definitions:

1. The **basic environment** (the Universe or the Cosmos) it is environment within which the Nature exist as continuum of all matter, energy, information, rays, particles, dimensions, powers and forces, and jet unknown contents of the Nature. The basic environment (the Universe or the Cosmos) do not has the beginning or the end, but has countless forms of matter, energy and information transformations, dimensions and systems and it is a system or the Nature.
2. Second to the basic environment (the Universe or the Cosmos) are countless form of matter, energy and information of larger and smaller dimensions of star systems, the galaxy systems, and within them individual star systems as our star Sun system.,
3. The basic environment (the Universe or the Cosmos) as system it is making possible the interdependence, interaction and co-operation of all matter, energy, information, rays, particles, dimensions, powers and forces and jet unknown contents of the Nature. Consequently each and one case system under observation: big and small bangs, seen or dark energy, black holes, galaxies, star systems and all other forms of systems within it are having their content and characteristics (individuality).
4. The star system environment it is a particular star system with its internal and external environments and systems.
5. The planetary system is a part of the star system and it has its external and internal environments and systems.
6. The star Sun system is a part of the Milky Way Galaxy, which has 100.000.000.000 + other star/planets systems and countless meteorites and other



forms/systems of matter or energy. All of them are moving like a top and circular movement around each other and according to interdependences, interactions and co-operation the star Sun system is moving like a top and with app 800 000 km/hour speed circling around the centre of the Milky Way Galaxy. The circular movement is main physical characteristic of all larger and smaller forms of matter and energy within the Nature.

7. The planet Earth is one of eight planets, but only one of them with environmental characteristics allowing “the living Nature”. The planet Earth has three basic environments (the planet Earth basic environments): the Land, the Water, and the Atmosphere environments.
8. “The living Nature” on the planet Earth natural system has countless living creature’s larger and smaller forms and systems, amongst which it is also Homo sapiens civilization. All of them share the environment or the Biosphere, which is thin part of the planet Earth system on the surface, within the water and atmosphere lower part.
9. The Homo sapiens civilization has its own environment of different characteristics but by the third millennium the urban environment prevail as internal environment made by humans. Other forms include: rural; agriculture; forestry; transport means systems including roads, railways, airports and ports; industry; sports including sport facilities etc.; military with barracks, armaments and other facilities; education with schools, universities, researching facilities, etc.; healthcare system with hospitals, researching and other facilities etc.; and etc. At 2008 in Europe (EU) 17 % of total area has been sealed land or land taken from the Nature and occupied by the Homo sapiens civilization within the land area of EU countries.
10. The living creature environment could be divided as: internal and external environment. Typical internal environment (within the body) is cell liquid or blood as environment for blood cells etc. and external – society, surrounding, water (bathing, swimming), air for breathing, etc.
11. Man made system have got internal and external environment – for instance the car has got combustion engine as part of internal environment and roads as part of external environment. Homo sapiens civilization environment and the natural environment are parts of the natural environment.

There are many environment word use and definitions connected with content of issues like the nature environment or surrounding, etc.

At the end I may discuss the environmental sciences, which are quest for knowledge and understanding of environment and as many environments so many sciences are. Generally I may think that “the basic environment” (the Universe, the Cosmos) as largest possible environment and only environment with only internal environments could be commencement of the environmental sciences and other could follow. Our civilization The Book of Physics should commence with Environment (“basic environment” the Universe or the Cosmos).



The Recommendations

I am recommending as follows:

1. Rethinking of present use of term environment and consequently introduction of proper terms.
2. Introduction of the system thinking for any use of environment word or issues.
3. Introduction of the environmental sciences as scientific approach to the Nature and “basic environment” (the Universe or the Cosmos), and other environment systems.
4. Use of system thinking as research tool.

The References:

As stated at text and foot notes otherwise all references could take much more space at this presentation as it is.

3.

The book »The Sustainable Future of Mankind III« is concluding book on the sustainability of humanoid. The book is on Amazon.com.

The sustainability in 2014 we understand as sustainable future of humanoid.

The simple definitions: »The Sustainable Future of Humankind is harmonious and complementary coexistence of the global community of humankind and the Biosphere of the planet Earth«.

Our publishing has changed the mode of action from paper books to digital ones. It is only digital form as only mode of presentation. Of course we have commenced using USB keys and continued with CD-s. Only difference to other researchers and scientist and our work was and is – we are not writing to get money but to put research on records.

The sustainability remains as one of our main subjects but in 2009 we have finished trilogy on sustainability. Our concluding book in trilogy on sustainability »The Sustainable Future of Mankind III« short presentation is following:



The CD front cover is the castle and the Centre of the Capitol of our home land Ljubljana. The first settlement was in swamp area back in 10.000 year BC. Many developments have been in following centuries. From Roman town Emona has developed to Slovenian modern capitol Ljubljana. The center of Ljubljana is castle from medieval times with medieval buildings around. It is the University town and site of our Slovenian National and University Library.

The book was written in 2009 but due to technical reasons the publishing was in 2010, the year during which Ljubljana was also the World capitol of book.

**Prof. Dr. Timi Ecimovic, Prof. Dr. Mark Esposito,
Prof. Emeritus Dr. Dr. Matjaz Mulej, and Sir Prof. Dr. Roger B. Haw**



THE SUSTAINABLE FUTURE OF MANKIND

III



Zg. Medosi, Korte, Slovenia, March 2010

ANSTED UNIVERSITY, BVI OF UK – SCHOOL OF ENVIRONMENTAL SCIENCES	SEM INSTITUTE FOR CLIMATE CHANGE Korte 124 SI – 6310 Izola – Isola	IRDO - INSTITUTE FOR DEVELOPMENT OF SOCIAL RESPONSIBILITY
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Anthology 2 – 2001 - 2014



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The Sustainable Future of Mankind III

Prof. Dr. Timi Ecimovic, Prof. Dr. Mark Esposito, Prof. Emeritus Dr. Dr. Matjaz Mulej, and Sir Prof. Dr. Roger B. Haw

Technical Editor:

Boris Maraz, B. S (Org. Sc.)

Dear Readers,

We want to offer you a good book. If you have any reason to be unhappy, please let us know!

The cover photo: Ljubljana, the capital city of the Slovenia from the air, the world capital of book in 2010.

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THE SUSTAINABLE FUTURE OF MANKIND III

Anthology 2 – 2001 - 2014



By

Prof. Dr. Timi Ecimovc, Prof. Dr. Mark Esposito,
Prof. Emeritus Dr. Dr. Matjaz Mulej and Sir Prof. Dr. Roger B. Haw



Acknowledgment:

To the sustainable future of mankind, and our families!

Zg. Medosi, Korte, Maribor, Slovenia, Grenoble, France, and Penang, Malaysia, March
2010

Foreword – Executive Summary

Since 1960 some of us and co-authors have been deeply involved in issues of future of our civilization. Some of us have been lost forever like Prof. Dr. Helmut Metzner from Tübingen, Germany, Prof. Dr. Rashmi Mayur from Mumbai, India / New York, USA, Dr. T. P. Amerasinghe, Colombo, Sri Lanka. Others are still active and mentioned in this and

Anthology 2 – 2001 - 2014



ours previous books contributing to the very complex issue of sustainable future of mankind.

We think mankind's evolvement/development over the last several hundred years has been on a wrong path with too much technological progress and too little respect for fellow humans. It is important to accept the present situation. We may research the past, we may see the present but the future is unpredictable.

Any action for survival of mankind should have its basis in the present and should take in account the past. The important issues include reality of knowledge and appraisal of the knowledge of reality, which has often been misled and misused for opportunistic purposes.

The most complex system we are in and we may research is the Universe. With contemporary research on commencement of the Universe the human knowledge has been changing. Our thinking, which is systemic thinking behaviour, has put forward the theory of environment and information.

Theory of environment is the core of the Environmental Science and is opening a commencement such as: "Environment is precondition for the Nature".

It is the reason for the statements: "The basic environment is the Universe" and "The Nature can live without humans, but humans cannot live without the nature".

When we are discussing the evolvement of matter and energy; the Nature as complex system, the Big Bang and Black Holes or the notorious nuclear technologies - their interdependences, interactions and co-operations are issues of primary importance and driving forces supported with evolvement of the information as discussed in "The Information Theory of the Nature".

There is no beginning or end, but a CONTINUUM as the only basic understanding of the Nature. It is supported by dimensions, locations, levels, grades, and many more expressions but by not visions of the reality of our present ability to comprehend it.

Globalization is an all-encompassing process, but human approach to it is not requisitely holistic and systemic.

This current process is offering a good platform for complex problem solving, but also a good opportunity for huge misleading and misuse of the Nature and hence the entire present mankind's society.



The challenge of leadership is important for our civilization sustainable future. We think it could be a DIRECT DEMOCRACY with no political parties. The World Parliament, Constitution of the Federation of the planet Earth and The World Government as collective governing complex of our global community, our common future, and could offer the political leadership for a way out of current blind alley.

This could open a possibility for mankind's sustainable future or harmony of our civilization with the Nature.

The Nature should be taken as a whole commencing with the basic environment or the Universe: then follow Galaxies, Sun systems and our Sun system, planets and the planet Earth, continents all way to our most local environment, and to energy, matter, information, particles, rays, powers and forces, and yet unknown contents of the Nature.

Executive Foreword

The title of this publication “THE SUSTAINABLE FUTURE OF MANKIND III” is trying to draw the awareness of mankind, its commitment and responsibility towards the changing environment, human society, the planet Earth and the Nature.

Why? We humans are responsible for the effect of the changes that have been made by humankind and made our future generation to pay the highest premium while the present world is enjoying the benefits.

It sounds ill-logic, but we can see that the endless progresses in the world made by the humans are just meant to meet the needs of human beings' desires.

The Theory of Environment tackles the commencement of the continuum of the Nature, both basic and local Universe, Milky Way Galaxy, our Sun star system, its planets including the planet Earth on which our civilization is practicing its LIVING: they are under permanent impact of interdependence, interaction, and cooperation as driving forces and rules of coexistence.

Mankind on the Earth is a form of living system with over 7.000.000.000 individuals. Our local Big – Bang resulted in history of over 4.500.000.000 years of evolvement and evolution, inventions and innovations; and their short summaries are genetic codes of living creatures.

This theory is an offspring of physics, biology, geography, chemistry and other the natural, social and technical sciences.

Our key observation is that over the last two hundred years mankind has been on a wrong path, along with a much better life of the current generation.



The result of mankind's history after the steam engine invention back in 18th century (James Watt 1774), and with urbanization resulted in a very catastrophic situation at the end of 2010.

The common denominator of the process and its resulting problems is human one-sidedness in both decision preparation-making and execution.

It is therefore system thinking/behaviour, which supports the requisite holism of the human approach to any action and thus opens a possibility for discovering the basic principles of the Nature. Our knowledge is based on our and others' observations and philosophy.

The reality differs very much from human insights.

If we take, for example, the Pleiades as the star cluster, which is also called the Seven Sisters we see it.

Often, on a clear night, you can see the Seven Sisters twinkling in the sky, even though they are five hundred light-years away.

Because of that distance, you are actually observing where the Seven Sisters were five hundred years ago; it took that long for the light image to reach your eyes. Basically, you are observing history in the night sky, not the actual, current position of the stars.

We urge each reader to read this publication completely at least one time.

After reading each chapter of this publication you will realize many features are interdependent, interacting and cooperating.

Their inter-relatedness caused the authors to table this part of their thoughts and research outcomes to show some useful facts for your perusal. This publication will cover a bigger scope towards the agenda of the "SUSTAINABLE FUTURE OF MANKIND".



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Some interesting parts from the book are following:



The Sustainable Future of Mankind III

Let us present the short history of our work on the sustainable future of mankind.

Philosophy, observation, research, interdependence, interaction and co-operation to write a books on sustainable future of mankind has commenced back in 1986, when TJE Business Research Centre in Komenda, Slovenia was established as independent business and biotechnology consultancy organization aimed at an innovative approach to the issues of the Nature, Space and Environment protection. The SEM Institute for Climate Change followed in 1995/97 as an independent research organization for natural sciences focusing on the environment. It is still active.

New dimension of philosophy, observation and research has been reached by within-the-country (Slovenia) and international co-operation with many researchers and organizations, where the platform for co-operation has been established. The common ground was the climate change, which was countless time misinterpreted, misused and tailored by politicians, bureaucrats, national elite members, rich individuals, religious, United Nations and other organizations, media and many more never noticed ways of opportunity used for individuals' money benefits, and in our thinking needed help for one of most complex issues facing the mankind as challenges from the Nature for our civilization's survival.

The philosophy, observation and research have been supported by the system theory, system thinking, analysis and synthesis as additional tools for work and many researchers with such knowledge have been contacted, incorporated: this publication resulted.

The thematic first publication as the book was published in 2002 »System Thinking and Climate Change System (Against a big »Tragedy of commons« of all of us)«, 303 pages, soft cover paper A4 book, CD, and also displayed in digital form (so are also all other publications mentioned at this chapter) at www.institut-climatechange.si It was written by Timi Ecimovic, Matjaz Mulej and late Rashmi Mayur. The term CLIMATE CHANGE SYSTEM was used for the first time as a term for description of the climate change in progress. The book was ground for nomination for The Nobel Prize in 2003. The book has been out of stock since 2003 and only source for those who do not have it is above home page.

The complexity of the sustainable future of mankind is not simply a battle for a better world or better tomorrow etc. It is a process which will require more from humanity as it has looked and looks like now, but also a process of hope for continuity of humanity. Sustainable future of mankind is a battle for our children's survival.



We lost Prof. Dr. Rashmi Mayur during the UN international conference “10 years after Rio” in Johannesburg, South Africa in August/September 2002. He suffered the brain stroke and died after a couple of months of unsuccessful treatment.

After the 9th session of the Provisional World Parliament in Tripoli, Libya, April 2006 a group of the authors: Timi Ecimovic, T. P. Amerasinghe, Ramadan Breki, H. A. Shankaranarayana, Alexander N. Chumakov, Roger B. Haw, Peter A Wilderer and Glen T. Martin published the book “Our Common Enemy (The Climate Change System Threat)”. It was sponsored by edition by H. H. Vishwaguru Mahamandaleshwar Paramhans Swami Maheshwarananda on the occasion of the international World Peace Summit Conference in Ljubljana, Slovenia, 2006. The digital and soft cover printed book with 174 pages is out of stock since the end of 2006, and only its digital form could be seen at www.institut-climatechange.si.

On 30th September 2006 the book by Timi Ecimovic “The Information Theory of Nature, and” was published. It has a digital and soft cover printed book form, 208 pages, and was a ground for his nomination for The Nobel Prize in Physics 2007. The book contains the information theory of the Nature and reprint of the book “Our Common Enemy (The Climate Change System Threat)”. The reason for reprint was in case of a positive response from The Nobel Prize Committee, the book could become very popular, and the message from the “Our Common Enemy (The Climate Change System Threat)” looked very important for the survival of the mankind or our civilization. There are some copies of the book and CD’s with author.

As a next step the group of authors: Timi Ecimovic, John M. Bunzl, Mark Esposito, Warren Flint, Roger B. Haw, Matjaz Mulej, H. A. Shankaranarayana, Peter A Wilderer, Lloyd C. Williams with a contribution by Roshni Udyavar wrote the book “The Sustainable (Development) Future of Mankind”. It is a digital and soft cover printed book, 334 pages including the reprint of the “Our Common Enemy (The Climate Change System Threat)” with the powerful message of The Sustainable Future of Mankind. It was published on 28th September 2007. Few copies of the paper book and CD’s are with the Timi Ecimovic; the digital form is displayed at above home page. This book is called the sustainable future of mankind I (one/first).

Our further research and practice of its presentation at international conferences was carried out at and after the international conference STIQE, in Maribor, Slovenia, June 2008, and Jubilee 20th International Conference WACRA EUROPE, in Maribor, June 2008, On its basis Stane Bozicnik, Timi Ecimovic and Matjaz Mulej with number of co-authors from all over the Earth published “Sustainable Future, Requisite Holism, and Social Responsibility (Against the current abuse of the free market society)” on CD. This book is only in digital form. It is called the sustainable future of mankind book II (2/second).



Our next step was publication of our digital and soft cover printed book (60 pages) “The Climate Change System – Introduction or/ali Uvod v system klimateskih/podnebnih sprememb” in English and Slovene by Timi Ecimovic and Matjaz Mulej on 10th November 2008.

At the end of 2009 and in January 2010 the book “Three Applications of the System Thinking”, 105 pages, soft cover book and CD was published as a ground for the third Nobel Prize in Physics nomination 2010 of Timi Economic as for “The Environment Theory of the Nature”.

Because of the role of the Corporate and Individual Social Responsibility C&ISR within the mankind social system we have been active in promotion of responsibility in all dimensions stressing both the corporate and individual ones. As a result Mark Esposito published digital and soft cover book, 230 pages “Put Your Corporate Social Responsibility Act Together!” as a part of Tate Publishing &Enterprises, US, during 2009 together with many presentations on the subject. Also in this book Mark has contributed a significant part.

And finally, we are trying to put together this third book as our contribution towards THE SUSTAINABLE FUTURE OF MANKIND; if its pioneer-role will becomes a seed of the present civilization’s survival in reality, we shall appreciate it. It is a digital book on the sustainable future of mankind we are calling III (3, third).

The Global Community

According to the present knowledge about the Homo sapiens origin it is likely that her/our origin has resulted from natural processes within the star Sun system base4d on interdependences, interactions and co-operation of all matter, energy, information, light, powers and forces, particles, rays, and yet unknown contents/attributes of the Nature.

Amongst researchers, and other peoples of the present civilization there are many insight and interpretations/speculations about the origin of the Homo sapiens. It is a result of the history and heritage of our civilization, but actual facts should not be (miss)used for daily practices of anyone. We have to reach knowledge about origin as one corner-stone of our philosophy. The common identity of Homo sapiens is the genetic code of humans. Our genetic code has its history of some 200.000 years; the Homo sapiens community in the context of the global, the planet Earth community has the same ages. Before it or at same time similar living creature looking or having similar external characteristics but a bit or more different genetic code or structure are representatives of another living creatures, perhaps could be of global or whatsoever community. Intelligent beings from outer space visiting the planet Earth, they could not be a part of our civilization. Also in case of very similar look and genetic code, they could be only what they are – representatives of an alien community.



Genetic code's identity is the only common attribute of Homo sapiens' global community. The differences in history, heritage, culture, ethics and any other content of the human life are not decisive issue for identity of anybody with the mankind community.

Why we are discussing the mankind global community? It is because we are in globalization age or – by some researchers - from pre-antiquity or before stone ages, stone ages, antiquity, medieval times, renaissance, baroque, pre-industrial, industrial, and information, digital, innovative to globalization ages. All of mentioned times could have different history, and it is possible to see many of past times now as a positive or negative source of the present quality of each individual or some community somewhere. The social responsibility time should follow now.

Why? What is globalization? Globalization is societal complex of mankind global community; since the end of the XIX century it was defined by many researchers such as: C. T. Russell (1897), and latter UN – ESCWA, Saskia Sassen, T. G. Palmer, T. L. Friedman, N. Chomsky, and H. E. Daly. A recent definition is stating »Globalization is amalgamation of national economies into united world system based on rapid capital movement, new informational openness of the world, technological revolution, adherence of the developed industrialized countries to liberalization of the movement of goods and capital, communicational integration, planetary scientific revolution, international social movements, new means of transportation, telecommunication technologies and internationalized education«.¹⁰

Whether we agree or not globalization is a process tackling deeply our local, national, continental and global mankind community. In this book we are presenting our view of the path toward survival of mankind global community regardless who, how, why and where but taking care for the life of our next generations. We shall try to not present criticism only but also the path toward a sustainable future of mankind.

And what is sustainable future of mankind? At the best of our knowledge it is harmony of mankind global community with the Nature of the planet Earth. Like it or not it is the Nature of the planet Earth which is offering hospitality to Homo sapiens' world or local or whatsoever community. »The living nature« has many communities, which are global or local or whatsoever communities of living creatures. They are making their living in the same space and physical, biological, and geographical characteristics. Only communities with ability to survive at the offered conditions will survive. That is why we have to unite our abilities, and to find the path toward the sustainable future of our species.

¹⁰ Please see at page 220 of »Global Studies Encyclopedia« ISBN 5-05-005719-1, 2003.



The Global Mankind Community consists of each and every representative of the mankind living at the planet Earth. Now we should not forget that the global community is composed of over 7 billion humans, who have equal rights, abilities, and possibilities and are members of the same club – the Mankind Global Community.

We have to accept that all good and bad is a part of ourselves. And only with our common knowledge, abilities, possibilities, values, ethics, dreams and living style we may have a common sustainable future.

The Present (2009/2010)

Philosophy of sustainable future of mankind is the search for knowledge and understanding of the nature and meaning of the universe and life. Some of us have presented similar insights at many international conferences and other gatherings all over the world.

We may learn and research the *past*, we can see and understand the *present*, but predicting the *future* leads to nowhere”. The future is unpredictable. (Ecimovic, 1997)

The present global social order, life style, education, ethics, values and daily practices of the globalization-age humans, needs to undergo a fundamental renewal, to meet the needs of the challenges at present of third millennium now.

The sustainable future of mankind¹¹ or harmony of our civilization with the nature of the planet Earth is an option for mankind to survive the approaching impact of the climate change system and present societal crisis (2008) on/by the biosphere of the planet Earth.

The year 2008 opened new horizons concerning the heavy crisis situations of the present global humankind civilization. Because of poor leadership of USA in 2000 – 2008 as the only super-power and not only the USA society but also the whole global society is facing serious social crisis.¹² Multiple resources-and-societal crises are entering an age of the climate change system and its impact as a crisis, which is adding to the complexity of the situation in 2009/10 and further.

¹¹ The sustainable future of mankind was discussed at the book »The Sustainable (Development) Future of Mankind«, Ecimovic at all, 2006, ISBN 978-961-91826-2-8, and »Sustainable Future, Requisite Holism, and Social Responsibility (Against the current abuse of free market society)«, Bozicnik, Ecimovic and Mulej with co-authors, ISBN 978-961-91826-4-2, 2008, only digital presentation CD, both displayed at: www.institut-climatechange.si .

¹² Please see: Planck Foundation (www.planck.org): Global Future Analysis, 2008, ISBN 978-94-6012-001-5, and Global Resources Analysis by Induscorp, NL; e-mail: volume1@indiscorp.nl



The scenario of USA and the global mankind society entering globalization age or the energy, drinking water, food, credit and societal crisis has been excellently elaborated and presented in the Global Future Analysis 2008 by Planck Foundation, www.planck.org and in the second presentation the Global Resources Analysis draft version 2008 by Induscorp.nl at volume1@induscorp.nl. Both analyses were managed by excellent researchers' teams. The brilliant social scientists were dealing with mankind and its mankind-centric thinking. The teams' complex system thinking and their co-operation with nature scientists enabled a more complex and hence more truthful analysis.

Actually, what is the missing part in them is the climate change system's impact and changes in the biosphere, which are going to have a broad impact on the present living conditions for all creatures living on the planet Earth.

The group of enthusiastic philanthropists many years ago, under leadership of late Dr. T. P. Amerasinghe from Sri Lanka who died in 2007, commenced an everlasting path of global human society leadership towards a direct democracy with The World Parliament, The Constitution of the Earth Federation, and The World Government.

The question which we are focusing on is the sustainable future of mankind.¹³ The integrated complex system thinking research techniques are needed for analysing it. The globalization age has its complex issues as they are, whether mankind sees them or not. In other words the very complex issue of the mankind problems of 2008/09/10 should be put into the frame of the living space/environment of humans – the biosphere, taking into account the simultaneous problems/processes evolving within the biosphere, plus their synergies.

What we are presenting is a broader analysis of more complicated/complex Nature of the planet Earth and global mankind society situation now. As system thinkers we are analysing statuses of the different origin of both mankind as a system/entity of its own and a part of the planet Earth system – THE BIOSPHERE.

The biosphere, which is the frame within which the global mankind civilization has its living space, has evolved the situation of the climate change system impact, during the rise of the Globalization Age.

The Climate Change System¹⁴ provides, makes, holds, and guards the living conditions within the biosphere of the Earth; it has a more important role as humans have been thinking in the past. To these conditions all living creatures must adjust to survive. A big number of

¹³ Please see footnote 2.

¹⁴ Please see "System Thinking and Climate Change System – (Against a big "Tragedy of Commons" of all of us)", pp149 Ecimovic, Mulej, Mayur, 2002, ISBN 961-236-380-3, and "The Climate Change System – Introduction", pp 35, Ecimovic, Mulej, 2008, ISBN 978-961-91826-5-9, both displayed at: www.institut-climatechange.si



extinctions of species, smaller and larger alike have resulted from changed environmental qualities, caused by changes within the climate change system.

Systemic thinking enables us, better than single specializations alone do, to see that the Earth's biosphere is made as a synergy resulting from *interdependences, interactions and co-operation* of all matter, energy, information, light, powers and forces, particles, rays and yet unknown contents of the Nature within the time frame, and has three bases – Water, Land and Air environments as local environments of the planet Earth biosphere. To be ready for changes, and mitigations due to the climate change system impacts, all of us single representatives of human species must learn more about the basics of the biosphere and the Nature.

System theory, thinking, synthesis and analysis as researcher tools are allowing researchers to reach beyond the classical science approaches. As thinking process it could define the climate change system in an understandable presentation.

The term system has many contents. Here it will mean to us neither the mental picture about the event or process dealt with nor a usual method of work or a socio-economic or other order nor a network/complex of plants or stones or humans fitting together somehow. The term system will here rather mean to us a feature/event/process that is so complex in its components, relations and influences between them and their consequences that it is difficult to comprehend and even more difficult to control.

This is why we call the climate change a system. Understanding and/or controlling it per parts is not very helpful, because as a whole a system has attributes that differ essentially from attributes of each one of its parts alone.

Clear cases: the edible salt is a synergy/system of two poisons; water is a synergy/system of two gases; an organization is a synergy/system of many – different from each other, unavoidably, and hence complementary – professionals; a house is a synergy/system of bricks/concrete/wood, doors, windows, electric, water and other works, etc.

Synergies emerging from their attributes provide to the new whole/system new attributes.

Therefore, the truth will be easier to discover, and difficulties with features, events, and processes easier to control, if the feature/event/process is considered as holistically as possible rather than per single parts. This is called systemic or systems thinking.

A total holism of human behaviour, i.e. monitoring, perception, thinking, emotional and spiritual life, decision making, communication, and action, and a total wholeness of insights and outcomes, is usually impossible to attain, but a single specialization – a single viewpoint of profession – limits humans to fictitious holism providing for fictitious



wholeness. This fact makes us apply the Mulej/Kajzer (1998) law of requisite holism as the suitable middle way.

In the case of the climate change system this would mean the understanding that synergies of insights from physics, chemistry, biology, history, technology, economy and several more disciplines and practices are needed. One would choose and collect professions and viewpoints that one would consider essential and interdependent for mutual completing up by differences.

Following the ancient Greek philosophy one would link them on the basis of their interdependence or – in the Greek wording – dialectics. A dialectical system would show up (Mulej, 1974, see Mulej et al, in press). In this case a system is not meant to be a complex feature, but a mental picture about it, which we introduce in order to attain the requisite holism of human behaviour and requisite wholeness of its outcomes.

A dialectical systemic approach to the climate change must consider the age of Globalization, the present status of our civilization, unnatural life of humans in poly/mega and similar urban centres, management of technologies without sustainability, lack of individual and corporate social responsibility¹⁵, uncontrollable human-population explosion, short- and often medium- and even long-term ('side'-)effects of the: synthetic chemicals; modern technologies; GMO; GMP; weapons; combustion engines; transport system; nuclear technologies; industrial and agricultural production; energy production system pollution; national and international political distribution of power and administration, and their influences on the scientific global, national and local communities; they are causing a gap between needs and results of the cohabitation of Homo-sapiens-civilization with the nature on the planet Earth. This gap threatens this civilization to disappear.

This gap surfaces as the climate change system and global human community impacts: strong winds, large droughts and floods, tsunamis, earthquakes, large air pollutions by industrial, city life's, and transport system's (including the Internet!) emissions, changes in local climatic patterns, global warming, depletion of the ozone layer, pollution of all three basic parts of the biosphere: soil, seas/oceans and air. They are due to huge misunderstanding of the climate change system by the population in local communities around the Globe. Unfortunately, the economic theory declared all three to be free

¹⁵Social responsibility is an attribute of humans and their organizations. It prevents or diminishes, at least, the danger of humans' abuse of their influence leading to damage experienced by their co-workers, other business or personal partners, broader society or nature on which the human existence or quality of life, at least, depend. This is a short summary of definitions in international official documents. Other references see in social responsibility an upgrading of the innovation effort/support called improvement or total quality management or business excellence. Further references see it closely linked with systemic behaviour; yet further ones link it with efforts aimed at peace in the world (Hrast et al., ed., 2006, 2007, 2008, 2009, 2010 etc.). The current dangerous state of climate change system results to an essential extent from a lack of responsible behaviour of humans over centuries of industrialization and all times until today.



commodities, thus causing the economic practice to neglect them; this mistake leads to then current climate change problems essentially, although not exclusively.

Simple language and understandable explanations for simple people are needed for sustainable future of humankind.

Whether we shall understand the climate change system or not has a crucial importance for the local/global community life, and gives questionable chances to the long-term survival of mankind – it requires sustainable future. *Sustainability of local communities leads to the sustainable future of global human civilization*¹⁶.

Many excellent achievements from the past and present make a heritage of humanity that should be rethought and put into new frame of needs showing up in the third millennium and present challenges coming from the difference between the global human society and nature:

The mankind's construction practice is not meant for the present disastrous conditions. Wind could reach a speed of 500 kilometres and more per hour. The power of wind could increase much more, with lifting the soil or other particles due to our practice in agriculture etc.

Floods and droughts will reduce food production possibilities and new techniques should be invented for covering the demands for food and other fundamental needs.

Earthquakes, volcano eruptions, tsunamis and larger floods will increase damages over human achievements.

The oceans/seas level rise could reach 75 meters (James Hanson, Dec. 2008) during the first hundred years of the 3rd millennium and with impacting the present living space of mankind the damages could significantly harm global civilization.

People may learn from other planets in our Solar system on environment or living conditions needed for life of human and other living creature's systems. Learning from research about the nature could provide for a short cut to new solutions for sustainable future of mankind.

Let us now connect the present time of the 2009/2010 global human community's situation with the climate change system, sustainable future of humankind, corporate, individual social responsibility, and global mankind community leadership or governing.

On entering the "Globalization Age" the challenges for humanity are more complex and possibilities for survival of our civilization are on the edge of ability and responsibility of humankind. The climate change system impact; very dangerous activities of national

¹⁶ For details see publications: »Our Common Enemy (The Climate Change System Threat)« by Ecimovic et al, 2006, and recent books: »The Sustainable (Development) Future of Mankind« by Ecimovic et al, 2007, and »Sustainable Future, Requisite Holism, and Social Responsibility« by Božičnik, Ećimović and Mulej with co-authors, 2008; all are displayed at: www.institut-climatechange.si



states entering wars; use of nuclear technologies; use of large number of synthetic chemical products and contemporary technologies from nuclear, particles acceleration, Nano, digital, GMO, GMP, communications, transport to armaments, without knowing their medium- and long-term effects/impacts within the biosphere of the planet Earth; producing enormous quantities of all sorts of waste; having “Money Monster” leadership; losing working effects of very large share of human population with urbanization and national states’, international, and global administrations and services activities; being hardly able to feed the global human population; losing ability to ensure safe water for humans; losing possibility to have enough space for living including the ocean/sea level rise impact; and losing possibility to ensure quality air for breathing, are some of the challenges we are facing at present, and likely we shall face them and the unknown and possibly more severe ones in future.

Just a case – Europe marketed app. 52.000.000.000 liters of the bottled water during 2008. If the global mankind disappears at one moment, the planet Earth will be covered with plastic bags and plastic bottles. The only reason for this situation is that the chemical lobby and owners of the producing facilities who are making “profit” for themselves.

The Corporate Social Responsibility (CSR) was invented to support work on the new challenges faced by corporations and their effect/impact on the human society, which failed to support possibility for its own survival, and opened a large gate for the “Money Monster” leadership which does not recognize the individual, social and global human society’s needs of now and in the possible sustainable future. Authors believe the CSR and individual social responsibility are forgotten values of the humanity neglected by “The Money Master” that needs the money reproduction and is managed by humans without humane qualities/ethics.

The genesis and evolvement of the corporate social responsibility – CSR (From: Esposito, 2008), could be presented as from ancient history, to modern times as the American case study: “Even if the notion of Corporate Social Responsibility is quite recent, the concern regarding the consequences of economic activities - that lies behind these words - has existed since a long time in human history.”

The formulation of “CSR” is expressed as a fruit of religion and ethics in the United States. From 1916 on the American economist John Maurice Clark stated what could be one of the earliest sign on the track of CSR:

“If men are responsible for the known results of their actions, business responsibilities must include the known results of business dealings, whether these have been recognized by law or not.”



In early 1930s, Professor Theodore Kreps used the term “Social Audit” while introducing the subject of Business and Social Welfare to his Stanford students, developing a concept of companies reporting on their SR.

But it was in 1953 that a protestant pastor; Howard Bowen was the first to introduce and to define the term “CSR” as: **“The obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society.”**

Corporate social responsibility has many more its definitions but basics are in social responsibility.

Let us stress it again: Social responsibility is an attribute of humans and their organizations; it prevents or diminishes, at least, the danger of humans' abuse of their influence leading to damage experienced by their co-workers, other business or personal partners, broader society or nature on which the human existence or quality of life, at least, depend.

This is a short summary of definitions in international official documents. Other references see in social responsibility an upgrading of the innovation effort/support called improvement or total quality management or business excellence.

Further references see it closely linked with systemic behaviour; yet further ones link it with efforts aimed at peace in the world (Hrast et al., ed., 2006, 2007, 2008, 2009, 2010 etc.). The current dangerous state of climate change system results to an essential extent from a lack of responsible behaviour of humans over centuries of industrialization and all times until today.

The corporate and individual social responsibility is very much connected with money system, an invention of humans from ancient time, and its abuse.

The social responsibility practice and possibilities for sustainable future of mankind of the members of the global human community have new challenges ahead.

The Corporate Social Responsibility - CSR and the Individual Social Responsibility ISR issues are more important for sustainable future of mankind as the present practice is doing. That is why we have included the advanced thinking on the “learning organizations”.

Case Study: The role of learning Organizations in the growing discussion on social responsibility



THE ROLE OF LEARNING ORGANIZATIONS IN THE GROWING DISCUSSION ON SOCIAL RESPONSIBILITY¹⁷ is offering new opportunity for transition of the global human community from the social technique of sustainable development towards sustainable future of mankind as vision, strategy, and technique for achievements in the future.

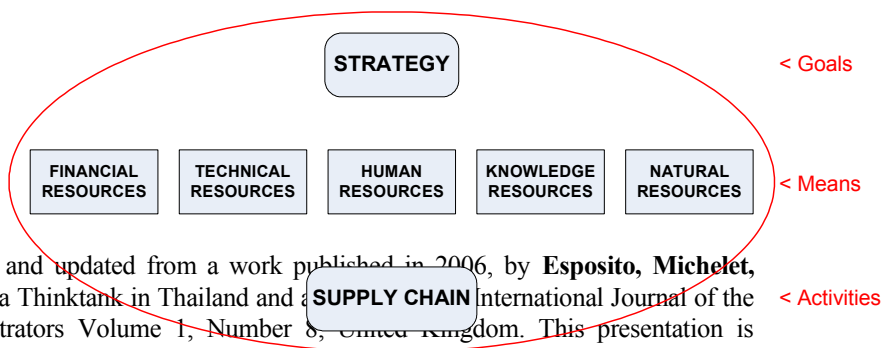
The purpose of this paper is to raise the reader's awareness with regards to the huge changes the so-called "new technologies" have brought to human beings over the last twenty years, transforming the way we think, live, learn and work so fast and so deeply that accelerated change has become the only reliable reference in today's socio-economic world.

We will demonstrate that in order to remain viable over time within this fast-changing environment, all organizations, be they public or private, small or large, for profit or not-for-profit, whatever their location and their activities, must fulfil the same five conditions. And these conditions require a total revamping of everything that makes the organization, from its business model down to the way its employees are working every day. In other words, to become a "Learning Organization" is no more a "nice-to-have" option (if it has ever been so) but a must for the survival of any organization. It is not something to "plan" for or "prepare" for in a vague future, it is something that must be today.

But we will also reflect on the meaning of the term "Learning Organization". Aren't we all learning organizations already? Indeed we are, since it is in the human nature to learn, adapt and progress. The point is therefore rather to become a faster, better learning organization. We will suggest that learning and knowledge were so far taken for granted, and as such, neither managed as a resource nor integrated and utilized to develop the value we need to survive and succeed. How to do this is the challenge that faces all of us today.

Socio-Economic Changes:

To understand the impact of change on organizations requires not only the identification and study of the major change factors, but also the acknowledgement of what is an organization.



¹⁷ This part of the book been edited and updated from a work published in 2006, by **Esposito, Michelet, Kopcsan and Ritzel**, from the Prasena Thinktank in Thailand and a **SUPPLY CHAIN** International Journal of the Academy of Executives & Administrators Volume 1, Number 8, United Kingdom. This presentation is authored by Mark Esposito, Ph. D.



We define an organization as any entity that has:

A strategy (objectives, and an idea of how to get there).

Activities (processes with inputs and outputs) that are guided by the strategy.

Resources as (financial, technical, natural, human and knowledge) to conduct these activities.

It is remarkable to observe that by this definition, an organization may be an individual person as well as a structured community, a company, a university, a government agency, a nation, or even the global mankind community. Such an observation leads us to realize how artificial are the walls that have been traditionally erected between the social and business worlds, between private and public, for-profit and not-for-profit organizations.

In today's reality, all organizations are facing the same challenges; all must fulfil the same conditions to survive.

Although the terminology and/or categorization used may differ, most thinkers of the later part of the 20th Century and the beginning of the 21st Century tend to agree on the change factors that are having the greatest impact on socio-economy, on business, but also on our way of life and indeed on all aspects of our lives.

Change Factors	Impact on People	Impact on Technologies
Globalization Tendency of any entity/activity/technology to acquire a dimension that grows beyond any "frontier" imposed by geography, culture, religion, gender, age, etc. Anything and/or anybody can have a worldwide impact	Think and act with a global mindset	Ensure that the info-structure can be accessed and used anywhere at anytime
Molecularization Tendency of any entity/activity/technology to adopt a molecular structure. Small, flexible, adaptable, expert units can function independently or gather temporarily depending on expected benefits	Empower employees, clients and partners	Ensure that info-structure components are autonomous, compatible, customizable, and reusable



Reintermediation

Tendency of any entity/activity/technology to function in direct relation with its partners. New types of intermediaries exist to enable direct relations

Enable direct working relations at all levels

Ensure that the info-structure is web-enabled and allows direct and immediate relations between users and partners

Internetworking

Tendency of any entity/activity/technology to function in constant contact with various partners within networks that become more and more wide, multi-directional and interactive

Be part of inter-linked business networks and e-communities

Ensure that the info-structure is integrated within itself and with external networks

Immediacy

Tendency of any entity/activity/technology to function on real-time basis, which entails the immediate response to queries as well as the capacity to react fast to any event

Work on real time basis, and be ready for change at all times

Ensure that the info-structure enables real-time work, and provides efficient support at all times even through technological migrations

Digitalization

Change of any entity/activity/technology to translate all information into the universal digital alphabet so as to speed up information flows and enable information sharing in a way that transactions with minimal human intervention are possible

Convert information and transactions to digital form
Conduct work without physical presence

Ensure that the info-structure is the organization's collective digital memory
Ensure that the info-structure is the virtual version of the entire organization, and supports virtual work

Innovation

Tendency of any entity/activity/technology, freed from menial tasks by the virtue of other cyber-characteristics, to produce ever more new ideas that may lead to concrete innovative applications

Use creativity to innovate and change ways of working

Ensure that the info-structure is innovative in nature and stimulates creative work

Knowledge

Tendency of any entity/activity/technology to become more and more knowledgeable, through own development and through greater access to others' knowledge. Information, knowledge and ideas become the key economic resources

Stimulate and integrate information sharing and knowledge development at all levels

Ensure that the info-structure captures and supports the development of human capital



An over-simplified summary of these factors could be as follows:

Through the use of the universal digital alphabet and digital and networked technologies that enable direct communication and transactions with no space or time barriers, traditional frontiers based on geography, culture, religion, age, gender, status, wealth and other such criteria are disappearing. All entities find themselves in a global world, in which however each individual entity (person, community, company, nation...) can be heard and have a global impact, as well as choose the networks and communities to which it wants to adhere. In such a world, traditional strengths are greatly overcome by what is really making a difference: knowledge, ideas, networking, and speed.

The scope of these changes is such that it is not exaggerated to say that the 300 year-old “Industrial Era” is coming to a close, and that we are entering a new era, wherein our world will be very different from what it was until the end of the 20th Century.

A New Organization Model

In this new world, the concept of organization itself is changing. In a hectic global environment, today’s financial performance does not mean sustainable viability any more, and tangible assets as well as stocks (shares) are proving to be unreliable references to assess the value of an entity, whereas intangible assets such as knowledge and ideas emerge as more reliable indicators of an organization’s capacity to remain competitive over time.

The organization therefore needs to evolve from a big machine to a creative thinking brain.

	Industrial Era	New Era
Economic Assets of Reference	Tangible assets	Intangible assets
Organization	'Big machine'	Creative thinking brain
Competitive Advantage	Size	Human capital
Success Indicator	Short-term profitability	Sustainable development
Employees	Quasi-mechanical components valuable as a workforce	Individual 'neurons' valuable as fluid teams of knowledge workers



In this context, size and seniority are no more the strengths they used to be, but rather potential obstacles in the race towards adaptation to change, more knowledge and better ideas.

The real strengths of an organization are becoming its agility, its ability to syndicate knowledge workers to build and develop its human capital, and its capacity to use this new asset to generate the economic, social and environmental value it needs to remain competitive.

No organization is unaffected by these phenomena. Numerous cases over the last few years have demonstrated that although many companies try to resist through mergers and acquisitions, size does not protect from change.

Neither does a purely local scope of activities. Neither does a monopoly status, such as that which governmental agencies typically enjoy.

At most, well established traditional strengths can put off the unavoidable... for a little while.

Because of its universality and simultaneity, this huge wave of change affects all of us in the same way, wherever and whoever we are, for the first time in our history.

But our reactivity widely differs and this is why, in this transition period, all imaginable scenarios exist.

Location, size, type of activity, do not really make the difference – mindset, corporate culture, management style do.

New Challenges for Corporate Leaders

Indeed, within the new organization model, corporate leaders find their job completely overhauled – and not at all easier:

Whereas it did not require much work to impose upon a mostly mono-national, disciplined workforce, a **corporate** culture derived from the dreams and values of the small homogeneous group of people who traditionally kept the organization in a firm grip, the task is immensely more challenging when it comes to identifying, and ensuring adhesion to common vision and values among a decentralized, multinational, fluid team of highly diverse and empowered knowledge workers.



Business strategy has always been leaders' most difficult job, the job that justified their existence and high pay.

It probably still is so, with the added difficulty that to be meaningful, corporate goals can no more be restricted to pure financial growth or market positioning indicators, but must also integrate the notion of value, generated by the value network for the environment.

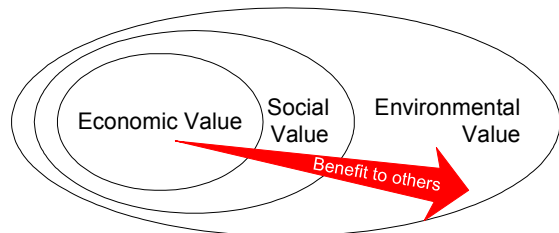
Whereas in a stable, compartmentalized business world where market players were short-term performance oriented and egocentric, the number of entities that could influence an organization and the extent of cooperation with them were kept to a minimum, the situation changes drastically in a fast-changing global and creative environment where, for example, traditional competitors become "coopetitors" but aggressive competition can emerge out of nowhere; the identification of the value network, the determination of what should be the organization's positioning in its environment, and the design of governance rules are becoming real hard work – and one that needs to be reviewed regularly.

Similarly, although monitoring is an old notion, it becomes so pervasive and sophisticated, with Key Performance Indicators touching upon all aspects of the organization, that leaders can no more pretend it is their subordinates' job.

The approach to corporate resources is also becoming more sophisticated.

In particular, people and technologies, so far considered as mere fixed costs that should be controlled, acquire a new dimension since they are respectively the source and the host of the human capital. Indeed, in addition to money, people and technologies, a new corporate resource emerges: knowledge.

Finally, while performance continues to be a key survival factor for any organization, business leaders need to look beyond it and reach for sustainable development or future – a much more complex and elusive goal forcing leaders to not only look at how their organization can profit from its environment, but also how it can benefit its environment.



New Challenges for Corporate Resources Managers:

Leadership is not the only corporate role to be affected. Corporate resources management too takes on a whole new dimension. In a 'machine'-like organization, all resources – even people and money – were considered as quasi-mechanical components that, put in



the proper place and appropriately activated, would produce in line with expected standards. Leaders demanded uniformity and discipline, and strived to reduce the costs, increase the yield.

By opposition, in a 'brain'-like organization, each resource (individual person, technology, money) has a unique value.

Leaders must invest in identifying this value, enhancing it, developing it, and creating a synergy between diverse and creative resources to propel the organization towards new heights of performance.

Moreover, beyond performance, the close partnership between resources enables the creation of a new one – knowledge.

This resource, once owned by the organization, becomes an asset (human capital) that is the key to sustainable competitiveness.

Clearly, the role of resources managers must undergo a profound transformation to catch up with what is now expected of their wards.

If merely administering resources was enough when nobody cared to look at individual particularities, administration today becomes the least significant part of resources management, which must now cater to individual, organizational and strategic needs.

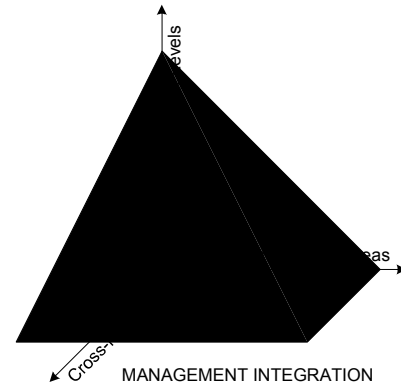
The Example of Human Resources

Personnel Administration	HR Management	People Management
TECHNICAL	STRATEGIC	DAILY
Payroll Administration Leaves Recording Employee Records Maintenance C&B Surveys Insurance Claim Admin Etc...	Organization Design Competency Management Performance Management Compensation Management Organization Development Etc...	Daily Problem Solving Individual Motivation Leadership Diversity Management Conflict Resolution Mentoring and Coaching Etc...
Internal or Outsourced Technicians	HR Function and Consultants	Line Management



Traditionally considered as “cost centres”, “support functions” – in other words a burden for the organization, resources management functions (and particularly HR, ICT, and now Knowledge) must become full-fledged business partners represented in the executive committee, and their huge respective and joint influence on the organization’s destiny must be recognized.

Most importantly, the traditional compartmentalization within the organization must disappear, since only the synergetic utilization of all resources together can really make the difference, both at performance and at sustainable competitiveness levels. Finance, HR, ICT and Knowledge Managers must learn to cooperate, use the business language as the way to communicate among each other, and work together on an on-going basis.



New Challenges for Employees:

Last but not least, the role of employees themselves changes critically.

In 1999, a new entry in the Great Dictionary of Terminology introduced the notion of “Knowledge Worker” and explained its importance:

“Person specialized in the research, analysis, management and communication of the information relevant to decision-making or knowledge management, and who uses information technology systems developed for this purpose”.

Note: “Knowledge Workers belong to the category of intellectual workers, or, in economic terms, to the category of quaternary sector workers.

They possess the organization’s knowledge and therefore have the capacity to innovate. As they often are highly qualified or experienced, they can be assigned roles related to strategic watch, decision-making, professional training, etc.

The Internet, data analysis software, data mining software are as many tools that have contributed to the emergence of this new worker’s profile and to a restructuring of work within organizations.

Often associated with information workers, knowledge workers are different in that they go beyond the information production and processing. They are in fact participating in



knowledge development. According to current analyses, knowledge workers are expected to dominate the labour market in the third millennium”.

Hence, within less than a generation, we have expected working people to transform themselves from machine components to knowledge workers.

It is obvious that our education systems, unprepared and still unsure of the direction we are flying towards, have had no time to catch up.

Still today, most education institutions shape our children into uniformed, disciplined industrial workers whose creativity is stifled as early as possible and who are told that learning is over by the time they pass from school to the working world. Although ICTs are used in some schools, they are far from being integrated parts of the learning and teaching processes.

This leaves multi-personal organizations with the heavy task of educating or re-educating their employees, young and old alike, to rekindle their eagerness to learn and their creativity, to awaken their self-consciousness and the recognition of their unique value, and to guide their development in a direction that fulfils both the individual's aspirations and the organization's needs.

As contrary as it may seem to what is observed in today's business world, the commitment between employees and employers should therefore be much greater than ever before. But the organization must demonstrate its long-term commitment to its employees in order to win their trust and commitment in return – not the opposite.

Five Conditions for Survival:

For an organization to survive change, and, better even, to profit from it and ensure its success in the emerging new world, it must therefore fulfil five conditions. These conditions are as follows:

- It must have a strong and enlightened leadership, capable of guiding the organization beyond short-term performance, towards sustainable development or future,
- It must recognize the value of each of its corporate resources, and manage these resources at strategic level in an integrated way so as to create and develop the human capital that is becoming the single most precious asset of any organization,
- It must develop a close and strong partnership between people and technologies so as to secure the levels of performance required not only to survive today, but also to generate the value that will ensure sustainability,



- It must stop being egocentric and turn itself towards its external environment because nobody can function alone in a global world. It must therefore acknowledge its clients, but also the suppliers, competitors, partners, media, universities, communities that constitute its value network, and integrate them at all levels in its activities,
- It must deliberately design the combination of brick-and-mortar and virtual structures, and the configuration thereof, that will best stimulate the motivation, learning and performance of its resources.

This brief review of the on-going socio-economic changes' impacts on organizations, and of the ensuing conditions any organization must fulfil to survive today, leaves no doubt about the vital role that Knowledge is increasingly taking in all aspects of life.

It may be appropriate at this stage to note that we certainly do not imply that Knowledge was not important for human beings so far.

In fact, this whole wave of change, although it does lead to the unfolding of a new socio-economic era, is in no way a revolution that would destroy or deny what was and start afresh with entirely new concepts.

It is instead but the fruit of a natural evolution, which, by virtue of the digital and networked technologies, has greatly accelerated over the last 20 years. The challenge we all face today is therefore in the simultaneity and universality of change rather than in its nature.

For example, although Globalization is mentioned as one of the nine main change factors, our world has been global for millennia, as is more and more clearly demonstrated by historians and economists.

No social, economic or other event anywhere has ever occurred without direct causes in – or at least profound influences from – elsewhere in the world, and in/from the evolution of the global socio-economic system.

However, it was taking a long time for such influences to be felt, as long as it took for men to walk or ride or sail to the other end of the world. Awareness of globalization was not necessary at individual level. In addition, globalization in that sense mostly had a geographical meaning.

Today, awareness of globalization and of its multiple dimensions is necessary, because technologies are now making the whole world accessible to us at the touch of a button.

The impact of any individual (whoever he or she is) can be immediate and simultaneously universal – we need to recognize this fact and act accordingly.



Similarly, Knowledge and Ingenuity are no new concepts, far from it. Ancient Chinese's extraordinary creativity and their remarkable education and recruitment systems have been very instrumental in ensuring their great economic power for millennia.

However, for very long time knowledge has been the affair of an elite, and power was associated with access to exclusive, confidential information channels.

Knowledge was distilled to the people after careful filtering and manipulation, knowledge providers were few and their respective roles well identified (parents, teachers, clergy, bosses, governments).

Instantaneous worldwide information channels and particularly the Internet have democratized knowledge, with effects on societal models and power structures that we are yet to fully appreciate.

But the economic impact is already obvious. All recent analyses tend to demonstrate that value is associated more and more closely with knowledge.

A product cannot be sold at a good price if it is not customized and accompanied with pre-sales and after-sales services. Smart products which are designed with the input of the clients and all other parties involved, and which evolve or change constantly in line with the environment and the client's needs, are those that are most successful.

But knowledge is a strange asset, value of which increases with its sharing. The more you share your knowledge, the richer you become. This rule is so contrary to what we were used to with tangible assets that it has become the object of endless contentions, especially in the Western world, where intellectual rights protection is a pillar of business.

» From	» To
» Value through intellectual protection	» Value through intellectual exchanges
» Confidentiality	» Knowledge Sharing
» Organization-centered	» External environment-oriented
» Value through local positioning	» Value through global positioning
» Talk with whom we know	» Exchange with everybody
» Value through expertise	» Value through expertise
» From few experts / processes	» From int/ext knowledge sources
» Value through specialization	» Value through flexibility
» Narrow scope of knowledge	» Wide scope of knowledge
» Value through leverage	» Value through innovation
» Conservatism	» Constant change
» Value through discipline	» Value through creativity
» Control of creativity	» Encouragement of ideas

Unfortunately, intellectual rights protection as it is currently understood also leads organizations and people to be egocentric, reluctant to work with others and afraid of exchanges that they believe might deprive them of what they know.



Recent technological developments are increasingly proving these laws and mind-sets obsolete.

In addition, in a fast-changing world where you cannot leverage forever on one specific product anymore, but you need to open yourselves to new ideas, nobody, as deep as they may have gone into their area of specialization, has the ability to function alone – because expertise must be wide as well as deep, and it must be flexible.

This type of expertise can only be acquired by accessing others' knowledge, and by building together upon shared knowledge.

This is why it is said that value today is generated by an entire value network rather than by an organization – not to mention an individual – alone.

In this perspective, if we define “Learning” as the process of acquiring and/or developing usable knowledge, all human beings, individually and in communities, must become strategic, real-time learning organizations:

- They must expect, identify and understand change in real time so as to adopt, flexibly and timely, new paths towards long-term objectives, in order to ensure their sustainable viability,
- They must acquire useful knowledge in real time and assemble it in a unique combination, from which the society can benefit, in order to optimize their market value,
- They must update in real time what they know in an environment where expertise becomes fast obsolete, in order to remain employable (individuals) or competitive (communities),
- They must monitor in real time the evolution of mind-sets, views, ways of life and developments and use it as a source of inspiration for new ideas, in order to reach success, and
- They must share what they know in real time, in order to generate social value and simultaneously increase the scope of their own knowledge.

If the need for all of us to be-(come) learning organizations is undeniable however, is it certain that all of us are really convinced that “all of us” means them too?

Are all of us aware of what is at stake?



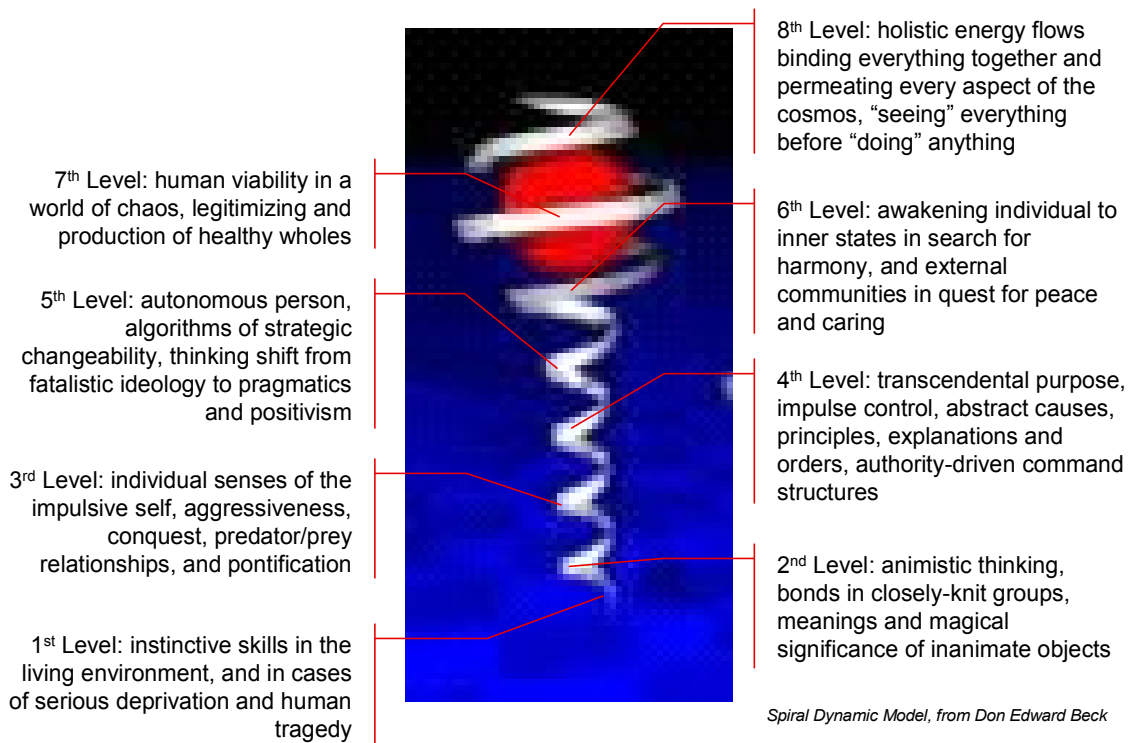
And if we are, are we really motivated to overcome the weights and obstacles facing us in the process of learning?

Learning and Awareness Development:

Psychologists, sociologists and medical scientists today all agree that the level of awareness of human beings varies depending on a variety of factors, most of them environmental.

Don Edward Beck for example, in his “Spiral Dynamic Model”, postulates that there are eight levels of awareness.

Interestingly, the highest awareness level he mentions, so far unattainable by all but maybe a few exceptional beings, reflects precisely what thinkers believe networked technologies should bring within the reach of all human beings.



Realistically however, we are still very far from this happy state. In fact, if a certain proportion of the world population today, helped with physical, material, educational and mental comfort, probably reaches Beck’s fifth or sixth awareness level, many



unfortunately must withdraw to the first or second level in order to survive in extreme conditions.

But we must here stress that the concept of “Learning Organization” relates to a dynamic process and not a state of being. When talking about learning, results – ephemeral since they are instantly obsolete – are of much less importance than the process of acquiring knowledge. The old expression “a well-learned man”, never really appropriate, has become totally irrelevant: one can never “be learnt” when there is always something new to learn. If we were looking for “learned organizations”, we would have to constantly acknowledge failure. But looking for “learning organizations”, the picture is different.

In all human beings, the motivation to act has two powerful engines: fear and dreams. More precisely, fear of losing what we have, and dreams of what we do not have yet. These two engines, always associated although fear often dominates, have ensured human dynamism ever since the dawn of time.

People whose awareness is at Beck’s first or second level fear for their life, because that is the only thing they have. Their main motivation to act will be to protect the vital minimum – physical security, drinking water, food, shelter, health. If such vital minimum is secured however, they will look forward and yearn for more. They will strive to reach comfort.

People whose awareness is at Beck’s third or fourth level usually take vital minimum for granted, but fear for their comfort. Their main motivation to act will be to protect their assets, their social status, and power. If these are secured however, they will look forward and yearn for more. They will strive to reach freedom.

People whose awareness are at Beck’s fifth or sixth level usually take life and comfort for granted, but fear the loss of the freedoms they treasure. Their main motivation to act will be to protect these freedoms – to believe, to think, to speak, to move, to choose – and in some cases, may even give precedence to freedom over comfort. If their freedoms are secured however, they will look forward and yearn for more. They will strive to reach harmony through holistic awareness.

Hence human beings never are in a stand-still. Whether they realize it or not, they endlessly learn, because nothing – even life – can be taken for granted, and both the protection of what they have and the endeavour to progress require the constant development of knowledge.

It can therefore be safely assumed that:

- The need for all organizations to be “learning organizations” is undeniable.



- Learning is as much a survival instinct as a deeply rooted progress tool in all human beings, whatever the level of their awareness.

Remains a question, which we believe touches the heart of the problem: have multi-personal organizations (companies, schools, governments...) so far consciously acknowledged the importance of learning, have they really supported personal motivation, have they ensured the alignment of individual employees' development and the needs of the community?

Most organizations so far can but plead guilty on all counts.

Competencies Management and Aligned Motivations:

In Industrial-Era machine-like organizations focused on short-term results, employees were hardly ever considered as individual beings with personal aspirations. They were instead considered as components of a "workforce", an indistinct mass of interchangeable muscles and skills that was expected to conduct specific tasks, and monitored accordingly. In such an environment, the HR management's responsibility was to motivate employees to demonstrate discipline and obedience, to respect the hierarchical chain-of-command, and to perform in line with set standards.

To activate the "dreams" motivation engine was not an option in this scenario where nobody had the vision of what the organization could expect of / give to the employees in the long term, and where personal aspirations were neither considered nor even identified. Motivation was therefore based on fear – fear of losing opportunities, status, revenues or even the job itself.

This does not mean that employees did not learn. In order to survive and succeed in their organization, they did need to acquire and develop the social skills to handle internal politics and red-tape, to know when not to speak, to ensure that the boss could take credit for his subordinates' work, etc.

They also needed to develop the technical skills related to their organization's activities, and to deepen their expertise over time.

They however had no choice but to dissociate personal fulfilment from work. It had indeed been made clear to them ever since school that their dreams were not relevant in the working world and that they should become part of the system and achieve success (i.e. money) by growing within it.

Those who insisted in keeping their creativity and pursuing their own dreams in the professional arena were considered as originals and seldom had a place in mainstream organizations. Most learnt to strive for personal fulfilment outside work – hence the huge



development of what came to be called “hobbies” over the second half of the 20th Century.

When organizations need to become creative thinking brains however, the situation is very different. As key resource themselves and source of another resource (knowledge), generators of the value that secures the organization’s sustainability, employees become long-term strategic investments for their employer.

Each individual employee’s unique set of competencies and knowledge must be identified to be utilized, and it becomes of a vital importance for all that each person develops such competencies and knowledge.

Accordingly, the responsibility of HR management with regards to motivation changes drastically. The point is today to motivate employees to think, create, learn, network, perform and proactively contribute to ensuring sustainable competitiveness.

In such a scenario, it is in the organization’s interest to encourage the fulfilment of each employee’s personal aspirations at work, since it ensures commitment, retention, and motivation to go beyond simple standard performance.

Hence the “dreams” motivation engine becomes the main HR management tool.

Such transformation does not occur overnight; but much progress has been done already: organizations around the world have started to introduce performance management systems over the last two decades, and mind-sets have had the time to adapt.

It seems now natural for the majority of organizations to put the focus on objectives and results, rather than on procedures.

Corporate planning becomes a real function, KPIs are used to ensure integration of objectives, corporate values and governance rules appear and serve as guidelines for employees left freer to choose how to achieve their targets.

Results rather than presence are monitored.

Positive motivation is ensured through rewards that are tangible (variable performance pay) and intangible (empowerment, excitement, individual recognition).

Years of performance management practice helped organizations realize that performance is but the efficient utilization of demonstrated competencies, and that the optimization of performance therefore requires the identification, evaluation,



development and alignment of each employee's competencies – hence the recent introduction of competencies management systems.

Although less than 25% of organizations today use such systems, the trend is already clear and irreversible.

Based on the realization that it takes time for people to learn and change, competencies management basically moves the focus of HR – and strategic – management from today to tomorrow.

It puts such activities as resources acquisition and development in the perspective of the organization's development and its future needs, and is therefore used for both person development purpose (recruitment, career path, promotion, person training and development) and organization development purpose (restructuring, succession, divestment, training policies, corporate values, organizational strengths development).

It makes organization and employees work together for the future, which can be done only if both organization's future and person's future are taken into consideration. It therefore leads the organization to take a genuine interest in each employee's personal aspirations and to strive to find optimal alignment.

Promotions become no more just a way to acquire money and/or power, but also a way to increase personal value and a step towards personal fulfilment – so much so that horizontal transfers or even assignments in lower grade positions may be seen as true promotions in this longer perspective.

Competencies management is also a powerful engine for mind-set change. The necessity to design its own Dictionary of Competencies (core tool of the system), that is to determine the list of competencies which are necessary for its survival and sustainable competitiveness, leads the organization to question itself, its culture and values, the way it works, and what really constitutes its strengths.

The set of competencies it selects carries in itself a strong message to its employees (and its management), reinforced by the policies that will be adopted to ensure availability and development of these competencies.

An organization may have talked about innovation for years without really taking any efficient action to concretely stimulate it, but if innovation appears in the Dictionary of Competencies, it will be automatically integrated in training policies, reward and recognition systems, development programs, etc.

It becomes clear to all that innovation is valued, required, recognized and rewarded.



Existing employees will be encouraged to awaken their imagination; creative people will be attracted to join the organization.

Innovation will become an effective part of the corporate culture and will be demonstrated through employee and organization performance.

The same remark is valid for initiative, empowerment, people development, life-long learning, technologies integration, knowledge sharing, business intelligence, partnership with suppliers/customers, social/environmental responsibility, and other such ideas that, as crucial as they may increasingly be, have so far been the object of much talk and little concrete action.

Examples of Competencies in an Organization's Dictionary

Competency	Definition	Level 2	Level 3	Level 4	Level 5
Customer Partnering	<i>Ability to build and maintain a long-term 'win-win' cooperation with customers</i>	Satisfaction for renewed sales - Develop good relations with customers, demonstrate understanding, reactivity and flexibility, strive to generate satisfaction so as to stimulate renewed sales	Cooperation for more revenues - Clarify customers' current needs, and adopt cooperative approach to develop adapted solutions, leading to higher-value sales	Partnership for more profits - Detect customers' evolving needs, and drive development of partnerships for the purpose of defining and fulfilling these needs together, leading to higher value and profitability	Life-long partnership for sustainability - Initiate high-value life-long partnerships with customers with customers' involvement in organization's strategic and solutions developments, leading to sustainable competitiveness
Knowledge Management	<i>Ability to actively contribute to the collective memory, and to draw upon it in return whenever needed</i>	Contribute and use - Recognize value of sharing knowledge, record own work outputs and store where easily accessible by others, use available information instead of 'reinventing the wheel'	Adapt and search - Recognize value of collective body of knowledge, adapt own work outputs to make them easily usable and accessible by others, proactively search for information that may be valuable to own work	Widen and stimulate - Recognize value of interdependence, actively contribute adapted work outputs as well as other information of general interest to collective body of knowledge, take opportunity of own needs to stimulate others to contribute	Transform and guide - Recognize value of knowledge as a corporate resource, stimulate development of collective body of knowledge and guide its transformation into valuable human capital
Life-long Learning	<i>Ability to seek out and acquire existing and/or new knowledge that can contribute to personal growth and to the fulfillment of the company's ongoing and changing needs</i>	Learn on the job - Demonstrate proactive interest in various aspects of own job, seek out training, coaching and opportunities to acquire more hands-on experience, apply to improve performance	Deepen expertise - Strive to increase knowledge of own area of expertise, seek out opportunities, at and beyond work, to learn existing and new concepts, approaches, tools, methods and/or technologies, apply to improve job value	Integrate expertise - While constantly developing knowledge of own area of expertise, strive to put it into the company's perspective through the learning of all necessary business aspects, draw and convey own conclusions regarding threats and opportunities for the company	Broaden learning scope - While constantly developing knowledge of own area of expertise and integrating it in a business perspective, strive to broaden scope of learning towards fields that prove relevant for the company's development, and suggest original ideas



In light of the above, we suggest that there is a correlation between the idea of “Learning Organization” – in the sense of an organization that, conscious of the importance of learning for its survival and sustainability, strives to achieve strategic and real-time learning through people learning and organizational needs alignment and integration – and the concept of competencies management. In fact, the latter is a stepping stone for the former: an organization can simply not become a “Learning Organization” if it does not manage its competencies. Yet, competencies management is not quite enough. If it enables the organization to identify what it needs to know and what its employees know, if it also provides guidelines for ensuring the harmonious synergy between individual and organizational efforts towards their respective and common aspirations, remains the need for the organization to evolve from a community of learning individuals to a learning entity in its own right. The fulfilment of this need requires knowledge management.

Knowledge Management and Human Capital:

If the concept of knowledge management is so recent, it may be because organizations did not recognize knowledge as a resource to be managed, but it is also – and most importantly – because it was concretely impossible to do. Indeed:

- There is no knowledge without source. People, as source of knowledge, therefore represent the first key component of knowledge management.

Whether internally or externally, people have always been available, if not deliberately activated

- There is no useful knowledge without way to capture it, to store it, to share it, to deliver it – on real-time and universally.

Technologies, as carriers and repository of knowledge, therefore represent the second key component of knowledge management.

But if digital technologies had offered easy storage and the universal alphabet that enabled global multi-media communication, we had to wait for networked technologies (particularly the Internet, emails, and the like) to acquire the capacity to activate such global and real-time storage and communication.

In 1999, books were written on knowledge management but were still acknowledging that it was a thing of the future.

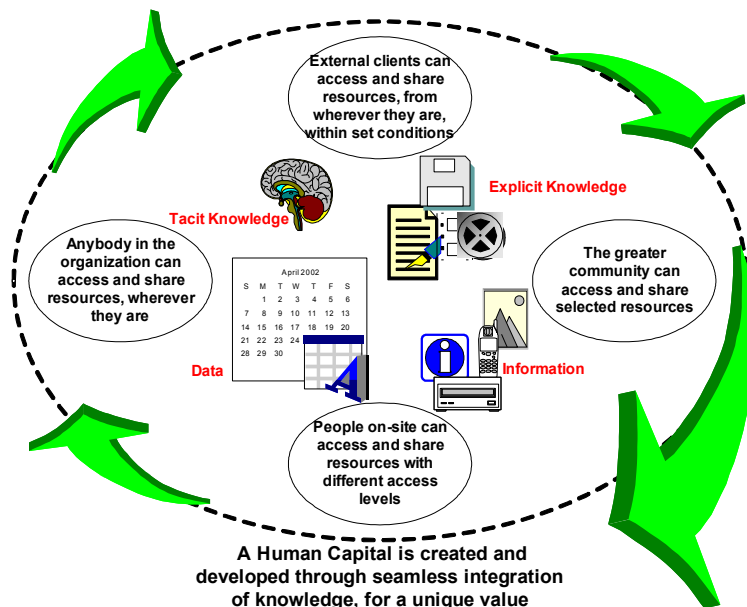
Around 2000 appeared the first knowledge management-friendly solutions appeared. The last 5 years, with the popularization of networked technologies, hence marked a definite shift symbolized by the nickname rightfully given to the Internet – “The Great Equalizer”.



Today, any organization, whatever its size, location or financial means, has the capacity to develop an info-structure that includes at least:

- A local network linking people in the same physical location;
- An intranet, or is network linking people from the same organization;
- An extranet, or network linking an organization with other organizations or people;
- Access to the Internet, the network that links anybody anywhere with the entire world.

These networks enable the sharing of knowledge, transactions, applications and devices on a real-time basis; they support digital libraries containing written, verbal and/or visual information, databases containing data that can be processed and integrated, applications and expert systems supporting work processes and transactions, asynchronous communication platforms such as emails, blogs, and synchronous communication platforms such as chats, MSN or virtual conference systems.



Thus enabled, knowledge management still needs to be fed with three vital nutrients:

- The will (mind-set)
- The means (resources)
- The skills (ability to contribute, to manage...)

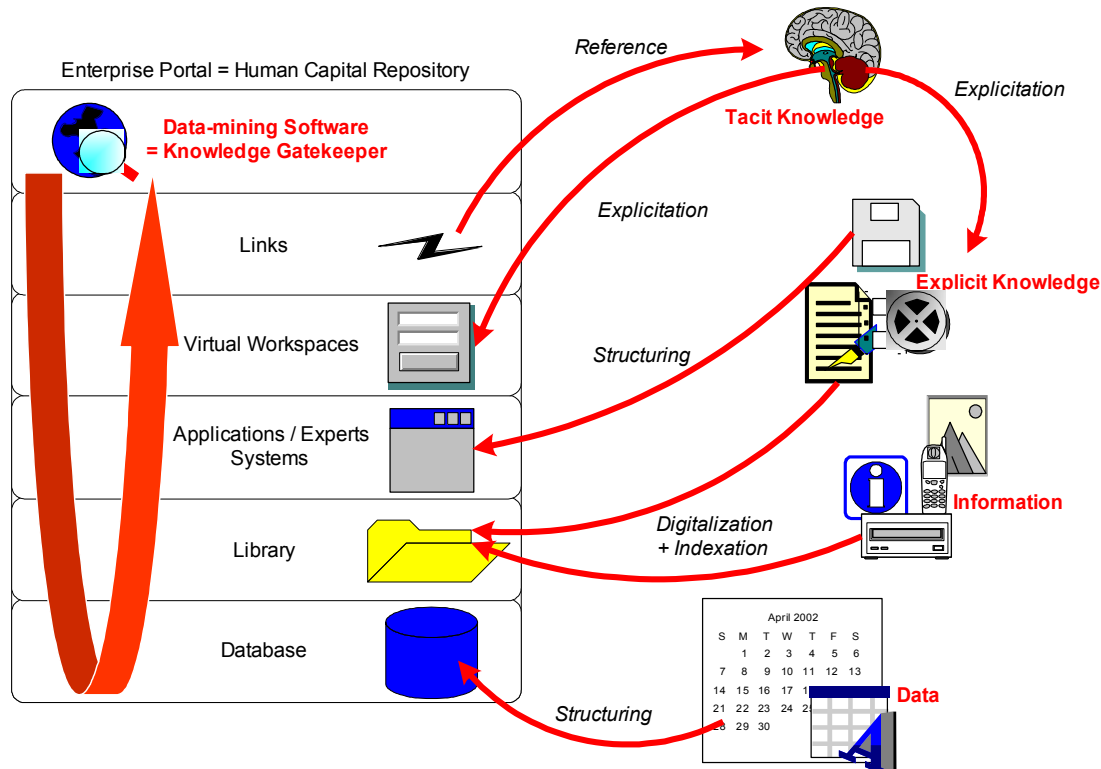
In other words,

Knowledge must be recognized as a corporate resource that must be invested in, inventoried, utilized and developed.

Contrary to common misconceptions, the management of knowledge as a resource does not aim at developing people (a responsibility that lies with HR management), but rather at acquiring and developing an intangible asset, which must have a value contributing to the organization's market value and its competitiveness.



Indeed, if tacit knowledge is made explicit, if it is recorded in a usable manner in databases, digital virtual libraries, expert systems, or at least in virtual workspaces, if all these repositories of knowledge are integrated to enable data-mining, and if the integrated whole (knowledge center) is easily accessible to all concerned, then this knowledge becomes an asset in its own right.



Knowledge contents may come from within or outside of the organization; they may be unique or be part of the common knowledge. But the combination of all these knowledge contents within the knowledge centre is unique. It belongs to the organization and has a value as long as it is valid, usable and up-to-date. It is called “Human Capital” as a part of “Intellectual Capital” (that includes more than knowledge).

To maintain and develop this value, and to ensure that it contributes to its overall economic value (market value, competitiveness), the organization must continuously update and develop its human capital. This provides the guidelines for its learning process.

Interestingly, the development of an organization’s human capital provides an answer to a question many have been asking over the last few years, as the concept of sustainable



development or future started to gather momentum: how can an organization produce social and environmental value without losing economic value?

The answer is logical. No value can be created from scratch at no cost. And as long as it is believed that social and environmental value cannibalizes economic value, rather than that it prevents cost from appearing organizations (especially stand-alone organizations which cannot count on philanthropist donors) will not willingly adhere to the concept of sustainable (development) future – even if it costs their existence in the long run. Social and environmental value must be the result of leverage; it must be a side-effect of economic value. And this can happen thanks to human capital.

Since knowledge is the only resource that retains (or even increases) its value even after it has been given (or sold) away, the organization finds itself with a bounty of valuables even after return on investment. The beauty of human capital is that it can be freely shared with those in need, used to help the society at large, without ever disappearing – it instead tends to increase its value as more people share the knowledge, give feedback and ideas, and contribute to update it and build on it.

As tangible assets had an economic value that had to be associated with such moral values as selfishness, egocentrism and isolation, knowledge has an economic value that is associated with sharing, openness to others and sense of human community. As tangible assets were the wealth of people whose awareness was at Beck's levels 3 to 5, knowledge is the wealth of people with higher awareness level – the people with holistic vision and a profound desire for global harmony amongst human beings, and between human beings and their environment.

Hence, we dare suggest that organizations that strive to introduce and practice competencies management and knowledge management are acquiring the key to become the true “Learning Organizations” they need to be to survive and succeed over time. But more than that, they earn the capacity to contribute to a better world, peaceful and harmonious.

CONCLUSION - Throughout this part of the book, we have adopted a certain number of assumptions, as follows:

A. We have defined “Learning” as the process of acquiring and/or developing useful knowledge. This means that a “Learning Organization” is an organization that continuously engages in such process – whatever the level of knowledge achieved so far.

B. We have defined “Organization” as any entity that conducts activities with the help of various resources and with the purpose of striving towards more or less long-term objectives. In this sense, an “Organization” may be an individual person as well as any organized community, including companies, schools, associations, government agencies,



nations and even global mankind community. This means that a “Learning Organization” may be an individual person continuously engaged in the process of acquiring and/or developing useful knowledge. In the case of multi-personal organizations however, to be a “Learning Organization” requires not only that it be a community of learning individuals, but also that it be a learning entity in its own right.

On the basis of such assumptions, our analysis is that:

1. The on-going socio-economic changes are propelling Knowledge at the center of life. It is becoming the key value of reference.
2. The need for any organization (mono- or multi-personal) to be a “Learning Organization” is undeniable today, in our fast-changing, global, interconnected environment.
3. Learning being as much a survival instinct as a deeply rooted tool for progress in all human beings whatever the level of their awareness, and human societies (including multi-personal organizations) being but “vivid-systems” similar to beehives for example, it seems that to be a “Learning Organization” (as described above) is in fact inherent to the very nature of organizations. Organizations are indeed continuously engaged in the process of acquiring and/or developing knowledge.

But,

They are not always aware of the critical importance of life-long learning for their survival; their learning is therefore neither deliberate – structured, managed – nor directed towards the achievement of their long-term objectives.

Multi-personal organizations do not always know what their employees know; neither do they know what their own development needs are. Individuals’ learning is therefore not always aligned with the development needs of the multi-personal organization.

Multi-personal organizations, in their great majority today, may be communities of learning individuals but they are not learning entities in their own right.

4. Consequently, it appears that when talking about “Learning Organization” (especially multi-personal organization), we should really mean an organization that is aware of the importance of learning for its survival and sustainability, and deliberately engages in a strategic and real-time process of acquiring and developing the knowledge it will need tomorrow, by ensuring that individual employees learn what is necessary for the fulfilment of both their personal aspirations and the organization’s needs, that such knowledge is used to perform but that it is also captured, shared and transformed into a valuable human capital.



Very few organizations can claim today they are “Learning Organizations” if this more precise definition is used. And yet all organizations should be. Some steps have been reached in this direction, but much remains to be done, in particular with regards to competencies management and knowledge management. How to accelerate the process of introducing, practicing and building upon these two concepts in all types of multi-personal organizations is the daunting challenge that researchers, educators, business leaders and government analysts must face and win today.

It is “Money master/monster» against sustainable future. From “Learning Organizations” to money master/monster: we shall try to connect them to the Sustainable Future of Mankind.

Money (Ecimovic et al, 2003) as a Homo sapiens’ invention/innovation has its origin in ancient history. People needed system of money for payment of goods and services, and to replace barter exchange. The eastern cultures were more advanced as the western. Chinese developed coins and coins-like money during the second millennium before Christ, and India followed. The first paper money was invented in China (Song Dynasty 600 and 960) during the first millennium after Christ. Marco Polo (1254 – 1324) reported about the use of paper money after visiting China. The first coins known in the Western world were produced in Lydia, 650 B. C., and a kingdom in the western Turkey; thus its king guaranteed uniform value. Paper money was invented in the Western world much later; we know today, it was developed in the England (1694), USA (the 19th century), and the uniform paper money in (1913). At the beginning of the 20th century, the money system was a nice and very helpful assistant of the civilization.

From a nice assistant to the master – the money system needed only half a century. By the end of the Second World War in 1945, and within the following five years assisted by USA administrations, Marshal Plan and development of society – the money evolved from servant/assistant to the master of our civilization.

From master to monster – at the beginning of the third millennium our civilization adopted a secondary role in society after “the master money”, by which transformed itself from master to monster. Today the “monster money” is deciding on right or wrong, dependence or independence, war or peace, values of services and commodities, people, nature, environment, and, sadly, even the scientific achievements. In the last hundred years an intensive knowledge gain of our civilization was driven by development of better and more effective armaments for Homo sapiens’ destruction/killing/protection – AGAINST WHOM. The present wars always result in financial gain of nation, which wins the war, and it’s was materials suppliers.

The evolvement of the role of the money in mankind society was followed by the evolvement of the banking world. In 1960ties the banks were places to keep money and



to assist population in all money-related services. Following the role of money the banks and banking world owners, workers and leaders underwent their transformation. At present the banking world is one of main causes of the mankind's crisis. Banks, bank owners, banking workers and leaders have become industries for money reproduction. The relationship of humans and money/banking world part of society has changed so much that banking leaders have been receiving bonuses in millions for services they have been paid for by high monthly salaries. It became practice and was used as complex society practice that emerged in complex relationship of politicians, governments administrations, international corporations and "money monster reasons", which resulted in the highest-ever payments of banking people services, not known even in the world of the world-top sports.

Just a case – NYSE's CEO Dick Grasso received bonus payment of 187 million \$: this proves misuse of the banking system as general practice now days¹⁸.

The money reproduction is even higher as mankind population explosion. Money reproduction has no more connections with whatsoever economics, production or any real values system.

At the beginning of third millennium our civilisation is in very bad shape; some nations such as G-7 countries look like success stories (in short-term criteria), but the majority is stranded: 85% of humans live with less than six US dollars a day (Nixon, 2004).

The recent impact of the climate change system clarifies the role of Corporate and Individual Social Responsibility - C&ISR and long-term values. The entire value of the "monster money system" is not sufficient to protect or mitigate impact of the climate change system humans have to find ways for better life or sustainable future, but of course not with monster money system leadership, but in sustainability and harmony with the planet Earth biosphere.

The C&ISR should be re-checked from a new angle making the money system a tool again, and making impact of money system on biosphere less destructive (which it is by support to production of: synthetic chemical products; nuclear technologies; GMO, GMP, human organs sale; production of waste; etc.) and one should make it assist eco-remediation of forests, river basins, coastal waters, deserts, large town areas, transport communications, and polluted land/water/air environments..

The C&ISR should be a part of new ethics. As Ecimovic stated in talks with students at Mangalore State University, India, 2007: "The CSR should not be responsibility of corporations, but individual SR of each and every citizen of the World; and when individual SR will be a part of all of us, we shall have CSR as result of new ethics, new approach or knowledge of each and every citizen of the World."

¹⁸ Please see Global Future Analysis, Planck 2009



Social responsibility has been a part of ancient people (Ecimovic statement for the purpose of this book) during and before the Stone Age. It is a part of heritage from the Nature to humans as social creatures, which was most essential for survival. In those ancient times humans would have no chance to survive without social responsibility integrated in their ethics and behaviour. Unfortunately, the present Homo urbanus¹⁹ and Homo slumus²⁰ have developed egocentric behaviour and ethics with no connections to ancient heritage, and no connections to life in the Nature. By 2030 we may expect up to 80 % of global human community to live in urban environments; this is why we have to develop learning methods and education, which will integrate system thinking, social responsibility, and many more topics and attributes needed for transition to sustainable future.

Just to mention – total global mankind community could be divided at two parts according to production and consummation. By 2030 when urban population could reach 80 % of total global population, we shall see 20 % of people as “producers” and 80’ % as consumers or “parasites”.

Individual social responsibility should be a part of each and every representative of human global community and integrated into the ethics of humans of the 21st century and on. The global human community with integrated ISR would need no separate CSR, which will – due to acting of people for the benefit of all including the biosphere – become a tool of humans’ individual social responsibility.

Our intention was to present situation, reasons and solutions but not all of them, because it is a task for a team of many more researchers, as we are. We hope that our task of putting together a clear picture of the present situation of global humankind society and the biosphere of the planet Earth was reasonable, and even more: if it leads to better research in future, we shall have the great pleasure to be a part of commencement. Our recommendations are:

1. Rebirth of ISR for each and every human of the global human community.
2. Distribution of the knowledge needed for survival of “Homo of sustainable future” or 21st century such as: System theory, thinking, synthesis and analysis, The Nature and the climate change system.

¹⁹ Homo urbanus – term introduced for description of the people living within town environment (Ecimovic 1999).

²⁰ Homo slumus – term introduced for description of the people living within slum environment. At present over 1.5 billion people are living as Homo slumus and app. 3.5 billion are Homo urbanus representatives (Ecimovic, 2010).



3. Rethinking of the role of money monster master system within humankind.
4. Rethinking of present governing national and international systems.
5. Rethinking of present urban life style of humans, constructions, consummation, pollutions and attitudes towards basic values of both humankind and The Nature.

We wish to all human's sustainable future, long life, prosperity, respect, peace and decent life!

The Sustainable Development Concept

From sustainable development to sustainable future concept!

The commencement of awakening of mankind in 1960s on needed quality of environment, as the basis for life of mankind and all creatures on the planet Earth, it is also commencement of sustainable development concept/strategy/vision (it is now becoming incorporated in C&ISR).

First compliments are reserved for pioneers and among them “The Club of Rome”²¹, with its first report and publication “The Limits to Growth”. Reports followed and awakening of global society commenced.

Stockholm -72: UN Conference on the Environment in Stockholm, Sweden in 1972 achieved the establishment of UNEP – United Nations Environmental Program in Nairobi/Kenya. More research and reports followed and it took humanity 20 years to prepare a global conference on sustainable development – Rio 1992.

In 1987 the term sustainable development was introduced by report “Our Common Future” or “G. H. Bruntland Report” from The World Commission on Environment and Development to the General Assembly of the United Nations. “Our Common Future” report had a strong impact on global society.

The Common Concerns report stated: “Those who are poor and hungry will often destroy their immediate environment in order to survive: They will cut down forest; their livestock will overgraze grassland; they will overuse marginal land; and in growing numbers they will

²¹ The Club of Rome a nongovernmental and informal organization that earned a world-wide reputation thanks to its research project - reports to the Club of Rome with expertise on global studies. It has been established in 1968 by Aurelio Peccei, founder and first president. They established Standing Committee of thirty European scientists and the membership was limited to 100 members. With co-operation on the National Associations basis from 1987 onwards (at present there is about 30 of them), they assist The Club of Rome to fulfil basic goal - Global Studies – issues, to work out solutions for global problems, and to draw attention of world public to them.



crowd into congested cities. The cumulative effect of these changes is so far-reaching as to make poverty itself a major global scourge”.

“Failure to manage the environment and sustain development threatens to overwhelm all countries. Environment and development challenges are not separate challenges; they are inexorably linked. Development cannot subsist in a deteriorating resource base; the environment cannot be protected when growth leaves out of account the costs of environmental destruction. These problems cannot be treated separately by fragmented institutions and policies. They are linked in a complex system of causes and effects.”

Those statements have been overlooked by the coming generations. The spirit of complexity was reduced to talks, but reality of issues was neglected. Environmental quality of planet Earth’s biosphere was and is (in 2009/2010) neglected. Interdependences, interaction and co-operation of all matter, energy, information, light, particles, rays, powers and forces and yet unknown contents of the Nature were overpowered by the short-term and narrowly conceived needs of individuals, national elites, security needs, money reproduction, bureaucracies, military needs, wars, riots, genocides etc. until now (2009/2010).

In “Towards Sustainable Development” in Our Common Future report the definition of it was stated as: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. It is very noble, humanitarian, cosmopolitan, global goal, which after it had been invented was generally misused by countless politician, bureaucrats and people of individual feelings and not humanitarian quality, knowledge or ethics’ after it had been invented.

We can continue with “Our Common Future”: its nice statement was: “Many of us live beyond the world’s ecological means, for instance in our patterns of energy use. Perceived needs are socially and culturally determined, and sustainable development requires the promotion of values that encourage consumption standards that are within the bounds of the ecologically possible and to which all can reasonably aspire”. Many means individuals, communities, countries, and we do not need to write more on this. The systemic characteristics of humankind are forgotten today!

“The world must quickly design strategies that will allow nations to move from their present, often destructive, processes of growth and development onto sustainable development paths”. This content was also extremely neglected!

“Critical objectives for environment and development policies that follow from concept of sustainable development include:

- Reviving growth;
- Changing the quality of growth;
- Meeting the essential needs for jobs, food, energy, water, and sanitation;
- Ensuring a sustainable level of population;



- Conserving and enhancing the resource base;
- Reorienting technology and managing risk; and
- Merging environment and economics in decision making”.

Objectives stand even today’s criteria, and have not been ever taken into consideration by politicians, bureaucracies and nations’ agendas.

The most significant was the statement on “The Urban Challenge”: “In 1940, only one person in eight lived in an urban center, while about one in 100 lived in city with a million or more inhabitants (a “million city”)”

- “By 1960, more than one in five persons lived in an urban center, and one in 16 in a “million city”. By 1980, nearly one in three persons was an urban dweller and one in 10 a “million city” resident”.

Hon. Tom McMillan, Minister of Environment, stated at WCED Public Hearing, in Ottawa, on the 26-27 May 1986: “The challenge ahead is for us to transcend the self-interest of our respective nation-states so to embrace a broader self-interest the survival of the human species in a threatened world”.

Dr. Gro Harlem Brundtland talking on report stated: “This commission’s report, Our Common Future, contains a message of hope and opportunity”.

In 20 years after Our Common Future report has been accepted, what is the result of it? To us in this team the result is smaller as expected. So we are coming to 1992 Rio Summit.

The 2nd UN Conference on the Environment and Development CED-2, in Rio de Janeiro in 1992 or Rio Summit was attended by representatives from 179 countries. A huge document was approved; Agenda for Change and Agenda 21 were adopted. A number of documents were approved, but never implemented.

Finally 10 years after Rio at the World Summit in Johannesburg, South Africa, on Sustainable Development the failure of action was admitted by its public of course.

The reason in our opinion was in the wrong handling of Our Common Future report and its possible global impact to society.

UN at that time did a wrong baby-seating of the report, and it became an agenda from UN to people, instead of an agenda from UN to its **member states**. Member states never put in action their own sustainable development agendas due to national priorities (wealth of national elite and other national state priorities).



In meantime UNO, due to poor leadership and political mishap of member nations on one hand and global human society on the other hand were not ready for sustainable development.

The role of UN was not adjusted to needs of challenges of time – the end of the second millennium and beginning of the third one. Restructuring of UN under leadership of that time was impossible. The common practice was and is for individuals: politicians, bureaucrats, national elites, governments, media, show people, religious leaders, local community leaders etc., to meet their needs and needs of their family for wealth and employment, and after that, only to look at humanitarian purposes. On top of it to the 4-year election practices cause, that there is never time for humanitarian results. They, in practice never take care of building a new profile of humans for the third millennium, and of new education, ethics with humanitarian values to be able to meet challenges of nature, as they are right now. Homo urbanus took over civilization and did not take over her long term responsibility, but only the short individual one.

And nice saying: “We are the only reason our ancestors existed. Our children are hope for touching the future. Let our children’s children be the reason we act”.²²

Now the sustainable development and more sustainability has become a popular term for politicians and politicians-like²³ people, who wish to make impression on listeners and public. It is a habit to mention sustainable development, global warming, and climate change as important contents of present time, but without understanding them in reality. After “Katrina” unfortunate events in USA, President G. Bush acted with no understanding of anything²⁴. He as president of USA should prevent tragedies occurring there and should not support/initiate national and international tragedies from natural ones to political, wars, and riots. The action for mitigating New Orleans “Katrina” tragedy should be taken well in advance. After tragedy – the large New Orleans region should be declared unfit for humans to live there, because it was unfit before and after “Katrina”. After “Katrina”, the USA Government should declare and make clear its statement on un-fitness of the region for humans to live there. Scientists understood and have been familiar with risk and hazards of the areas such as New Orleans and alike, and society should accept positive lessons, and government should prevent events which could be prevented.

²² Prof. Dr. Warren Flint, Five E's Unlimited, rwflint@eeeeee.net, and www.eeeee.net.

²³ Politicians-like person are politicians, bureaucrats, individual leaders from industry and commerce, educators, researchers, military leaders, religious leaders etc., people of influence but without humanitarian values, education, and ethics needed for global leadership.

²⁴ It was a known threat for New Orleans published in 2001 in Scientific American. Also Prof. Dr. Timi Ecimovic stated in 1998 at UN SD conference »New Orleans area should not be inhabited at all. Let it be a historical city and nothing else. « »Katrina« was one of disasters and future ones will definitely destroy New Orleans!



Society as it is in New Orleans, is taking advantage of tax payer's money and questionable government policy, not only because of "Katrina", but floods and other related events are demanding a great government's financial input every year.

Sustainable development as the leading global society policy is questionable in terms of many contents of the present practices.

At the time of awakening this policy was excellent, but did not change with challenges of present and past short term time values. The problems of sustainability of mankind and planet Earth are much more complex as it was understood at the end of 20th century.

The first part of the sustainable development – sustainability is much more important and has a high value for the future of mankind. The second part - "development" - is a misused term from industrial revolution and economics, and has nothing to do with Nature of the planet Earth. Development could tackle a product, construction, man-made systems, repairs, machines, armaments, etc., and it is a part of the human society of the post-industrial era. The nature has no development what so ever and nature system is working on contents and interdependences, interactions and co-operation relations.²⁵

With introduction of the modern tools for thinking and researching of complex issues a new horizons on content of the nature are opening. Contemporary scientific results as "The Environment Theory of the Nature", "The Information Theory of the Nature", system thinking, analysis, synthesis and system theory, and others on top of many excellent tools used up till now, will support humanity for better tomorrow.

What is needed is New Approach²⁶ as introduction of global society system relations, values, ethics, contents and mechanisms, which should assist transcendence to sustainable future of the planet Earth global humankind community.

What we find necessary for survival of humankind, is to introduce sustainable future of humankind as harmony of local and global human society with the other contents of nature on the planet Earth and larger to the Universe.

It would be easy to write many pages on sustainable development concept, but the purpose of this book is not to do it, but to make humans transcend from sustainable development to sustainable future as the technique needed for survival of mankind.

²⁵ System Thinking and Climate Change System – Against a big »Tragedy of Commons« of all of us, 2002, by Ecimovic. Mazur, Mulej and The Information Theory of Nature, and, 2006, by Ecimovic, are opening discussions for understanding the present times of our civilization, and this book adds to them.

²⁶ The new Approach as needs for restructuring of global society has been introduced by Prof. Dr. Slavko Kulic, IOM, from Zagreb, Croatia, but it is still within science and is waiting for better time to be understood and used.



The follow up from sustainable development to sustainable future should be devised with all possible co-operation of mankind, and with mitigations of the climate change system impact to biosphere of the planet Earth.²⁷ The goal of sustainable future is a most complex issue, which could be undertaken with consent of all humankind and its dedication to fulfilment of its content. Let us see what sustainable future concept is all about.

Indicative description is possible only by a short definition: **Sustainable future of mankind is harmony of the humankind system/civilization with system of nature/biosphere of the planet Earth.**

It is a short description of a very complicated and complex issue of the present global human society and its basis – the biosphere of the planet Earth.

We think up till now good work of many humans towards sustainable development should be transcended to the more complex sustainable future concept.

The Sustainable Future Concept

The question which we are putting forward is the sustainable future of humankind.²⁸ The integrated complex systemic thinking research techniques are needed for analysis of it. The globalization age has its complex issues as they are, regardless humankind does see them or not. Or otherwise very complex issue of the humankind problems of 2008/09/10 should be put into the frame of living space/environment of humans – the biosphere, taking into account the simultaneous problems evolving within the biosphere, plus their synergies.

What we are presenting is a broader analysis of the more complicated/complex Nature of the planet Earth and the global humankind society situation at 2009/2010. As system thinkers we are observing the statuses of the different origin of both humankind as a system/entity of its own and a part of the planet Earth system – THE BIOSPHERE.

The biosphere, which is the frame within which global humankind civilization has its only living space, has evolved the situation of the climate change system impact, during the rise of the Globalization Age. The Climate Change System provides, makes, holds and guards living conditions within the biosphere of the planet Earth; it has a more important role as humans have been thinking in the past. **To these conditions all living creatures must adjust to survive.** A big number of extinctions of the species, smaller and larger alike have resulted from changed environmental qualities, caused by changes within the climate change system.

²⁷ Please see complementary book »Our common Enemy«, later in the book or at www.institut-climatechange.si.

²⁸ Please see footnote 2.



This gap surfaces as the climate change system and global human community impacts: strong winds, large droughts and floods, tsunamis, earthquakes, large air pollutions by industrial, city life's, and transport system's (including the Internet!) emissions, changes in local climatic patterns, global warming, depletion of the ozone layer, pollution of all three basic parts of the biosphere: soil, seas/oceans and air environments. They are due to huge misunderstanding of the climate change system by the population in local communities around the Globe. Unfortunately, the economic theory, like the Holy Bible, declared all three to be free commodities, thus causing the economic practice to neglect them; this mistake leads to the current climate change problems essentially, although not exclusively.

The sustainable future and harmony of the global mankind society and its coexistence with other creatures in the nature and within the planet Earth's biosphere is the solution to the best of our knowledge, which should be adopted as the vision for its survival. We need a society-wide global approach and not the dilution of scarce financial means, for **it is impossible to buy the survival of humankind with a finance-based approach and what-ever quantity of money.**

At time of awakening it the sustainable development concept was excellent. But it did not change in line with challenges of the present and past short-term and narrow values of humans preferring immediate profit to long-term survival. This was in line with the so called neo-liberal economics reigning over the world from the Chicago school of economics by Milton Friedman et al; they even won many Nobel prizes for what is now found mostly a source of danger for humankind.

The problems of sustainability of mankind and the planet Earth are much more complex as it was understood during the 20th century and humans' failure to consider the social responsibility like Adam Smith used to claim. The neo-liberal economics is a very dangerous deviation from Smith's liberal economics allowing for no big companies and requiring total transparency of business and total individual responsibility of business' owners (Toth 2008). None of these preconditions is embarrassed today!

This is why above cited a New Approach²⁹ is needed as introduction of global society system relations, values, ethics, contents and mechanisms, leadership, which should assist transcendence to sustainable future of mankind global society. What we find necessary for survival of humankind, is to introduce sustainable future of humankind as harmony of local and global human society with the other contents of the Nature on the planet Earth that is yet not fully known to us humans. The transition from sustainable development to sustainable future should be devised with all possible co-operation of humankind, and with

²⁹ New Approach as needs for restructuring of global society has been introduced by Prof. Dr. Slavko Kulic, IOM, from Zagreb, Croatia, but it is still within science and is waiting for better time to be understood and used.



mitigations of the climate change system impact on biosphere of the planet Earth.³⁰ The sustainable future is the most complex issue, which could be undertaken with consent of all humankind and dedication for fulfilment of its content. Let us see what the sustainable future concept contains.

We think the path for the sustainable future of mankind is putting forward the need for the World Government, Constitution of the Earth Federation and the World Parliament. It should not replace the local, national, or international laws, but complete them up in the few topics that can hardly be regulated – except on the world-wide level, with supra-national rather than international or national law – well enough and with requisite holism, supporting C&ISR, including sustainable future, while committing no one-sidedness and allowing no crucial discrimination, war, and abuse of the nature and humans.

We think: good work, of so far, many humans towards sustainable development should be transcended toward a more complex sustainable future concept, with a societal technique.

Sustainable future concept agenda could have the following contents:

- Redirection of scientific work towards researching systems of the nature of the planet Earth, Solar System, Milky Way, stars and galaxies of the Cosmos/Universe and/or the basic environment Cosmos/Universe as presented after introduction of the Information Theory of Nature.³¹
- Redirection of the climate change research towards researching of the climate change system as a part of the planet Earth biosphere, and interdependences, interactions and co-operations within this system itself and other systems – units - of the nature of the planet Earth.
- Transcending of the present education system towards education for understanding and use of human abilities, innovative and other thinking processes as major tools for better work. Ethics, human values, tolerance, past and present achievements, knowing the humankind's heritage, and many more impacts should become parts of education system. One could add life-long education, long distance learning, and new methods of knowledge transfer (learning organizations) allowed for by new communication means, too. Public media matter as well.
- Transcending from “Homo urbanus” to “Homo of sustainable future” with a new approach to life based on the long-term values and requisitely holistic behaviour using systemic thinking for the requisite wholeness of outcomes of the human activities from the daily work to activities aimed at sustainable health.
- Establishment of the global human society with direct democracy, World parliament, Constitution of the Federation of Earth, and World Government, but the

³⁰ Please see complementary book »Our common Enemy« at www.institut-climatechange.si.

³¹ “The Information Theory of Nature and”, 2006, by Ecimovic, please see at www.institut-climatechange.si



- one disabling any abuse and misuse of power-holders' impact over humans and their natural preconditions of sustainable life.
- Transcending of United Nations towards their integration with global society' needs for problem solving in co-operation with global and national governing institutions.
 - Decommission of biased and one-sided national governments and bureaucracies towards meeting needs of new global human system/civilization/society for all nations/humans to survive and to have decent life.
 - Rethinking of military and security needs and establishment of responsible attitude (Individual social responsibility) of humans within the global human society.
 - Rethinking of present living style practice, techniques, and technologies in use towards sustainable ones. Wars, transport, use of nuclear power and technologies, GMO, GMP, construction, land use, water use, air use, communications, energy, conservation practices, long term impacts of present over future possibilities, etc., should be looked at and the proposed solutions reviewed.
 - Rethinking of the present research³² and industrial production practices of producing without knowing the medium and long-term impacts over the biosphere of the planet Earth.
 - Mitigation of the climate change system impact and its consequences within the biosphere and prevention of damages of present practices of humans on the planet Earth, and present short- and long-term living practice changes.
 - Building up the new Homo sapiens for the third millennium with the education and knowledge needed for common performances under challenges of the present and possible future evolvments.
 - Stopping wars and riots, stopping practices, which are harming human society and its chances for survival; building up respect and peace philosophy; transcending the present financial and money system, which have become our civilization Master/*Monster*, to introduce a new more equitable and motivating socio-economic system based on actual abilities, social responsibility, ethics of interdependence, interaction, and cooperation rather than the current abuse of power causing terrorism; transcending the present media and free time practices and their influences on the global human society; and researching the medium and long term impact of those on humans.
 - And many more changes, which should be worked out in co-operation of humans with abilities for it.

Of course, it is an optimistic scenario, which we are supporting and initiating its enhancement and long term realization. Nothing is attained, if it is not dreamed about, first. Ideas which are not against the give logic at the first glance are not worth attention. Logical thinking has namely been reduced to the logic of old experience, which does not match the innovative society.

³² Any scientific research activities should be reviewed for medium and long term effect over the sustainable future of humankind.



The path toward making such a model the viable reality includes work with local communities and with sustainable future of local communities in order to enhance the global society's sustainable future or harmony with nature. The basis from Our Common Future, Rio Summit as Agenda for Change and Agenda 21 processes etc., New Approach, Our Common Enemy – The Climate Change System Threat and many more achievements of present and past humans should support the new approach for the global sustainable human society to be created or evolve. A major goal is education for the new profile of mankind's individuals, knowledgeable and thinking persons devoted to requisite holism and wholeness. Mankind needs such a transcending from its present to future conditions for survival. Hopefully, the current generation does not hate its own children and grandchildren as much as to prevent rather than elaborate and support this concept.

Many excellent achievements from the past and present times make a heritage of humanity that should be rethought and put into new frame of needs showing up in the third millennium and in the present challenges caused by the difference between the global human society and the nature:

- The humankind's construction practice does not match the present disastrous conditions.
- Wind could reach a speed of 500 kilometres and more. The power of wind could increase much more, with lifting soil or other particles due to our practice in agriculture etc.
- Floods and droughts will reduce food production possibilities and new techniques should be invented for covering the demands for food and other fundamental needs to be meet.
- Earthquakes, volcano eruptions, tsunamis and larger floods will increase damages over human achievements.
- The oceans/seas level rise could reach 75 meters (James Hanson, Dec. 2008) during the first hundred years of the 3rd millennium: its impacts on the present living space of mankind could damage and significantly harm the global civilization.
- People may learn from other planets in our Solar system on environment or living conditions needed for life of human and other living creature's societies. Learning from research of the nature could be short cut to new solutions for sustainable future of humankind.

Let us now connect the situation of the mankind global community in present time of the 2010's with the climate change system, sustainable future of mankind, C&ISR, and global mankind community's leadership – The World Government.

On entering to the current type of the "Globalization Ages" the challenges for humanity are more complex and possibilities for survival of our civilization are on the edge of ability and responsibility of mankind. The climate change system's impact, the very dangerous activities of national states entering wars, the use of nuclear technologies, of



large number of synthetic chemical products and contemporary technologies from nuclear, particles acceleration, Nano, digital, GMO, GMP, communications, transport to armaments, without knowing their medium- and long-term effect within the biosphere of the planet Earth, producing enormous quantities of all sorts of waste, having “Money Monster” leadership, losing working effects of very large share of human population with urbanization and national states’, international, and global administrations and services activities, being hardly able to feed the global human population, losing ability to ensure safe water for humans, losing possibility to have enough space for living including the ocean/sea level rise’s impact, and losing possibility to ensure quality air for breathing, etc. – these are some of challenges we are facing at present, and likely we shall face them and also the unknown and possibly more severe ones in future.

Of course people should not put heads into sand and dismiss gender equality and major role of mother as first and most important educator of babies and children. Our prime target should be education of women for meeting demands of new challenges for better build-up of ethics and knowledge of our children. It is full-time employment for mothers. Many of the present complex issues are result of needs for financial, food, cloth, medical, shelter, and education provisions of present society. It is important to recognize contents needed for transcendence to the future humans, the ones in the third millennium.

After 165 pages of discussion and information we have the recommendations as are following;

Recommendation

Our first recommendation is to commence with application of the societal technique Transcendences from Sustainable Development to the Sustainable Future of Mankind.

To foster individual social responsibility of each and one member of the mankind global community, as it is a way out of blind alley ahead of present.

One planet, one government is our recommendation. Of course, The Planet Earth Federation Constitution is first, The Planet Earth Parliament and Government follow in line, after ratification of The Planet Earth Federation Constitution as corner stone of direct democracy governing of the planet Earth Homo sapiens present civilization.

Further we recommend a new approach to the social order, which has to reflect the present experience and the establishment of a new contract, new approach, or new order for humankind living on the planet Earth. The goal is to prevent explosion of humankind reproduction, enforce ethics and respect amongst peoples of the planet



Earth, and enforce (a globally holistic!) law and order, and with skilful governing allow the coming generations to live and have sustainable future³³ on the planet Earth.

Also we recommend redirections of scientific work from war armaments, too narrowly market-oriented and synthetic chemicals technologies, etc., to discovering viable global systems of nature, space, the environment and cosmos/universe, as essential elements of knowledge needed for understanding survival and sustainable future of mankind.

4.

Misliva, da je predlog, ki sledi pomemben za prihodnost in še posebej za trajnostno sonaravno prihodnost prebivalcev tako na območju, ki ga obravnava, kakor tudi širše, pa vse do globalnega nivoja.

Podajava samo predlog, kajti priloge so obsežne, strokovno zahtevne in v angleščini. Odgovora na predlog še do danes nisva videla in misliva, da je obtičal v predalih sedanje birokracije Republike Slovenije.

Danes je že znano, da sistem klimatskih sprememb predstavlja grožnjo obstoju celotnega človeštva na planetu Zemlja. Scenarijev je veliko in je težko ali nemogoče predvideti prihodnosti.

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Medoši, januar 2009

P r e d l o g

³³ *Sustainable future of mankind is harmony of our civilization and the Nature/Biosphere of The Planet Earth* (Ecimovic, 2006).



projekta izgradnje univerzitetnega centra »KROG« in z njim povezanih spremljajočih vsebinah

Predlog je izdelan na osnovah izkušenj in znanja SEG Inštituta za klimatske spremembe in katedre za okoljske znanosti Ansted Univerze, na osnovi kriznih vsebin življenja ljudi ob koncu leta 2008, kot so delovanje sistema klimatskih sprememb znotraj biosfere planeta Zemlja, energetske, vodooskrbne, prehrambene, družbene ter kreditno/finančne krize človeštva.

Predlog je izdelan v povezavi z ambiciozno vsebino predloga Mediteranske univerze, stanjem Primorske univerze v Kopru, programi primorskih občin ter možnosti za meddržavno sodelovanje, med Italijo, Slovenijo in Hrvaško na okoljevarstvenem pilotskem projektu za reševanje dolgoročnih pogojev življenja prebivalstva na območju Benetke – Trst – Koper – Izola – Piran – Buje – Umag – Poreč. Osnovni izziv je v zaščiti visokošolske mladine, kakor tudi zaščiti prebivalstva omenjenega območja pred prihajajočimi spremembami pod vplivom delovanja sistema klimatskih sprememb.

Prilagam knjižico »Uvod v sistem klimatskih sprememb« (november 2008) v slovenščini in angleščini, »Klimatska grožnja planetu« (dec. 2008) ter »2008 globalna površinska temperatura z GISS analizo« (januar 2009) Jima Hansena v angleščini. Jim Hansen je vodilni naravovarstveni strokovnjak NASE, ZDA. Priloge so osnova, zakaj predlagam projekt.

Predlagam, da je občina Izola pobudnik projekta. Poleg tega naj bi se na podlagi preliminarne ocen izbrala skupina strokovnjakov, ki bi izdelala idejni osnutek projekta. Sam sem pripravljen sodelovati v dogovoru z občino Izola.

Osnove in namen projekta sta univerzitetni center za 35.000 študentov v sodobni podzemni izvedbi na lokaciji samostana »Krog« v občini Piran, kot pionirska izvedba univerzitetnega centra, delujočega v pogojih delovanja sistema klimatskih sprememb in komunalno – komunikacijska povezava od Poreča do Benetk, s pripadajočimi obmorskimi, primorskimi središči življenja ljudi. Osnova je podzemna železnica, kjer se ob izgradnji projektira in izvaja skupna problematika vseh komunalnih vsebin, na primer: skladišča in preskrba s pitno vodo, odvajanje odpadnih voda, električna dostava/prevzemi visoko in nizko napetostne električne energije, informacijski sistem na kabelskih osnovah, urejanje okoljevarstvenih vsebin in obalno zaščitnih vsebin varovanja naravne, gradbene, zgodovinske in civilizacijske dediščine, zaščita središč življenja ljudi v obmorskem območju v primeru višje morske gladine (možnih 150 cm do leta 2030) in posledic tega (projekt zaščite Benetk, Pirana, itd.).



Tako bi imeli realno možnost varnega življenja na projektnem območju v pogojih delovanja sistema klimatskih sprememb in bi s projektom kot pionirskim prešli od govoričenja v akcijski program lajšanja učinka delovanja sistema klimatskih sprememb. Tako bi na območju treh držav (dveh članic ES – Slovenije in Italije, ter Hrvaške kot države, ki naj bi postala članica ES) omogočili prvo izvedbo sodobnega projekta za prihodnost prebivalstva v Evropi.

Predlog projekta ima strokovne in družbene osnove iz vsebin sodobnega znanstveno, raziskovalnega področja, področja delovanja Združenih narodov, vodstva ES, Slovenije in primorskih občin. Multiplikacija projekta je mogoča in se veže na rezultate predlaganega projekta.

V primeru izvedbe projekta bi preprečili izpad delovanja sedanjih komunalnih vsebin, ki je verjeten v pogojih delovanja sistema klimatskih sprememb. Tako bi preprečili izgube vrednosti in človeških življenj, ki bi bile možne v primeru, da ostane stanje, kakršno je sedaj.

Predlog podajam kot osnutek in osnovo za delo v bližnji prihodnosti.

Lep pozdrav!

Prof. dr. Timi Ećimović