Post-Science Anti-establishment Beliefs: Foundation for Next-Generation Knowledge

(1) **Man-made Laws (FIRREA of 1989) vs. Non-Violable Laws of Nature (Solution of Value):** As in science, material behaviors are governed exclusively by non-violable laws of nature in science, post-science believes that human behaviors should be exclusively governed by non-violable laws of nature in social science, such as the Fisher Identity, Price x Quantity = Velocity of Circulation x Money Supply (PQ = VM), the Infinite Spreadsheet, which expresses the mathematical relationship between the price and the rate of return in a time space extending to infinity, and all the approximate time-invariant quantities, such as V in PQ = VM and rate of return. Non-violable laws of nature in social science are an extension of the Free Market of Milton Friedman, who believes in deregulation of all man-made laws. Post-Friedman economics should be regulated by non-violable laws of nature. The man-made law the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA of 1989) be replaced by the solution of value, known as Quantitative Supply and Demand Model Based on the Infinite Spreadsheet. The problem of value posed by Kenneth Arrow and Gerard Debreu in Debreu's book **Theory of Value**.

(2) **Productivity vs. Distribution:** The main economic problem today is not productivity, but distribution based on value, particularly, distributing available human work for full-employment.

(3) **Market Comparison and Peer Review vs. Solution of Value and Infinite Spreadsheet:** Post-science believes that the market comparison method, which is the main cause of both the Savings and Loan Crisis and the Subprime Woe, endorsed by FIRREA of 1989 and the peer review process should be replaced by the solution of value, which predicted publicly both the S&L Crisis and the Subprime Woe. The market comparison method and the peer review process share the same trait of looking backward, thus, stifling changes or innovations, while the solution of value is forward looking and, thus, will be able to change the price or the decision, as future conditions change. Science is based on the concept of time-invariance; only time-invariant quantities can be carried from the past into the future for prediction. Prices, plans, and decisions are examples of time-variant quantities, which change continually with time to infinity in time, and, thus, should not be compared to the past, unless the future does not change. Time-invariant quantities are not subject to empirical verification, which is the standard of rigor of science. The mathematically rigorous Infinite Spreadsheet uses approximate time-invariant inputs, which are necessarily fuzzy because the infinite future is always uncertain.

(4) **Education vs. Research:** Post-science believes that the funding for education should be separated from the funding for research because the former is defending the establishment and the later should be anti-establishment in order to be truly innovative.

(5) **Post-Science vs. Religion or Good vs. Evil:** Post-science believes that evil is created as a survival mechanism for the weak to compete against strong for survival. Thus, unlike in religious beliefs, post-science does not believe that evil should be eradicated, but should be understood.

(6) **English-Like Computer Source Code vs. Integer-Like Universal Computer Source Code (UCSC):** While, currently, all computer source codes are English-Like, except some machine instructions, post-science believes that all computer source code should be in the form of Integers, such as DNA. Integer-Like computer source codes are invented by Chien Yi Lee under the formal name of Universal Computer Source Code (UCSC). Computing With Words (CWW) of Lotfi Zadeh can

be combined with Computing With Integers (CWI) to form the Universal User Interface, which is the familiar tree-structured, numerical multiple-choice question format, and which employs Human Associative Memory to allow computer users to access unlimited amount of information, such as in the computerized library search system and hypertext or menu systems, in general.

(7) **Newtonian Mechanics vs. Robot Mechanics:** Newtonian mechanics is derived based on the study of passive planetary motions. Most of these passive motions start from zero force. Post-science believes that human and robot motions can start with applied finite forces, which would make human and robot motions more efficient. A finite force is described by the new physics concept of jumpulse, which is a sudden change of force and is a word coined by the Father of Chinese Physics, Ta-You Wu. Finite forces are generated by the Jumpulse Mechanism, which is also called biotensegrity (biological tension integrity) or tensegrity, and can be generated by the sudden removing one of two opposing forces. Therefore, muscles are constantly under tension in order to start motions with finite forces. Jumpulse is necessary in robot touch and in prolonged contact in sports, where the finite force or a jumpulse must be applied with precise timing. The low-tech auto industry can be turned into a high-tech robotics industry. Manufactured General Purpose Robots will be programmed by completely automated software. Ultimately, the Robot will become the human, and the software, DNA.

(8) **Manual Software Update vs. Completely Automated Update:** Currently, the bulk of software budget is for updating legacy software, a process, which might continue to infinity in time. Post-science has solved the problem of completely automated software and believes that all software should be completely automatically updated. The Human-Language Programming of post-science allows humans to communicate with computers exclusively in human native languages.

(9) **Non-Universal Number Systems vs. Universal Permanent Numbers:** Post-science believes that all the current number systems, such as ISBNs and Patent Numbers, are incorrectly designed and should be replaced by Universal Permanent Numbers, which are the complete set of integers from minus infinity to plus infinity. Universal Permanent Numbers are basically usable as globally searchable unique integer names for permanent entities, mainly, knowledge.

(10) **Theory of Evolution vs. Self-Creation:** From its solution of complete automated software, which identifies DNA as the prime example of Universal Permanent Software, post-science believes in self-creation of the living system. From our self-creation, we will know from our design criteria the meaning of our lives and the purpose of our existence. The meaning of life is in its happiness and the purpose of existence is self-creation, for what we self-create will be able to carry on what we can do, permanently. The infinite future is necessarily fuzzy. The problem of uncertainty is the Final Problem, which deals with the expansion of the range of tolerance of the living system. DNA contains the cumulated wisdom of the universe from the infinite past.

(11) **Western Medicine vs. Post-Science Medicine:** Post-science believes in Post-Science Medicine, which is based on the belief that medicines have been created alone with foods, while Western Medicine is based on science or empirical verification, which does not apply to permanent DNA.

(12) **Freedom vs. Constraints:** Post-science in general does not believe in freedom; it believes that freedom should only be exercised within the limits of freedom set by non-violable laws of nature in physical and social sciences and by the requirement of permanence in software design. In practice, the market is not free, and software design must have the discipline of permanence.