

20.03.2014

SYSTEMS FOCUS AND BI-POLAR BALANCING ORIENTATION

The theme "How Should Humanity Steer the Future" raises fundamental questions.

Humanity, the genus Homo, has selected over the millennia to one surviving species: Homo Sapiens. Homo Sapiens is evolving ever more numerically, creatively and selectively. What is the nature of the evolving Homo Sapiens humanity? Is it unifying or is it diversifying or does it both?

Steering presupposes a predetermined steerable structure, a sense of orientation and a competent helmsman. So far human history has shown no proof of such technical advancement. There have been some serious claims and violent tries. The question is: Can a technical concept of steerability be meaningful and relevant in the evolving human context? You can only steer when you are in control.

The Future is essentially unknowable. Presumption of the future has proved to be the most fatal folly of mankind in the past. In the last 100 years this included two world wars and the ideologies of Communism, Fascism and Hitlerism. The risks of nuclear proliferation are unresolved. Is humanity sustainable? What could be the humanity sustainability conditions?

There are no agreeable answers yet to questions of this kind. Humanity can be said to have noteworthy concerns of perceived specific risks in the sense of trying to minimize them, including the proliferation of nuclear know-how, climate change, lawlessness etc. None of these risks are unchanging and uncontested. All are proliferating. They are subject to evolving processes of particular instances and particular attempts at resolution without conclusive outcomes.

The only conceptual framework to explore these problems further is a comprehensive theory of evolution. It embodies the concept of organic and systems change through competitive selection over the whole of nature. It embodies uncertainty and activity. Evolution can be circumscribed as the forces evolving more of everything evolvable including themselves in all evolvable varieties. Surviving life actually emerges and evolves out of infinite unrelenting repetitive trials and errors, eliminating failures. Every life evolves in relation to all life.

The evolution of evolution has overcome progressively the limited scope of physical substances, opening the dynamic potential of organic life and from there the infinite potential of human drives, ideas and explanations. Much has been made of an apparent backlog of human brain adaptation in relation to the accelerating pace of overall evolution. All the evidence is that we as humanity are actually setting this accelerating evolutionary pace, which challenges the natural evolution of our human brains. Human brains are involved both ways. We are all involved physically, emotionally and mentally and are becoming increasingly aware of it. We need orientation and insight.

What can we say about the vital core energy and force of our existence, the existence of our universe? We use nouns like God, Big Bang, Creation, Infinity, Destiny etc., to represent what we really do not know. We do not even have orientational words for what to look for. What can it be like if it is unlike anything we can think of? And yet we are living by it. We are it. Without it we would not exist. How can we widen and deepen our mental-emotional horizons and language for insightful orientation?

Science and Technology continue to be the most visible evolution accelerating factors. They can beat the speed of natural evolution by systemic elimination of all natural variability or interference. The results are systemic clones in mass-production as required. This goes for all production goods, less so for services and breeding which involve degrees of relationships.

We have to distinguish between relationships and systems. Relationships are live, involving humans. Systems are man-made products. Relationships have open potential ranging from creative to destructive. Systems are humanly predetermined. Relationships are bi-polar energizing. Systems are inactive or automatic without human relations. Relationships are unforeseeable. Systems can only operate as programmed. In his inspiring "The Beginning of Infinity" David Deutsch suggests the criterion: "If you can't program it, you haven't understood it." One could add: If it is programmable it can only be a system."

Evolution is bi-polar. It creates and recreates. It includes creative destruction as part of creation. It takes account of everything as it happens. It tries the future. It does not presume the future. Over millions of years the genetic code, as it has been now unravelled by science, has proved more survival fit than other alternative trials. By gaining more lives and procreation it set a new pace of evolution. More recently the elimination of the different species of the genus Homo in favour of the species Homo Sapiens suggests a similar evolutionary explanation with acceleration effect. However our concurrent patterns of irrepressible, irrational human violence and discrimination suggest the strengths of continuing instincts of basic natural evolutionary selection. Humanity cannot opt out of its natural evolution and take off with its technical evolution. Are we seeing it that way?

Humanity is evolving spectacularly with science and technology. Science and technology have learned to take advantage of emergent natural evolutionary achievements and model them for technical advantage. Science and technology are speeding ahead of natural evolution in constructive ways that easily outpace natural organic evolution technically, but not life-wise.

One of the obsessive ideas of the 20th century was national planning, also termed scientific planning. Such top-down planning systems were the curse of Sowjet Russia and added for both World Wars the elements of mindless irreversible systematic destruction for the sake of what was planned. Post-war Great Britain was handicapped with legacies of national planning until the 'Thatcher' years in the Eighties, while defeated and destroyed Germany had emerged as "The German Miracle" in half the time. The formal planning mania also spread to commerce and industry as strategic planning systems. By now all is being subverted by obsolescence and the impact of IT systems and social networks.

The human brain has become a key object of scientific attention. It is now supplemented, substituted and modelled in parts by layers of electronic technology systems at staggering evolutionary paces. The brain as system is mapped and orientationally interpreted. What is a brain in isolation from its live engagements? What can be the overall evolutionary effect? For orientation we have to return to the distinction between relationships and systems.

All the systems are being created competitively-cooperatively through human relationships. Human relationships and their energies arise, as we know, from the creative, less analytically accessible sources of our personalities. They are represented by the right-half of our brains. They are the vital

resources of our natural evolution. They emerge as we are challenged or as we challenge ourselves. Necessity is the mother of invention.

What really happens and matters emerges through actual engagements of the relationships in the heat of actions. Assessments after the event as measured hindsight lack the vital insights. With our present scientific arsenals humanity misses direct access and explanatory language to get to the heart of such engagements. Concepts of bi-polarity at least set the scene and open orientational scope. The overall bi-polarity of evolution sets the pattern for widening explanatory reaches.

Setting the definitional bounds and isolating their contending differences, enables an order of comparable graduation of possible combinations from one pole to the other. On the assumption that evolutionary potentials can be described, compared or explained by the degrees of involvement of the contending elements, such methodology reflects to a manageable extent the essential complexity and dynamics beyond present human reach.

Equally important is the distinction between what we know and what we do not know. By contrasting our finite human knowledge with our comparatively infinite uncertainty and ignorance we can gain a sense of proportion of the human tasks and future potential. The range from absolute or certain knowledge to what we cannot even imagine would be the range along which to relate what we can claim to know to whatever degree, subject to change at any time.

Just as Socrates is quoted saying about 2500 years ago: "I know nothing except the fact of my ignorance" current science with so much more information at hand is increasingly ready to echo such sentiments. There is no certain knowledge. New thoughts and evidence can and do change what we know and how we know it overnight. Natural evolution as a whole has taken nothing for granted. It is evolving by trial and error. Homo Sapiens is only setting the evolutionary pace in so far as Homo Sapiens does set the evolutionary pace. Spin-offs and consequences become the problems of following generations.

Here again we can find orientational prospects through balancing the opposing contentions of humanity is in control versus humanity is victim of the evolutionary pace. The range of engagement between the extremes opens the potential range for comparable orientational explanations.

Evolution, as we can theoretically and practically understand it so far, embodies the most tested and assured survival experience of everything we can see and find out. Whatever we can learn from the study of evolution has been proven more enduringly than anything we can ever add in our lives. By comparison we can learn even more from the great majority of all creation that did not survive in evolution.

Current humanity lives as the offspring of countless generations of parents leading to us. We are by all accounts so far the most numerous, most healthy, long-living, socially and technically advanced human generation ever. Our children are set to do better. How come? Is it sustainable? Is there a problem?

If all appears to have worked out so well in this generation, what is there for our children to learn from us? - According to the historian Norman Davies war and civil war human losses from 1914 to 1945 amounted to about 140 million deaths and at least as many seriously wounded. It was followed by unprecedented prosperity in the Cold-War years for nearly the rest of the century. The guilty,

defeated and most destroyed countries, Germany and Japan prospered most. Both countries became world leaders in industrial exports and seem to have won the next round of the contest peacefully, thanks to their reformations.

And yet there was always the threat of nuclear war between East and West. There was no end of lesser violent conflicts around the world, each with potentials to escalate globally. There was AIDS and the greatest financial and banking crisis. Maybe the lingering memory of the World War trauma did help to keep heads cool and averted disaster for the time being. Can we be sure for the future? Can we humans trust ourselves? Can we be sure of our own human evolutionary extravagance when in possession of power? In the nature of human evolution this new human generation has a greater overall power potential than any other human generation before them. Are they prepared to make the best of it, whatever that may turn out to become?

The total world population in 1914 was estimated at 1.8 billion. By 1945 it was about 2 billion, an increase of 11% in 31 years. By 2012 world population passed the 7 billion mark. From an overall evolutionary perspective the most violent period from 1914 to 1945 reduced world population as measured against the 1914 level by 140 million or 8%. The subsequent growth of the world population from 1945 to 2012 from 2 to 7 billion was of the order of 350% in 67 years

Quantitatively all this can be counted as an evolutionary success story. Overall 140 million lives were sacrificed to overcome the ideological obstacles and the planning mania to enable an increase in humans close to four times over. The evolutionary potential of 7 billion contemporary human evolutionary trials is bound to be greatly more powerful than the potential at the 1914 levels.

The problems of the 20th century ideological obstacles and planning mania have been removed at great human cost. Even at the state of the 1914 knowledge, it is now realized, the human slaughter and destruction could have been avoided by those in power at that time. Nevertheless the slaughter and destruction took place.

The situation now is that from a total of 7 billion in 2012 world population is expected to increase to 8 billion by 2027 and to 9 billion by 2046. Science and technology are transforming living and communication facilities at growing rates making these population increases physically possible, challenging past conventions. Evolution through the expanding humanity is set to continue increasingly accelerating.

If the new generation nurtures convictions that it can control these developments it is likely to get into big trouble. The potential for destruction multiplies with the expansion of population and their assets. The human problem is likely to become an ever growing task of learning, influencing and coordinating what needs doing at every turn. Increasing evolutionary acceleration demands more long-term orientation.

Evolution, as far as we can now understand it, was always an unlikely progression, made possible only by innumerable trials and self-selection of sustaining exceptions. Every life and all life can be understood as balancing efforts between life and death. From a bi-polar perspective all life is balancing on the life-death range between absolute life and absolute death as long as it lasts. This can also be understood as the overall pattern of evolution ranging on balance between evolving or not-evolving. What not evolves gets dissipated. This applies to heat as much as it applies to trust.

Such bi-polar understanding of life is the pattern of its dynamics. We now know that human lives do not only depend on the ordered collaboration of billions of cells but also on even more billions of microbes in association with our bodies. The strength of such patterns is not static connection but what can perhaps be alluded to as active competitive- cooperative ties. The organic evolution of such active competitive-cooperative ties from intra-body functionality to inter-personal relationships from minimal to maximal potential amplitudes might reward research.

The human physique represents the most potent evolutionary life so far evolved. As the basis and resource of our minds the human body is the most potent and proved assembly of evolutionary know-how we can rely on. This Homo Sapiens human person type is part of overall evolution. It has no separate existence or relevance in the universe. In a bi-polar sense individuals and our universe belong together in engagement.

Engagement starts with orientation and communication. The importance of orientation and communication is growing exponentially with the population increases and the spread of scientific and technical advances. Technically we now have world-wide networks of communication enabling us to see and converse with one-another instantly at any time. Alternatively we can come face to face to each other within hours rather days or weeks.

Visual contact matters more than oral or written contact. It is more natural and comprehensible. With all these abundant facilities we humans are challenged how best to live with them. We all have to learn and practise. We talk about mixed blessings. On balance the question will be how humanity can and will take advantage of these systemic extensions to our natural mobility and ability. As with all facilities human misuse and disruption are testing sustainability. They are endemic threats to any smooth functioning.

Contrasting contact with isolation or privacy, humans need to balance them at different times for different situations. Increasing ranges of options extend personal decision-making for better or worse. In the communications range from physical contact to a mere echo or mention, written communications stand out for requiring more personal effort and time to produce and to understand them, than the more instant modes now on the market. Writing is more directly aligned to thinking and the expression of coherent accounts and explanations.

Language is the basic medium of all forms of explanatory communication. The nearest thing to a common world language is currently the evolving English language. It has become the successor to Greek, Latin and French, which in their turn influenced world-wide thinking, communications and civilization during their respective historical ascendancy. Through their speakers and writers these languages influenced the evolution of communicated knowledge from isolated inspirations to increasingly inclusive systematic networks of widening and varying perspectives. This is a tale like organic natural evolution except that it is mind-bound rather than physical and therefore more agile.

Austrian-born philosopher Ludwig Wittgenstein (1889-1951) famously exemplified in his early life the unifying evolutionary pull of language to defined meanings. In his later life he exemplified the other end of the range, language as diversification drives as 'language games'. Natural evolution is always contending both-ways.

Wittgenstein never explained his philosophical contradiction. Evolutionary bi-polar balancing analysis could have been the way to explain the connection. Evolutionary bi-polar balancing analysis is perfectly compatible with current English language usage. To varying extents it has been in casual use right across the language spectrum. The difference comes with systematic practice and application. The next generation will need something like this to keep up a balancing orientation of their world.

In taking up the challenge of the essay theme, as worded by the sponsors, I have only managed to raise more questions thanks to a promising methodology. Over to You! Try it!

Helmut von Schweitzer

REFERENCES - ALPHABETICAL BY Author's NAME

All factual data are Wikipedia-tested

- Davies N. (1996) Europe, Oxford University Press, Oxford, 1996
- Dennett D. (1995), Darwin's Dangerous Idea, Simon & Schuster, New York 1995
- Deutsch D. (1997), The Fabric Of Reality, Penguin Books, London, 1998
- Deutsch D. (2011), The Beginning Of Infinity, Allen Lane, London, 2011
- Deutscher G. (2005), The Unfolding of Language, Arrow Books, London, 2006
- Feynman R. (1998), The Meaning Of It All, Perseus Books, Reading Mass., 1998
- Hayek F.A. (1988), The Fatal Conceit, Routledge, London, 1990
- Miller J. (1978), The Body IN Question, Jonathan Cape, London, 1978
- Popper K. (1959), The Logic of Scientific Discovery, Routledge, London, 2002
- Popper K. (1982), The Open Universe, Routledge, London, 1988
- Wittgenstein L. (1921), Tractatus Logico-Philosophicus, Cosimo, New York, 2007
- Wittgenstein L. (1953), Philosophical Investigations, Blackwell, London, 2009

