# Knowledge-Oriented Society

*The Problem of Surviving the Permanently Uncertain Future: The Requirement of Permanence*

(Review Paper on Post-Science and Fuzzy Logic 2016—Invited Paper for IEEE ICCI*CC'16, Stanford U. 8/22-24/2016)

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*Abstract*— Mankind has inherited the earth. But, up to now there is little hint on the meaning and the purpose of this inheritance. Science, thus far, has explained only a tiny fraction. The real issue is identified as the problem of surviving the permanently uncertain future. Technically, the problem can be called the Requirement of Permanence. All the knowledge discoveries of the past, the present, and the future and all the wisdom of the universe accumulated from the infinite past seem to be aimed at satisfying this Requirement of Permanence. And, by the best account, merely looking at the living system on earth, the problem seems to have been solved, as far as the universe in concerned. However, science, dealing with certainty, has missed the essence of the problem, which is solving the permanently uncertain future. The solution is expanded and further explained by Post-Science Social Science based on the solution of value, Post-Science Life or Computer Science based on the solution of complete automation, and Post-Creational Fuzzy Logic for describing the fuzzy reality resulting from the sacrifice of precision in the expansion of the range of tolerance of error of a creation for surviving all the possibilities of the uncertain future. The same solution for solving the problem of the uncertain future is used for solving the problems of financial crises and complexity crises, which will plague our society in the Age of Abundance. Post-science promotes the concept of a future cooperative society of abundance guided by knowledge. A knowledge-oriented, not power or money-oriented, society is needed to solve the problem of surviving the uncertain future permanently. Only knowledge will give mankind the right to inherit the earth and to connect to the wisdom of the universe.

Keyword—value, software, robotics, money, Bitcoin, fuzzy logic, common sense, intelligent design, future, uncertainty, self-creation, infinity, permanence, complete automation, financial crises, complexity crises, cognitive science, cognitive computing, electronic brain

## I. Introduction

*What Is "the" Problem?*
*What Is the Knowledge Breakthrough toward Solving It?*

The permanently uncertain future is "the" Problem. And the knowledge breakthrough toward solving *the* Problem is the knowledge discovery, which connects man-made technology to the technology of the creator of the living system. Then, human technology can start to copy the living technology to solve the Problem of the permanently uncertain future. The breakthrough in knowledge discovery involves mainly the identification of DNA as completely automated software. Overall, the permanent uncertain future is handled by (1) Constant recalculation by the solution of value in the form of an infinite spreadsheet, whenever the future expectation changes [1-7], (2) Constant auto-updating by the solution of complete automation to keep up with never-ending changes [8-19], (3) Fuzzy logic to describe the expanded range of tolerance of error in a creation for surviving all the possibilities of the permanently uncertain future [20-25], and (4) Self-creation before the expiration of an existing living system [11 and 35]. As an illustration of the range of tolerance, a robot is exact, without tolerance, and a human is fuzzy. What separates them is common sense, which is actually a design strategy for the tolerance of error or for making a fuzzy decision within the range of tolerance. Common sense allows humans and animals to survive the uncertain future, at least, temporarily; technically, Turing Test is a test of common sense of the machine and a contest between the intelligence created by the human and the intelligence created by the creator of the human. The conspicuous absence of the Father of Fuzzy Logic Lotfi A. Zadeh [26] in the list of the Turing Prize winners reflects a total ignorance of the relationship between fuzzy logic and common sense by the main beneficiary of common sense, namely, humans, and the Turing Prize selection committee has yet to realize the extraordinary vision of the person, to whom both the Test and the Prize bear his name.

## II. The Greatest Knowledge Breakthrough

One of the greatest breakthroughs in the progress of human civilization occurs when the human technology advances to the point that man-made technology connects to the technology of the creators of the living system, and then human technology can start to copy the living technology. In life and computer sciences, the current technology should immediately be switched to a completely automated foundation. And the self-generated neural network of software cells will lead to the construction of an electronic brain in cognitive science. In social science, the current social system can only watch in awe of the fixed plan of our creators, where the planning has been done to perpetuity, while our current social planning systems are just at the stage of switching from fixed rigid finite plans to infinite planning systems, which can change the plan, whenever there is a change in the future expectation. Fuzzy logic is related to the post-creational technology of the fuzzy reality resulting from the sacrifice of precision in the process of expanding the range of tolerance of the creation in order to survive all the possibilities in an uncertain future. To humans and the creators of humans, the future uncertainty must always remain the most difficult problem to be handled and is The Greatest Problem or simply *the* Problem.

## III. Discipline

*Common Sense vs. Uncommon Sense*
*Created vs. Creator*

Discipline summarizes the basic characteristics of our universe. For example, there are non-violable laws of nature in physical and social sciences, which should be observed in all behaviors. In the absence of our creators, pain and suffering serve as the teacher of these laws. The Requirement of Permanence summarizes the goal of the discipline, and is immediately applicable to life and computer sciences, for any creation, which is not created for permanent existence, will sooner or later become valueless.

Humans and animals are created with hard-wired common sense or instinct for surviving in a world of discipline. An exact robot does what it is programmed and has no common sense. In the past several millennia, humans start to acquire uncommon sense in the form of logic, mathematics, and science, which are not generally necessary for survival, as animals, birds, and insects have amply demonstrated that they can survive solely on common sense or instinct. Uncommon sense is the knowledge of the creator of the living system and is needed to discover and satisfy the discipline of the universe. Animals, birds, and insects help distinguish common sense from uncommon sense and the created from the creator. Humans have both common and uncommon sense and are both the created and the creator. A robot has no free will. Free will of humans and animals is created by expanding the range of behavioral flexibility to adapt to new environments based on the ability to change, and change is necessarily fuzzy. Common sense is fuzzy. Also, Human Associative Memory allows humans to access an unlimited amount of information and is a source of fuzziness. Human language includes all human expressions, such as spoken and written languages, multi-media expressions, and even software. Human language is affected by common sense and is permanently fuzzy, as demonstrated by computer software, which is the idealized formal language, but must still have the capability of auto-updating with the solution of complete automation to satisfy the requirement of permanence. Today, we have a complexity crisis because almost all the software budget is allocated for software maintenance or updating. DNA has been designed with the main goal of survive in an uncertain future by expanding the range of tolerance of the creation, with the sacrifice of precision. For example, the multi-cellular design of humans, animals, insects, and plants is the ultimate design in fault tolerance. And bio-diversification through bisexual reproduction is a fuzzy function to accommodate change for adapting to new environments in an uncertain future.

## IV. Infinite Consideration and Permanent Existence

Four new fields of knowledge will lead society into the next 2000 years and beyond and will start to address the problem dealing with the uncertain future. They are: (1) Post-Science Social Science based on the solution of value, (2) Post-Science Life or Computer Science based on the solution of complete automation, (3) Fuzzy Logic for describing the fuzzy reality, and (4) Self-creation for the perpetual rejuvenation of the living system.

Post-Science Social Science will be the next stage of human development, advancing human civilization from the current Age of Science, when motions are guided by non-violable laws of nature in science, into the coming Age of Social Science, when behaviors will be guided by non-violable laws of nature in social science, such as the mathematically rigorous solution to the problem of value posed by Gerard Debreu in his book ***Theory of Value*** [1]. The criterion for the acceptance of knowledge will change due to the change of the nature of knowledge. Science deals

with finite consideration in a controlled environment. Social and life sciences deal with the reality, which is infinite. Solutions in science are accepted based on empirical verification, requiring also the law of uniformity, which simply claims that what happens in the past will happen the same way in the future. Solutions in social science involve infinity and needs to be considered to infinity to obtain a deterministic condition for solution. Due to the consideration of infinity, which, by definition, never arrives, deterministic set of date can never be collected and, thus, the solutions in social science cannot generally be empirically verified. If the solutions in social science cannot be empirically verified, what is the criterion for acceptance in social science? From the post-science solution of value, it is realized that the criterion for acceptance in social science is complete mathematical rigor. The solution of value is completely mathematically rigorous and is as non-violable as mathematics and is a non-violable law of nature in social science. Similarly, any mathematically rigorous system corresponding to reality can be considered a non-violable law of nature. However, thus far, the only example is the solution of value, which can be considered the foundation for social science.

The solution of value is also the solutions of rational arbitration, which can change society from competition to cooperation. Competition is the main engine of progress in the absence of rational arbitration. Value is defined as the sum total of all the benefits and losses to infinity. The valuation system based on the solution of value calculates a deterministic price, when the rate of return is given, or calculates a rate of return, when the price is given. The valuation system relates the price to the rate of return through all the factors affecting the price. The solution of planning is a valuation system, which recalculates the price or the rate of return, whenever the expected future changes. The price can be described as a variant quantity because it will change continually to infinity in time. It is the time invariant quantities in social science, such as the price, the decision, and the plan, that make empirical verification impossible. In contrast, science deals exclusively with invariant quantities, which can be empirically verified. The rate of return can be described as an approximate or fuzzy invariant quantity, which generally can be obtained from market comparison, which are originally calculated by the solution of value. The price must be calculated based on the most current future expectation. The actual calculation of the price involves single-loop iteration, equivalent to about 100 spreadsheet calculations. The calculation of the rate of return involves double-loop iteration, one for the price and the other, rate of return, equivalent to 100 x 100 = 10,000 spreadsheet calculations. The solution of value is commercialized for real estate and demonstrated at: http://infinitespreadsheet.com. The stock prediction is at: http://123iss.com.

The Infinite Spreadsheet has predicted both the Savings and Loan Crisis for Alan Greenspan and the Subprime Woe for Ben S. Bernanke, and also helped solving the Subprime Woe with the US Treasury public comment by Hugh Ching: "…lowering the interest rate as much and as rapidly as possible." Up to now, the only effective measure in solving the Subprime Woe is lowering the interest rate, to even negative rate with Quantitative Easing. The solution of stock prediction had not been accurate enough before 2008, when most analysts provided input data for the benefit of the company or themselves. The unreliability has been amply demonstrated by the sudden collapse of Enron, Worldcom, and Tyco. The market crash during 2008 scared away most private stock investors, and now professional Registered Investment Advisors are keeping the analysts honest. Currently, the Infinite Spreadsheet Stock Rate of Return Calculation is in the process of breaking the threshold of 50% accuracy. Since the beginning of 2016, the Infinite Spreadsheet stock predictions have been more accurate than rating companies in general [27].

The Savings and Loan Crisis was caused by the market comparison appraisal method, which kept the price rigid when the economic condition had changed. The solution of the S&L Crisis was the man-made law FIRREA of 1989 which endorsed the market comparison method and made the Subprime Woe an order of magnitude more severe than the S&L Crisis, because all the appraisers were forced by FIRREA to use the market comparison method. Similarly, the peer review process follows the same concept as the market comparison method and has the same damaging effect on knowledge, because it filters out truly original ideas, which, by definition, should have no peers. In sum, all the backward-looking valuation systems should be replaced by forward-looking valuation system, such as the Infinite Spreadsheet, which provides full disclosure of all the inputs and outputs to infinity and full accountability in the future.

The post-science solution of complete automation solves the problem posed by John von Neumann, who tried unsuccessfully to solve the problem by considering directly hardware complete automation. The post-science solution starts with software. The solution is disclosed in the Patent

Hugh Ching ***"Completely Automated and Self-generating Software System"*** (Pat. No. 5,485,601). Complete logic of complete automation is described in a paper to be published [19]. The solution of complete automation is the Self-manufactured General-Purpose Robot with the ability of touch. No robot today can touch; a robot finger bounces off a surface like a ball bounces off a racket. The Robot will be maintained, developed, and controlled by the completely automated Software. Ultimately, the Robot will become the human, and the Software, DNA, completing the cycle of self-creation [11 and 35]. The design specifications of mankind's self-creation will reveal the meaning of life and the purpose of existence. The Age of Life Science after the Age of Social Science will look very much different from the current Age of Science. Humans will just do the thinking and work or develop programs using the completely automated Software from a control console, and all the physical work will be done by robots.

## V. Bottleneck in Robotics

*Jumpulse: The Solution of Robot Touch*

The solution of robot touch is based on the new physics concept of jumpulse, which denotes a sudden change of force, as impulse is a sudden change of momentum [28-31], and which is missed by Isaac Newton and all the physicists since Newton for the past 300 years. Touch follows the same physics as prolonged contact due to a jumpulse applied during a collision between a ball and a racket. In order to have two objects moving together, they need to have the same position, velocity, and acceleration. Sometime during the impact, the velocity and the position of the ball and the racket are the same and, if at that precise moment, the acceleration of the racket is increased by a finite amount to match the acceleration of the ball, prolonged contact can be achieved. Prolonged contact needs the new Ching's Law of Touch, which states, unlike velocity, acceleration and all the time derivatives higher than acceleration can be changed instantaneously.

Prolonged contact is directly related to touch, and touch can be defined as permanently prolonged contact at low impact velocity. A demonstration of prolonged contact with two colliding model cars is given at the website: http://www.youtube.com/watch?v=PixwnjvNlNQ
Jumpulse is defined by the Father of Chinese Physics Ta-You Wu below with infinite jerk $\mathbf{d^3x/dt^3}$:

$$\textbf{Jumpulse} \equiv \mathbf{m} \int_{t_1}^{t_2} \mathbf{d^3x/dt^3}\, \mathbf{dt},$$

where $(t_2 - t_1)$ approaches zero and can equal to zero. It should be noted that machines move with force, humans, animals, and insects move with jumpulse. Humans can produce a jumpulse by releasing one of the two muscles, namely, bicep and triceps, which have been windup initially. Jumpulse is desirable in initiating a fast motion in sports, but is necessary in prolonged contact and robot touch where a finite increase in acceleration must occur within the very short time duration of an impulse. Jumpulse is measured in **w**eight **u**nits, where one **wu** equals one **newton**.

## VI. Why Is Reality Fuzzy?

The purpose of fuzzy logic is to solve or identify some unsolved problems in science, which is characterized by precision and deals with certainty. What has fuzzy logic solved or identified which cannot be done by science? Most critics of fuzzy logic consider fuzzy logic unnecessary. Post-science believes that fuzzy logic is necessary. For example, in mathematics, the most accurate description of reality used to be the Exact Solution, but now, with fuzzy logic, should be Fuzzy Exact Solution; fuzzy logic has raised ceiling on mathematics.

Post-science believes that science deals with certainty, where the problems are finite and exact, and that fuzzy logic is needed in dealing with uncertainty, where the problem is infinite and fuzzy. Science is value-absent and considers problems within finite controlled environments; science can only give incomplete solution. Reality is fuzzy and infinite, and the future is permanently uncertain.

Why is reality fuzzy? The reality is fuzzy due to post-creational technology, which sacrifices precision in the process of expanding the range of tolerance for error of a creation in order to survive all the possibilities of an uncertain future.

Lotfi A. Zadeh has explained how to use fuzzy logic, and post-science is expanding it to explain why reality is fuzzy. Reality is fuzzy, but science insists it is exact. The fuzzy human is the result of the sacrifice of the precision of the human to expand the range of tolerance of error in order to cover all the possibilities for survival in an uncertain future. Computer science can be considered the communication between the fuzzy human and the exact computer. The following two immediately available practical applications set fuzzy logic apart from exact logic of science, making fuzzy logic the most advanced knowledge known to our current society and necessary for describing reality:

1. Fuzzy Exact Solution, not Exact Solution, is the ultimate solution for describing the fuzzy reality.

2. A practical example of Fuzzy Exact Solution is the Fuzzy Infinite Spreadsheet, where the single value in the cell is replaced by a range of value.

In the past, pure mathematicians have restricted themselves to use just analytical ability, not perception. The future society will be run by mathematicians with perception, as today the scientific world is run by scientists. Perceptive mathematicians will be able to explain the nature of non-violable laws in social science, which governs our behavior, and whose acceptance depends on mathematical rigor. The main obstacle in understanding social science is the conflict between mathematical rigor and fuzzy perception. Post-science combines rigor and perception and requires all thinking faculties of analysis, perception, and creativity.

## VII. Money Revolution

*From Bitcoin to UPN Digital Currency based on UPS*

To Universal Permanent Number (UPN), which gives distinct integer names to permanent entities, money is just like any other commodity, but has a unique characteristic. Money is a universal commodity, which can be universally changed to all other commodity. The function of money is to provide convenience. The economic constraint on money could be the equation PQ = VM (Price x Quantity = Velocity of Circulation of Money x Money Supply). Thus, the supply of money should be limited to avoid the corresponding rise in the Price or to avoid excessive inflation. The correct adjustment of the money supply M to compensate for the drop in the velocity of circulation of money V in the aftermath of the Subprime Woe had helped the world economy avoid another Great Depression, which could have caused a great deal of human suffering. UPN will not add to the existing currencies, but will retire them when exchanged for UPN; this is the main method, with which UPN digital currency is created. Unlike today, money must be designed to serve mankind, not the other way around.

UPN for digital currency will be set up in the same way as all the other UPN systems. UPNs with prefix 8 will be allocated to represent currency.

Money is a universal commodity, created to enhance the convenience of trade. Paper money has the same characteristics as UPN, being universal and permanent. The supply of money should follow the equation PQ = VM. Each UPN for digital currency will be stored in a software wallet and be identified by a private key, the holder of which is allowed to spend the UPNs in the holder's wallet. A public key associated with the wallet will allow others to add UPNs to the wallet. All transaction will go through a verifying process, which consists mainly checking the validity of the UPNs being exchanged from the old wallet using its private key to the new wallet using its public key. The status of all the UPNs is stored in a blockledger, where the UPNs are identified using the public key, and is updated at a specified rate. The frequent scrutiny of the status of the blockledger insures the absence of fraud. There is no need to record all the past history of the blockchain; now the blockchain is just a state function. Nodes will be set up to store duplicate identical copies of the blockchain, and all the node holders, as well as the detectors of fraud or discrepancy, will be awarded with newly issued UPNs. All the UPNs for digital currency will originate from one central wallet held by the inventor and the original owner of UPN and Universal Permanent Software (UPS). New UPNs will be issued as awards to new knowledge contributors, according the expected increase in PQ due to the knowledge, node holders, and people with greatest need, all of which will be for keeping PQ=VM stable. However, the bulk of UPNs will be for the replacement of the existing currency, which will not be put back into circulation and will be retired permanently, so that stable PQ=VM will not be affected due to the change of M.

The UPNs for digital currency can be treated exactly as UPN for identifying commodities, except that here UPNs themselves are commodities and identify themselves. The owner of the wallet or the wallet can be identified by a UPN, which is associated with all the commodities owned by the UPN. A transaction simply means that the ownership of the transacted commodity changes from the current owner to a new owner both of whom are identified uniquely by their UPNs or their public keys. UPN is designed for unique global identification of permanent entities, of which money is certainly one. Additional information on UPN is at the website: http://upn4.com/ and [32]

All the UPNs are initially controlled by the post-science fuzzy logic team, which is led by the Father of Fuzzy Logic Lotfi A. Zadeh, Tosiyasu Lawrence Kunii, Chitoor V. Ramamoorthy, and the founder of post-science Hugh Ching, who is also the executive officer. The interest of the team is in knowledge, and, thus, the design of UPN for digital currency will not be for the monetary gain of the team, but for the benefit and the convenience of society. The team believes that, in view of the success of Bitcoin, Litecoin, Dogecoin, Ethereum, etc., there should be a world-wide search for the best design of digital currency. UPN digital

currency design is a knowledge contribution to this search and holds a unique position because UPN is a byproduct of the solution of completely automated Universal Permanent Software (UPS) at: http://postscience.com/pspatent.pdf/. The Software, in particular, can be used to remember what each UPN stands for. It has fundamentally eliminated all the technical barriers in computer usage by converting all the technology to UPN, which, in turn, can be remembered by UPS, not the user.

Money should satisfy five conditions:

1. Satisfy the Quantity Theory of Money: PQ = VM (Price x Quantity = Velocity of Circulation x Money Supply),

2. Satisfy the condition: Rate of Return > Interest Rate > Inflation,

3. Satisfy the criteria for the growth of money supply: Inflation Rate = VM/PQ – 1,

4. Have permanent intrinsic value, and

5. Have unlimited supply.

In Item 2, the Rate of Return sets a ceiling for Interest Rate and Inflation and can be determined from the post-science solution to the problem of value posed by Kenneth Arrow and Gerard Debreu in Debreu's book Theory of Value.

For example, fiat money can satisfy 1, 2, and 3, and gold can satisfy 4, and only UPN can satisfy all 1, 2, 3, 4, and 5. Additionally, UPN can be used as digital currency with blockledger (similar to blockchain with just two links) security check. The intrinsic value of UPN is similar to that of ISBN, which is the global standard for identifying book titles making books easier to manage and charges from $0 (Canada) to $125 (USA), verses the listing price for UPN being $10 for a 13-digit UPN. ISBN is an example of incorrectly designed number system, which will come into conflict with other number systems in a global search.

In spite of the claim by business and governments that our currency systems are correct, there has never been the existence of Universal Permanent Money as the correct solution to our currency system. For example, gold is Universal Permanent Money (UPM), but its supply is too limited to provide the needed currency for the economy. Temporary substitutes of IOUs have been created to fill the gap between the total demand for money and the amount of UPM available in the economy. A rational economy needs a rational money system. The invention of UPN (Universal Permanent Number http://upn4.com) based on completely automated UPS (Software) is also the invention of money. All the current money types are not really suitable as permanent money, which is guaranteed to last permanently, even when governments or even the earth perish. The best example of permanent money is gold, but the fatal defect of gold to be used as money is its limited supply, while UPN is unlimited.

UPM represents the invention of money; it is a yet-to-be-solved-and-implemented fundamental economics problem. UPM essentially revert transactions back into the barter system, where objects of value are being exchanged and the medium of exchange can be kept perfectly stable, that is that no excessive inflation of deflation.

### VIII. Chasing Future to within Range of Tolerance

The future does not stay constant. It changes and is uncertain. To solve the problem of the uncertain future, the strategy is to develop systems, which can keep up with the change. It is a scheme for chasing the future to stay within the range of tolerance for survival. Post-science has demonstrated two such systems: the Infinite Spreadsheet, which can recalculate automatically, whenever the future expectation changes, and auto-updating in the completely automated software. In practice, there are variant and invariant entities, and the permanently changing variant entities, such as value, language, and software, which is a form of language, must be chased permanently with the solutions of value, complete automation, and fuzzy logic.

The practical implication of the concept of chasing the future is that all the current finite-period plans are incorrect because the future can change within the finite period. Therefore, all the plans should be switched to planning systems, which can modify the existing plans to new future expectations. All decisions should be based on expected future consequences, not the past performances. In practice, decision method based the past, such as the real estate market comparison method, the peer review process, technical analysis of stocks, is fundamentally incorrect. These methods may give the correct prediction for a finite period, but, due to their rigidity, often are the causes of market crashes leading to crises. Decisions should be based on the future, not the past, but the future is permanently fuzzy or uncertain. The living system on earth is created with common sense or instinct to automatically adjust to new environment within the range of tolerance for survival. Humans have been created with the potential of uncommon

sense to discover all the non-violable laws of nature in physical and social science and to self-create the living system. The knowledge of non-violable laws of nature will help mankind avoid unnecessary suffering and will be needed in the process of self-creation. Self-creation is a part of the planning system for the long-term, when mankind's time on earth expired. For the creator, who might no longer take care of the created, expanding the range of tolerance could remain the only option in chasing the future. Thus, the uncertain future is solved by common sense, uncommon sense, which is demonstrated by science, solution of value, and the solution of complete automation, and self-creation, which completes the cycle of chasing the future.

## IX. Created Repeating Creator

In self-creation, the created repeats the effort of the creator in the design and the construction of the next living system. The existing living system serves as a template for the creation of the next generation. For those who are not satisfied with the human condition, they can also introduce new design features when self-creating. However, to surpass our creator is not likely because, by definition, self-creation means that what is created can do anything the creator can do, including the ability to add addition features.

## X. Self-Generating, Self-Manufactured, Self-Creation

The concept of self-creation is also contained in the Self-Generating Software System and the Self-Manufactured General-Purpose Robot. It appears that self-creation is one of the most important innovations in the universe. Self-creation is generally the first criterion to be satisfied toward perpetual improvement of a creation, such as in software.

## XI. Knowledge-Oriented Society, Wisdom-Oriented Society, Happiness-Oriented Universe

Knowledge-Oriented Society is just the start of the process of mankind joining the progression of the universe. A more advanced concept would be Wisdom-Oriented Society, where wisdom, which includes knowledge, is the goal of the society. For example, wisdom might put happiness or beauty ahead of intelligence, which is directly associated with knowledge. If value is to be maximized, most people might choose happiness and beauty over intelligence in their lives. Thus, it can be speculated that the goal of the universe might be for a Happiness-Oriented Universe.

## XII. Concluding Remarks

*Thinking is the Natural State of Human Beings.*

*Working is the Natural State of Robots.*

With the help of machines to automate routine works, today, society has already high enough productivity to supply all the necessities of life for all the humans on earth. But, we live in a society which does not know how to handle abundance. We need more thinkers who can think problems with over 50 variables in social science and around 500 variables in life science, so we have some definite ideas about how to behave and who we are. Currently, instead of enjoying the fruit of high productivity, we experience financial crises caused by abundance or over-productivity. Also, partially, not yet completely, automated hardware and software is leading us into complexity crises. Even today, machines are taking over human labors. In the past and the present, many people are willingly to take jobs, which will be done by robots in the future. And those, who refuse to work like robots, are either supported by science or, when the science budget is cut, become entrepreneurs or self-employed thinkers, with no steady income. Someday all robot jobs will be done by the robot, and then only the owner of the robot makes money.

If we have a better understand who we are, we might realize that humans are supposedly to think like human, not work like robots. Then, how do humans make money by thinking? There are already ample evidences that the more thinking a person does, the less money the person earns because thinking makes the person anti-establishment and, thus, not employable by the establishment. Post-Science has proposed the Distributed Full-employment [33] to make sure that everyone can be paid enough to have money for the necessities of life. We need to move away from the current money-oriented society toward a knowledge-oriented society, where people will be rewarded by knowledge contribution and will all have enough money to live a thinking and happy life, regardless what they do, in the Age of Abundance [34]. We need to trust knowledge!

Rationally, we need a society led by people of knowledge, not the current politicians, who should no longer be allow to control the printing of money for the purpose of controlling people. The people of knowledge must understand the non-violable laws of nature in social science to guide the society away from financial crises and understand what life is in order to teach people how to live like humans, not animals or robots [35]. The society must switch from money-oriented to knowledge-oriented by making money as a convenience for the exchange of goods and services, not a goal in itself. Only knowledge, not money or power, which

should be based on knowledge, can contribute to human progress, whose ultimate goal is to advance human knowledge to a level that mankind can take a rightful place as a contributing member to the wisdom of the universe.

**Biography:** Hugh Ching is the founder of post-science, knowledge beyond science, partnering with Lotfi Zadeh, T. L. Kunii, and C. V. Ramamoorthy. He has solved the problems of value, complete automation, and robot touch. His formal training includes SB, SM, and ScD from MIT, post-doctor at the Courant Institute of Mathematical Sciences, and 8 years at the Department of Philosophy at the University of California at Berkeley working with Paul Feyerabend. He is the inventor and the software developer of the Infinite Spreadsheet and the Self-generating Software System. He operated In 1970s the first successful Computer Newspaper, which now represents the entire Internet Industry. It caused the local newspaper the Berkeley Gazette to fold. He co-invented the physics concept of jumpulse with the Father of Chinese Physics Ta-You Wu. He invents the Jumpulse Dance and becomes a legend in San Francisco Bay Area. He owns all the Universal Permanent Numbers (UPN), the set of distinct integers from minus infinity to plus infinity.

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