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Can we have a common value system?*

Abstract

Value systems have developed throughout the history and differ among different cultures. Each human activity is driven by and develops its own value system. At a certain level some of these value systems differ significantly. The 21th century creates a global, interconnected and interdependent fast-changing world. In this paper we discuss whether coexistence of different value systems is possible and whether all our value systems have a common basis.

1. Introduction

Twenty-five centuries ago Heraclitus from Ephesus declared "Panta rei" – everything flows, changes. Concepts of cultures, identity, civilizations, laws, human rights and responsibilities, emotion, education, paideia, spirituality, religions, mind, brain, intelligence and needs have changed throughout history. Human beings and their social structures such as family and state have also changed.

Average life expectancy increased from about 40 at the beginning of the 20th century to almost 80 today drastically influencing health care, employment and education – concepts that themselves have been shaped from the mid 1800's on. Demographic changes prompted massive migrations. Slavery began in prehistoric times but exists even today. It was abolished by Akbar the Great

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in India, in 1833 in the British Empire and in 1865 in the USA. When Aristotle wrote in his Metaphysics "All men have a desire to know." - and when Jefferson wrote in the Declaration of Independence that "All men are created equal and they are endowed by the Creator with certain unalienable rights" neither of them meant all persons. Though Aristotle discussed the concept of rights, the notion of human rights appears for the first time in 1525 in the "Twelve Articles of the Black Forest" during the German Peasant War. Until 19th century many Western democracies had property qualification, i. e. only landowners could vote and often the voting right was weighted by the amount of taxes they paid. Other determining factors were gender, religion, race and literacy. For instance, Catholics in Britain were allowed to vote only after 1829 and Jews after 1858. In Canada several religious groups opposing military service were not allowed to vote in 1917. In 1906 Finland, at that time a grand duchy of the Russian Empire, formed their own parliament elected by all adult citizens - women included. In most European countries women voted only after World War I and in Switzerland only after 1971. Short-lived Corsican Republic (1755-1769) was the first to grant suffrage to all inhabitants over the age of 25. Freedom in the World lists New Zealand as the only free country in 1893, in 1972 there were 43 free countries, 38 partly free and 69 non-free countries. In 2002: 2.5 billion people lived in free countries, 1.46 billions in partly free and 2.17 in non-free countries [1]. Though states were formed five millennia ago, there is a dramatic change from the "Cuius regio, eius (illius) religio" of the Augsburg Treaty of 1555 and the Westphalian Treaty of 1648 to present sovereign nation states that are multinational and multicultural. Family changed: from an extended family to the contemporary model in which single-parent family features largely and where fertility rate has dropped significantly below 2.1 – the replacement level.

The contemporary world is interconnected, interdependent and fast changing all generated by scientific research. Modern science developed through disciplinary research. Last two centuries were characterized by physical and life sciences: quantum physics, theory of relativity and theory of evolution. "Nothing in biology can be understood without evolution." wrote T. Dobzhansky. Yet almost half of humankind negates evolution [2] and believes that God created humans, animals and plants about 10,000 years ago. That belief has been consistent during the last 25 years. However, "Evolution is a fact, and from a Christian perspective, one of the greatest God's works." [3]

"Evolution on this planet is a history of the realization of ever new possibilities... Through the new knowledge it has defined man's destiny and responsibility to be an agent for the rest of the world... It is as if man had been appointed managing director of the biggest business of all, the business of evolution." Thus wrote Julian Huxley [4] outlining biological and socio-cultural evolutions, with the socio-cultural one being much faster and accelerating since the agricultural revolution. Biological and socio-cultural evolutions are now intertwined. Today human beings are directing the evolution, and they are also responsible for assuring conditions for the evolution to continue developing either on our finite Earth or somewhere in the universe wherever our ingenuity takes us. The present epoch is Anthropocene Epoch [5]. Human beings are the threat and dangers, but also the most important resource, and so far an underused resource.

Human beings produce facts and information: reliable, true but also incorrect, and definitely much too many to be adequately processed. Through curiosity, creativity and research human beings develop expertise and flexpertise, knowledge, some buried as tacit knowledge – justifying a famous M. Polanyi's statement that we know more than we think. In spite of tremendous progress of scientific knowledge we still know much less than we need: in physics we think we understand 4% of our Universe. We know that 23% of our Universe is Dark Matter and 73% Dark Energy, but we have no clue what they are. We hope that Large Hadron Collider at CERN will explain the masses of particles, or maybe we hope that it will not, so that we may found New Physics. Notwithstanding great progress in brain research, the mystery of brain-mind relationship and the issue of our irrationality puzzle us. We think we know how to measure our rational intelligence to solve logical and strategic problems (IQ), but computers can be designed to have similar features. The awareness of our feelings and of the feelings of others – the emotional intelligence (EQ) [6] is at least to some extent a basis for IQ, i. e. if the brain area with which we feel is damaged, we think rationally less effectively. However, also animals have feelings. Human beings longing for meaning and asking the ultimate question require spiritual intelligence (SQ) [7]. Possibly parts of our brain are associated with SQ (termed "God's spots"). Do we possess multiple intelligences? "There are more things in heaven and on the Earth than are dreamt of in your philosophy, my Horatio" or - should we say - there are more things in our thoughts and dreams and the virtual might be larger than the real. To face challenges of the contemporary world we need out-of-the-box thinking and more than thinking. There is no end of science. We are still con-

fined within disciplines, we truly need interdisciplinarity, a holistic approach and transdisciplinarity. We need knowledge to face opportunities, threats and dangers and, if Aristotle was correct in his Nichomachaen Ethics, we need knowledge to be happy.

Frank Zappa wrote "Information is not knowledge, knowledge is not wisdom, wisdom is not truth, and truth is not beauty..." Psychologists, sociologists and philosophers are addressing wisdom [8] – as related to an individual, to a collective and to a crowd [9]. Can a social group be composed only of wise persons, would then the burden of wisdom be too much? Are really wisdom and happiness anticorrelated? Can God be happy and wise??

It is argued that cultures and values are for social groups what instincts are for individuals. Should one seek for the meaning and genesis of value systems through the evolution: biological and socio-cultural, and try to understand which value systems give evolutionary advantages? How are beauty and wisdom related to evolutionary advantages? Even a superficial view shows that there is more beauty in the world than the evolution requires. Beauty is related to symmetries and broken symmetries. Symmetry is related to conservation laws and to space dimensionality. In one dimension there are only 5 possible varieties of frieze patterns, in two dimensions there are 17, in three dimensions 230 and in four dimension 4783 different patterns. Is abundance of beauty related to the space we actually live in, though not aware of it? Symmetry limits and enriches. On the other hand there is much less wisdom than the current epoch demands. Is that related to our value systems that formed in particular historical circumstances that are now irrelevant and hindering?

2. World Value Survey

World Value Survey Association (WVS) performed five systematic studies of value systems 1981-84, 1989-93, 1994-98, 1999-2004 and 2005-2008 involving 97 countries and 88% of the world population. WVS displayed values in a two-dimensional space. One axis extends from survival/conformity to self-expression and the other from traditional to secular/rational values. Self-expression represents rising demand in economy and politics, higher tolerance for diversity and child-rearing stressing imagination rather than obedience and hard work. Survival values are focused on surviving and conform with existing/imposed rules. Traditional values include high level of national pride, high regards for family values, low tolerance and abhorrence of abortion, eu-

thanasia and divorce. Secular/rational values stress scientific and rational approach. WVS main results are [10]:

- 1) There are wide differences among countries. Fig. 1 displays contemporary cultural/religious/ geopolitical areas: e. g. Africa, Protestant Europe, English-speaking, ex-communist and Confucian countries. WVS shows that e. g. Montenegro, Serbia and Croatia are more secular/rational than the USA and Ireland, and Confucian countries are more secular/rational than ex-communist, English-speaking or Catholic European countries.
- 2) Values changed, e. g. values in Italy changed from (-0.35 + 0.35) to (0.25, 0) and in France from (+0.1 + 0.75) to (0.65, 0.82). However, data show no convergence of values. Societies are as distinct in 2007 as in 1981!
- 3) Values are crucial for economic development, quality of life and for governance.
- 4) More knowledge shifts values toward higher self-expression.
- 5) Democracy and self-expression are positively correlated: countries whose citizens have higher self-expression in general are democratic and have higher human rights. Countries less democratic than their citizens' values are likely to soon become democratic.
- 6) Endeavor to become a knowledge based society have conflicting effects on religiosity: decreasing it and increasing.

WVS involves measurements of indicators as well as their evaluation. It is necessary to measure, but one has to know what and how and with what precision. It is beyond this paper to assess the reliability of WVS. I find WVS interesting and indicative, but definitely not conclusive. Lack of meaningful measurements prevented Aristotle to understand motion and forces, and in economics and scientometrics we still have unreliable indicators. It was known already to Jan Tinberger, Nobel laureate in economy, that GDP is an inappropriate indicator, R. F. Kennedy spoke about it during his presidential campaign and European Commission is currently involved in defining more appropriate economic indicators.

3. Value System of Various Activities

Each human activity is guided by its own value system. There is similarity among them, but also contradictions and incompatibilities, at least at the starting level.

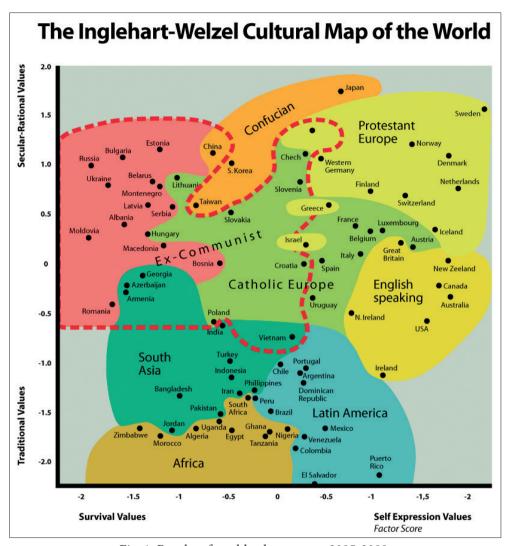


Fig. 1. Results of world values survey 2005-2008.

The value system of economic activities includes categories such as labor (labor is a much broader concept than employment and some labor is non-monetarized and some even non-monetarizable), welfare, employment, money, competition, cooperation, productivity, consumption and profit. It depends on inventions and innovations, and therefore, on research and development. All economic activities involve human-environment interactions, but the value system presently emphasizes money and profit over everything else. Studies of characteristics of CEO show that organized, dogged, anal-retentive

and slightly boring persons are more likely to succeed as CEO than creative, emphatic and team-oriented persons. This is what CEOs are today rather than what they should be.

Science is cumulative and objective, and it is problem-solving focused, primarily in those "areas where the light is". Curiosity, heresy and a unique mixture of discipline and challenge (that may appear as disobedience) are features of scientific research. In addition to hardship and frustration scientific research is a great fun. B. Pascal said: "We come to know the truth not only by reason, but still more by our hearts". The domain of science keeps increasing, but it is nevertheless finite. However, our daily life takes us beyond the domain of science – and we might not be even aware of that. Science and/or technology cannot give us answers if we are in the domain beyond science.

Religions promise salvation through obedience and respect of certain laws, practices and rituals. However, "What is involved in God's commandment is not an obedient submission to the will of God revealed in laws. Anyone who understand the commandments legalistically and not in the light of love is constantly faced with the conflict of duties... God's concern is not law, but human being." [11]

Politics permeates everything. Though Aristotle claimed that politics is the essential science, there are great incompatibilities between scientific research and politics. Politics has been defined as the art of possible, though it should be the art of achieving what seems to be impossible. The main objective of politics, its value is political power. Politics does not tolerate heresy and disobedience and it hardly accepts diversity. Often it is full of "sound of fury signifying nothing" and stupid as Swedish 17th century chancellor Oxenstijerna said. [12]

On a higher level economic activity, religion, scientific research and politics are all concerned with the human beings and therefore, human welfare should be the essential value. *Today, we are slaves of many laws, rules and values that contradict and/or hinder our main values – the achievement of the basic value – benefit to human beings.*

4. Golden Rule

In 1973 John M. Smith applied game theory [13] to animal strategies. Animals not only compete but also share a resource if that is beneficiary. Competition

and cooperation are two modes of interactions among social groups. Human beings are social animals and our values are based on social network history. In a complex network [14] of actors with many interactions, where all actors are confined, the winning strategy is: tit-for-tat: cooperate and never be the first to defect, retaliate only after your partner has defected, forgive and cooperate after retaliating just once [15]. Eskimos saying "The best place to store food is in another person belly" confirms cooperation.

The basis of all major religions is the Golden Rule. In 500 B. C. Confucius states "What you do not want others to do to you, do not do to others." In 150 B. C. Mahabharata specifies "This is the sum of all true righteousness: deal with others as thou wouldst thyself be dealt by." And more action oriented "Thou shalt love thy neighbor as thyself." (Lev. 19: 18, 1000 B. C.) Who is my neighbor? In the globalized world we are all interdependent and the answer to this question has been given by Darwin "As man advances in civilization, and small tribes are united into larger, the simplest reason would tell each individual that he ought to extend his social instincts and sympathies to all the members of the same nation, though personally unknown to him. This point being once reached, there is only an artificial barrier to prevent his sympathies extending to men of all nations and races." [16, 17] Nobel laureates declared in 2000 "As never before, the future of each one of us depends on the good of all."

5. Future - Scenarios and Surprises

Scenarios are rigorous, logical, but imaginative stories about *what future might be.* They are *not* predictions, but tools for planning introduced in 70 ies in Shell, and now are used by multinationals and governments. Scenarios identify *critical uncertainties*, *wild cards*, *black swans*, *embedded assumptions and "early warnings"*. Future always includes surprises.

By 2100 the world population will increase to 9-10 billions and life expectancy by 20 years. By 2020 nano-machines will be used in medicine – entering the bloodstream to feed cells and to extract waste. By 2030 mind uploading will be possible. By 2040 "human body 3.0" could alter its shape and organs could be replaced by cyber implants. Synthetic biology – development of new biological devices and systems that do not exist in the natural world – is rapidly developed [18]. In a few decades several technologies will converge: nanotechnology (manipulating atoms), biotechnology (genes), information communication technology (bits) – ICT and cognitive neuroscience (neurons). Ar-

tificial intelligence and machine-machine interaction will be common in a few decades. By 2300, it has been predicted that the world population will decrease to two billions because of fertility decline. Within few decades median age of the population of most European countries and of China will be 50 and the percentage of those over 65 and those over 80 will be substantial. These are some scenarios, but there will be surprises!

Today, 70% of citizens are dissatisfied with their governments and think that their country is going in the wrong direction. In almost all evaluations of trust in various institutions: governments, parliaments, police and businesses are at the bottom (sometimes surprisingly the army is ranked very high). Should we change them? The 20th century gave us enough reasons to avoid revolutionary changes. It was the means that was inappropriate, not the change itself. The change is needed as was emphasized by Marcus Aurelius "Can anything that is useful be accomplished without change?" We are part of the first global revolution - deeper than any previous one [19]. Democracy is now reduced to free elections [20, 21] (elections are within a constrained set and often produce poor results, markets allow more freedom of choice), ignoring checks and balances (see Federalist papers) and disregarding the need to actually empowering all citizens to be able, motivated and entitled to govern their lives without hindering but actually stimulating and promoting leadership. Political leadership is very complex. Plato argued for philosopher-king and was supported by Erasmus "Unless you are a philosopher you cannot be a prince, only a tyrant." For Napoleon a leader is a dealer in hope.

The essence of the Golden Rule is that "people are the true wealth of nations. The basic aim of development is to enlarge human freedom and choices so that people live full and creative lives. This must benefit everybody equitably." [22]

There are about 5.000 different cultures today and their diversity is as crucial for us as the biological diversity. Out of 5.000 cultures about 1.000 have more than several million people. Yet there are only 200 sovereign states. Sovereignty today is considerably different from that of the 17th century and it will change even more, but they are still needed to assure that people are the real wealth. Cultures are changing, disappearing and more people belong to more than one culture. The goal to have one civilization, i. e. one system of laws is cumbersome.

Economic activities have considerably changed and will change even more. Agriculture decreased and services skyrocketed. Khalil Gibran wrote that

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work is a love made visible. The current employment rate in the working age cohort in Europe is about 60%, EU is striving to reach 70%. However, the role robots play is increasingly bigger. A sugar factory near Brussels decades ago employed 5,000 workers and now has only five workers and the rest are robots. A joke says that a modern factory will have robots, one dog and one person. Robots work, a dog guards the factory and the person feeds the dog. Though machines have numerous shortcomings, the nontrivial question is what human beings should do - obviously much less manual work and considerably more creative work and critical thinking. Throughout history societies trained workers and soldiers. The underlying ideal was expressed recently by one CEO who said: "I have a group of highly intelligent employers who do not think." World now needs creative and critical doers-thinkers: to do, to challenge and to change. The current global crisis cannot be overcome in the same way as the previous ones have been overcome since the present is distinctly different from the past. We have never had ecological footprint of 1.29, nor weapons of mass destruction. Value of goods, their price, markets and the virtual monetary sphere (now larger than the real economy) have to be studied and changed. A. Smith, D. Ricardo, K. Marx, F. von Hayek, L. von Misses, J. Keynes and the Chicago school are giants of economy, but we now live in a different time where we are consumers and producers, the exploited and exploiters (classes have disappeared), and changes are so fast that we cannot identify our permanent interests. Money is technology - useful and dangerous - as fire, nuclear and biotechnology. Money should always be a servant of human beings and not a value in and of itself. In a global world with essential global commons, should money and private property be changed? St. Bernard de Clairvaux said "I have what I gave to others." It is more important to be rather than to have. The current global crisis cannot be solved and future ones cannot be prevented solely by demanding that people change their behavior. The system is faulty and has to be modified.

We and our values are the products of biological and socio-cultural evolutions. While the socio-cultural evolution carries the imprint of specific historical circumstances that may no longer be valid, our biological evolution makes ourselves. Biology imprinted in us the Golden Rule and curiosity, our desire to know (Aristotle, Metaphysics). "Human existence depends upon compassion and curiosity. Curiosity without compassion is inhuman. Compassion without curiosity is ineffectual." [23] Human beings long for freedom, and freedom so some extent defines humans. Is there a biological basis of our aspiration for freedom, is it connected with curiosity?

Can our value system be derived from basic rules: Golden Rule, freedom and curiosity? Human beings are above and beyond logic and rationality and our value system cannot be axiomatically codified as B. Spinoza attempted. We do need more values? Love thy neighbor, desire to know and freedom are our basic and common values and all others should be treated as replaceable. This is a very tall order and we should be aware of our arrogance and vanity to behave as gods. It is much easier to adhere to numerous laws, than to humbly follow the Golden Rule and assure conditions to fulfill our curiosity and freedom.

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