Elements of Knowledge in Societies: Boundaries of Human Conscience

[1]Syed V. Ahamed[*], [2]Sonya M. Ahamed
[1]Computer Science Department, City University of New York, USA
[2]Center for Research, Columbia University, New York, USA

Abstract— This paper deals with constant underlying movement of the elements of knowledge. Finely fragmented cogent, coherent, and cogent particles of knowledge derived from larger bodies of knowledge traverse the mental spaces as atoms negotiate the chemical space. Both elements form bondages with other elements of compatible kind and form larger molecules, strings and complex structures. Some of these larger, longer strings are more robust and stable than others and become elementary particles of even larger and even longer strings. The dictum of chemical elements is governed by the numbers and properties published in the Periodic Tables. The syntactic and semantic rules for knowledge elements are flexible, adaptive and dynamic, but coherent and cogent to make the mental space orderly, constructive and creative. The routine textbook rules of chemistry become programs for knowledge machines to generate significant larger and longer strings of knowledge. Such machines emulate the behavior of finely fragments elements of knowledge and their logical bondages with each other create and invent new, diversified and beneficial knowledge. These strings of knowledge form cohesive bonds between minds, thus establishing a continuity of rhythm of thought and compassion across cultures and societies.

Elements of knowledge thus become the numbers, alphabets, words and symbols for a new generation of knowledge machines. Such elements can be stored, processed, arithmetically and logically enhanced, modified and altered in the memory units, caches, processors and switches of knowledge and network machines. This paper explores these concepts from philosophic and ethical perspectives, and uses the discipline of knowledge at the frail boundary between "good" and "evil".

Keywords— Knowledge Machines, Internet Knowledge Banks, Good and Evil, Right and Wrong, Conscience

I. INTRODUCTION

Elements of knowledge (shortened as *kels* to represent <u>k</u>nowledge <u>el</u>ement<u>s</u>) exhibit laws of chemistry as the chemical elements bond with other elements and generate new compounds and molecules. In the domain of knowledge, the laws of convolution with other *kels* are flexible and adaptive, but maintain rationality for the mind to perceive knowledge in its microscopic or macroscopic formats in the real world and the mental space. Both the real world and mental space spans nations, cultures and societies.

Knowledge in human activity blends like chemistry within species in nature. In most instances, larger bodies of knowledge are composed, enhanced, used, and utilized to benefit the existence of society. The fundamental precept behind all the widespread generalities is that lives of all species is based on dynamic actions of objects that make life feasible by prolonged strings of actions continually in the time dimension. Objects and actions trigger the mind into a life-form based on the answers to seven basic question; why, who, what, how, when, how long, and where. The mental coordinates are established. Information is processed and knowledge is acquired. The long cycle from prior knowledge to the derived new knowledge continues ad infinitum

The strife between good and evil is the theme of vicissitudes in lives. The inner self that refuses to accept anything but the best leads to the search for the best for each one (i.e., each noun object(s), *no* or *no's*) with honor, justice and dignity accomplishing the each one of the deeds (i.e., each verb function(s), *vf* or *vf's*) in a tactical and socially acceptable way (*). In a nutshell, the theme of activity becomes ($no \rightarrow * \rightarrow vf$) or ($no('s) \rightarrow *'s \rightarrow vf(s)$) in a time sequence that a machine can execute with probabilistic result(s). The central processor unit (CPU) of such a machine follows a series of executable statements that can be written down as $\{\sum ((no \rightarrow * \rightarrow vf))$ from 't' to '$t+\Delta t$' in real time. The motivation (why) for the *no* (who), the (what) actions (*vf's*) in real time duration ,'t' to '$t+\Delta t$' (when and how long) and a probable outcome after an interval are established.

The parameters listed above are entirely programmable as operators, operands and operational codes, in machines. The machine emulates the actions, behaviorism, and modality. The most probable outcome is stacked away to be combined with other executable statements. The series of actions can thus optimized for the most desirable (expected) result from any social, corporate, national, or any strategic result.

A. Incorporation of Human Factors

The expenditure of energy to function causes its depletion and reduces the tendency to remain active indefinitely. A sense of balance between the extra expenditure of resources and the expected gain in the marginal utility that is thus

derived curtails excessive effort in any given direction. The balance becomes global and a sense of fairness and justice prompts most humans to be generous and positive based on gratification and peace. The Second Law of Microeconomics becomes the basis for human race to progress in a positive direction.

In the other direction, when resource are limited the conflict between self-interest and fairness starts to surface. The fears of the future sometimes dominate to obliterate the glory of being righteous in the past. Greed and negativity sets in. The first and second need levels from the Maslow's Need Pyramid [1] projected into the future, cast an grim shadow over the fourth and fifth levels of need-gratifications from the past. Fear of fear makes the insecure drown in greed, hate and violence.

B. Adaptation by the Machine

The knowledge machine is more than a communications tool. It has all the potential of being an intelligent partner to interact and act as a highly logical human or a highly emotional companion. During training the machine, the machine acquires the personality of the "other" interactive human. The machine personality is augmented by internet knowledge bases that provide, validity, verification to provide answers for the saint (with positive priming of the machine functions (*vf(s)*) and connectivity to intellectual and verified KBs).

Conversely, a negatively primed machine can also provide for the mafia and thugs by connectivity to mafia and their associated knowledge bases. In addition, the machine also acquires the most desirable interface for the interacting human based on the "mood" of the user, just as a therapist would adjust the sessions based on the attitude of a patient. Human temperament though highly variable is accommodated by appropriate macro commands at the interface.

The rest of the paper is divided in two major Sections. Section II presents the emulation of the elite processes for the social betterment by the practice of truthful, virtuous and beautiful deeds in the society. Section III deals with the emulation of the deceitful, arrogant, aggressive and hate-ridden actions of the perverse groups of the population, for social erosion of established ethics and morals. Appropriately, designed machines can address both sides of the human nature.

II. THE POSITIVE AND BENEVOLENT SIDE OF HUMAN ACTIVITY

Like fire that can provide warmth and comfort, it can also be used to burn and destroy. The knowledge machine, in most instances, such machines are used to process *kels* for social and human betterment. By altering the software, firmware, macros and executable routines, the same hardware can serve as tools of mafia, thugs and robbers for espionage and social unrest.

In pursuing the role of a knowledge machine in positive directions, we present the role of a doctor (a benevolent noun object) from the role of truthful one in Quadrant I of Figure 1. The concepts and ideas behind the actions permit wide latitude to make the objects (doctor in the case), their functions (seeking to invent), in a positive way (to benefit the society). Such objects and actions may occur in any nation, any culture and in any society. In this vein, the teaching of Aristotle and Plato (in the Knowledge domain, see the Loop T, Quadrant I, in Figure 1) are bonded to Beauty and Healing (in the kel domain; see Loop B, Quadrant II, in Figure 1), and so on in Quadrants III and IV, till the innovation of the Magnetic Resonance Imaging Systems. Historically, the bonding takes place in the minds of the innovators (Edison, Shockley, Townsend, etc.) inventors (Bardeen, Ampere, Bell, etc.) and contributors (Gandhi, Carter, Fleming, etc.) who seek to benefit[1] humanity.

In particular Figure 1, blends the concepts borrowed from the writings of Aristotle (as he documented them in 300's BC) [2] emphasizing the ideas of Truth, Virtue and Beauty) that advance human society, and thus ends up with Magnetic Resonance Imaging System (MRI) invented [3] in of the 20th century to diagnose cancerous tissues in the human body. Please note the noun objects (*no's*) and verb functions (*vf's*) of and Achievement Beauty, Virtue and Truth; i.e., (A, B, T, and V) can assume many forms. The imagination and creativity of the user is challenged in this Figure. In order to trigger the movement, we tabulate some of the possible the *no's* of A, B, T, and V in Table 1 and some of the possible *vf's* in Table I.

A. Inclusiveness and Richness of KELS

In scanning Table I, many of the *no's*, *vf's* and (*'s*) are common because one no can have the attributes of others. For example, an intellectual may also be virtuous or benevolent can also be goal seeking and persistent, etc. The attributes of the noun objects form linkages and bondages with other noun objects, or the deeds in the *vf's* can reinforce each other. Generally, most people have a single personality and do not sway between good and evil dramatically over short intervals. The story of Dr. Jekyl l and Mr. Hyde is imagination of Mr. R. L. Stevenson [4]. In reality, schizophrenics are generally hospitalized and the Table I attributes are not applicable to such extreme cases.

B. Expulsion and Exclusiveness of KELs

However, opposite attributes of noun objects and verb function tend to become exclusive like cruelty and kindness or a saint and a thug. In the recent past there have been increasing cases where supposedly respectable humans have turned out to be thugs (and mafia types) and violated the public trust. The actions of few individuals in the recent history

---

[1] Numerous figures with the imagery of Figure 1 can be constructed for most situations in most cultures. The domain of knowledge is vast enough to cover the entirety of all Internet knowledge bases and more. This figure is illustrative for those who wish to invent based on a mathematical and scientific basis and contribute based on social and human betterment.

[2] We present this section for the sake of completeness. Most authors abstain from presenting this side of human nature, hoping it will just go away.

indicate the presence of Negativity ridden *KELs* in the society. For example, the Andersen [7], and Global Crossing executives [8], Nixon during Watergate years [9], Nixon and Johnson over the Vietnam war [10], Clinton and Monica Lewinsky [11], indicate that such *KELS* do not disappear by simply ignoring them. These *KELS* need to be included in the appropriate knowledge bases such that the knowledge machines are forewarned that such *KELS* can and may reappear in the future.
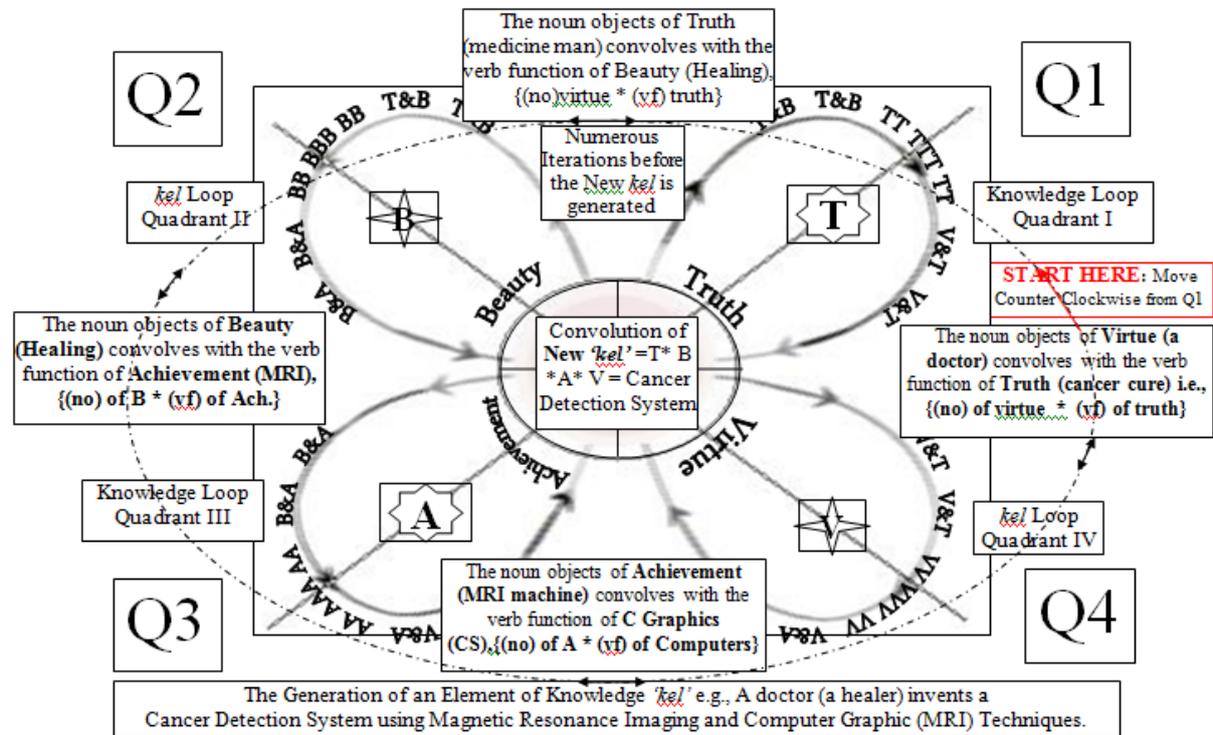

Figure 1. An example of the deployment the noun objects (*no's*) of one discipline with the verb functions (*vf's*) of another discipline to generate, enhance, modify, invent new knowledge elements or *kels* in a similar or an entirely new discipline. Please see the text about the convolutions of T, B, V that result in the Advancement of the Society with the invention of the MRI systems [3].

		(POSSIBLE) NOUN OBJECTS *NO(S)*	(POSSIBLE) VERB FUNCTION *VF(S)*	LAWS OF CONVOLUTION *(*'S)*
A	A C H I E V E M E N T	**Worldly (Humans and Machines)** Wealthy, Affluent, Prosperous, Rich, Financially Secure, Profiteers, Self Interest Groups **Scientific** Intellectuals, Elite, Researchers, Dedicated, Innovators, Pioneers, etc. **ETC.**	**Worldly (Deeds and Processes)** Planning, Organization, Command, Control, [5] Deception, Propaganda, Thievery. **Scientific** Research Skills, Contribute, Persistence, Goal Seeking, etc. **ETC.**	**Worldly (VARIATIONS)** Corporate Ethics, Behavior, Controlled Aggression, Greed, Ruthlessness, Self Interest, Self Love **Scientific** Pursuit of Science, Laws of Nature and Mathematics, Goal = {*no(s) (*'s) vf(s)*}
B	B E A U T Y	**Worldly (Humans)** Celebrities, Models, Pageanists. **Scientific** Scholars, Famous, Researchers, Contributors, Inventors, Poets, Painters. **ETC.**	**Worldly (Actions and Deeds)** Acting, Pageantry, Modeling,, Personality Enhancement, etc. **Scientific** Research Skills, Contribute, Persistence, Goal Seeking, etc. Authentic, Original Innovations **ETC.**	**Worldly (VARIATIONS)** Show-Personality Behavior, Appealing Mannerisms, etc. **Scientific** Accuracy of Statement, Formulations, Equations and Time (li/less)ness of Ideas. Goal = {*no(s) (*'s) vf(s)*}

TABLE I. *SOME OF THE SUGGESTED* POSSIBLE NOUN OBJECTS (*NO'S*) AND VERB FUNCTIONS (*VF'S*) CORRESPONDING TO FIGURE 1 AND A, B, T, AND V.

		Worldly (Humans and Machines)	**Worldly (Deeds and Processes)**	**Worldly (VARIATIONS)**
V	**V I R T U E**	Social Workers, Charity Leaders, Etc. **Scientific** Philosophers, Theologians, Sufis Preachers, Reformers. **Spiritual** Saint, Clergy, Priest, Preacher, Monks, Rabbis, etc **ETC.**	Benevolent, Rewarding, Love **Scientific** Truth in Religions, Beauty in deed Charitable deeds, Selfless Help **Spiritual** Divine deeds of Monks, Sufis, Preachers, Rabbis, Imams, Monks. **ETC.**	Benevolence, Selfless Love **Scientific** Utilization of Resources, Honor, Fairness, Justice. **Spiritual** Dedication, Humility, Forgiveness, Acceptance Goal = {*no(s) (*'s) vf(s)*}
T	**T R U T H**	Sufis, Religious, Dedicated Humans Intelligent and Social Machines **Scientific (Humans and Machines)** Scholars, Fame, Intellectual, Contributors, Inventors, Pioneers. Intelligent Knowledge Systems **Spiritual** Spiritualist, Universalists, Inter-Disciplinarians, **ETC.**	Long term deeds in Education, Charity, Guidance, Betterment. **Scientific** Search for Truth in Sciences, Fundamental Equations, Religions, Beauty, Charitable deeds, Helping **Spiritual** Divine deeds of Monks, Sufis, Preachers, Rabbis, Imams, Monks, **ETC.**	Benevolence, Untainted Love for others **Scientific** Utilization of Scientific Resources, Pursuit of Honor, Fairness and Justice. **Spiritual** Dedication, Humility, Forgiveness, Acceptance Goal = {*no(s) (*'s) vf(s)*}

Table Note: The Table **suggests positive** traits for A, B, T, and V in the Society. Positive noun Objects (*no's*), verb functions (*vf's*), and their convolutions (**'s*) are tabulated. It is also possible to build similar Table for other Achievers, writers, sportsmen, teachers, etc. Noun Objects (*no's*) are generally human beings, corporations, organizations,, churches, mosques, synagogues, and/or charitable organization etc; verb functions (*vf's*) are generally negotiations, peaceful settlements, love, construction and reconstruction, etc; and their convolutions (*) are with sympathy, kindness, human and civil rights, understanding and responsibility. When A, B, T and V are present in the society and nations, everyone who can act will become a catalyst for the progress and invent new ways (convolutions) to honest, sincere, benevolent and becomes an instrument in exponentially nurturing A, B, T and V towards larger and more stable *KELS* of themselves.

III.   THE NEGATIVE AND DESTRUCTIVE SIDE OF HUMAN ACTIVITY

Whilst the scientific progress has been impressive over the last century and contributed to the betterment of health and welfare of the society, the abuse of technologies has been destructive, devastating and demeaning for the populous especially in the underdeveloped nations. The abuse of technology is funded by taxes in the developed nations and this technology exported to "friendly nations" at the drop of a hat who can abuse the destructive technology in an even more destructive fashion! This vicious cycle of abusive technology is not only cruel but propagates all the noun objects and verb function of Deception (D), Arrogance (and Aggression, A), Hate (H) [6] and Shame (S)[2]. In order to present the entire picture, we include this Section in this paper that is antithetical to Section II. The Truth, Beauty, Virtue [2] and Achievement of Section II are annihilated to make room for political and monetary gains of greedy individuals, states and nations. We present facts without arousing emotions and should be considered as scientific part of events brought about by neglect of human rights, dignity and honor.

In Figure 2, the noun objects (*no's*) are generally individuals (war mongers, paranoids, robbers, murderers, mafia, cartels, etc; the verb functions (*vf's*) are generally spreading turmoil and unrest, burning and looting, rape and murder etc; and their convolutions (*) are with ruthlessness, cruelty, hate, etc. The noun objects (*no's*) (such as mafia, thugs, terrorists, terrorist nations, etc.), verb functions (*vf's*) (such as ruthlessness, violence, terror, drone-bombers, etc.), and their convolutions (**'s*) (such as, ways of racists, murderers, looters, killers, etc.) become dominant. When deception is tolerated in the society and nations, everyone who can, acts to become a catalyst to cheat, exploit and hate thus becoming an instrument in exponentially enhancing D, A, S and H towards larger but less stable and destructive *KELS* of themselves. Decay and negativity both are propagated and each human noun object invents (and even machines can invent) new ways (convolutions) to deceive, cheat and hide behind every "waterfall of lies".

Nuclear weapons, machine guns, laser guided missiles, drones, MIGs, mirage bombers, dynamite, satellite spy systems, etc. are computer-based machine counterparts of misguided human noun objects. Computers become programmable tools of misery as technologies become abusive and destructive. In Table II portraying the negative image

---

[2]   We present this section for the sake of completeness. Most authors abstain from presenting this side of human nature, hoping it will just go away. Historically, this bleak nature of behavior repeats in many forms and gets worse over the millennia. Evil does not die; it is reborn as a new species of deception, aggression and hate bringing shame and dishonor to the society.

of Table I presents the opposite extreme of the nature of human beings.   By comparing Tables I and II, it becomes clear that right can be depicted as wrong and vice versa; and evil can be portrayed as good, and vice versa. The human nature is flexible enough to adapt to the two extremes and vision can be fooled to "see" the white as black and vice versa. The sense of direction for the future can be easily reversed in the mind of young and restless. Age fortifies wisdom from past and from experience; youth offers strength and courage to dabble with the future. We propose a "wise" machine to channel the "courageous" towards a web based GPS guidance for the mind to be efficient and optimal in the choice between "good" and "evil".

IV.   INTERNET BASED KNOWLEDGE POSITIONING SYSTEM (KPS)

As much as GPS can provide immediate access to physical coordinates, a knowledge positioning system provides knowledge coordinates and inform the users of where the knowledge is coming from and where it is leading based on the Internet Knowledge Bases (IKBS). The accuracy of any *kel* is based on the principle of triangulation from at least two well-founded knowledge bases. When activated, the KPS offers also the six mental coordinates (who, what, how, where when and how long) for any *kel*.   Since all *kels* are dynamic, they can decay and deteriorate unless other *kels* interact to move towards a more desirable position. The KPS will prioritize *kels* from a utilitarian consideration unless the user may deliberately junk the *kel*. For example, gossip/junk knowledge can be allowed to be dumped/annihilated by the KPS. Spam *kels* are separated by filters barring junk noun objects, verb functions and the convolutions. For example, a spam email is a junk *kel* filtered by its own elements; its noun object(s), its verb functions, and its convolution(s). A deceptive claim, from a sales agency, asking to buy a particular item, can be discard by 90% of the buyers who have bought a similar item in the last 60 days.

Useful knowledge is linked to other useful *kels* and junk *kels* may be cross linked to prior junk *kels* or allowed to die a natural decay in the mind by not remembering them. The KPS acts a mind cleanser by shelving the useful and/or positive *kels* and by junking the useless and/or negative *kels*.   The human mind function as a *kel* machine but the KPS provides some initial cleansing of *kels.*

Knowledge Positioning Systems (KPS) act as outposts between good and evil by analyzing the characteristic of the *kels* that are in between by comparing the (long and short term social rewards of each *kel* individually, and each cluster of *kels* as a dynamically).   Every *no's, vf's,* and **'s* of every *kel* is examined individually and collectively. The expected marginal gain and loss (in this case the marginal reward and the expected risk) are evaluated by the KAP for every user. This deployment of the KPS is similar to the use of user-preference tables in an IPOD/Android device and becomes an extension of the mind set.   Some of the proposed *no's, vf's,* and **'s* of the *kels* are presented in Tables I and II. Such tables can be customized to most human activities that are essentially "good" and conversely "evil". In calibrating the KPS, the facts are based on history and the analysis is based on projection of the *kels*, their use or their abuse, their expected utility and their expected risk. The KPS functions thus, based on facts and their inference based on economic predictions of expected utility or risk to weigh and consider both. Maximizing the expected utility and/or minimizing the risk are both standard procedures in economics.
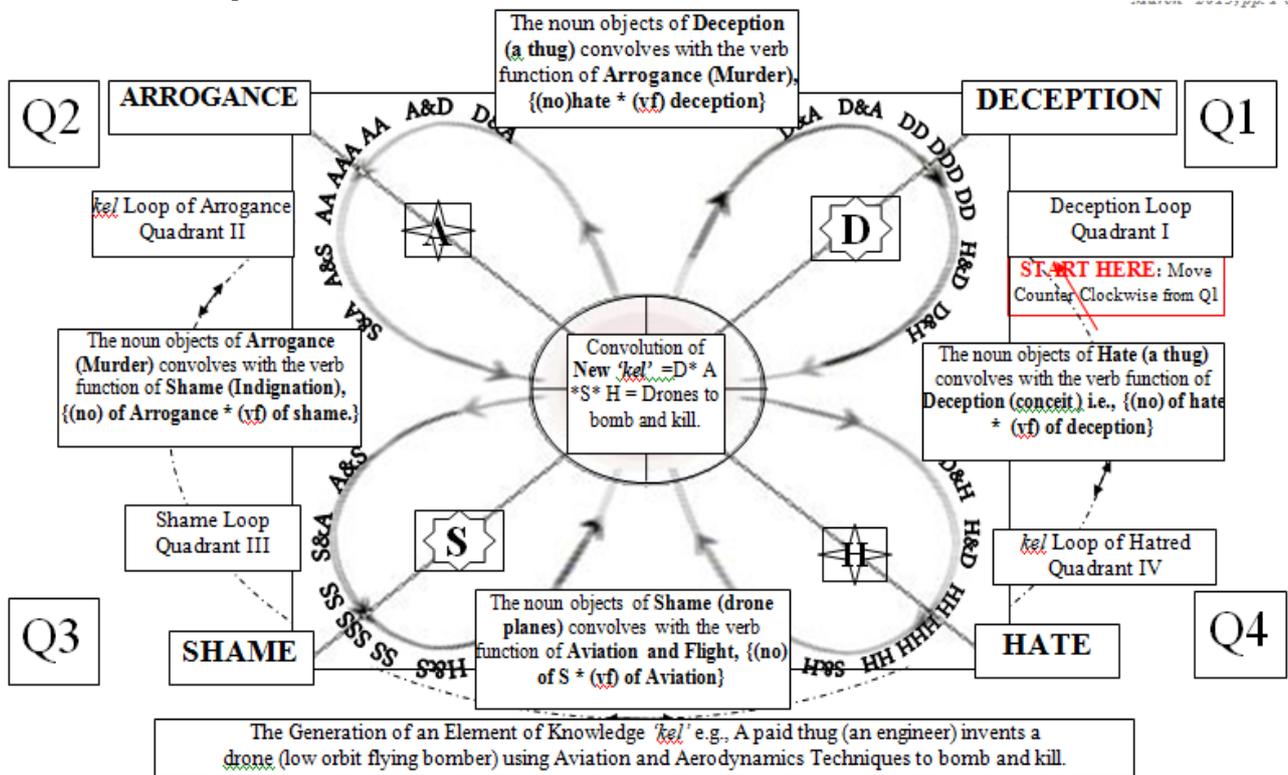

Figure 2. An example of the deployment the noun objects (*no's*) of one discipline with the verb functions (*vf,s*) of another discipline to generate, new knowledge elements or *kels* in a similar or an entirely new discipline (drone Technology).. Please see the text about the convolutions of D, A, H (Deception, Arrogance, Hate) that result in the Disgrace for the Society with the destructive Drone Systems.

TABLE II. *Some of the Historic* Noun Objects (*no's*) and
Verb Functions (*vf's*) corresponding to Figure 2 and D̲, A̲, S̲ and H̲.

		(Possible) Noun Objects *no(s)*	**(Possible) Verb Function** *vf(s)*	**Laws of Convolution** *(*'s)*
D̲	**D E C E P T I O N**	**Worldly (Humans and Machines)** Mercenaries, Money Launderers, Agitators, Paid Killers; Drones, MIGs, Heat Seeking Missiles, Machine Guns, Stealth Bombers **Scientific** Unethical, Opportunity Seekers, False Claimers to Inventions, Patents, Originality and Authorship. Etc.	**Worldly (Deeds and Processes)** Scientific but Deceptive Acts, Spy Activity, Seek and Kill, Robbery, Deception, False Propaganda, Thievery. **Scientific** Greed of Wealth, Power, Political Position, Gain and Self- Illusion . Etc.	**Worldly (VARIATIONS)** Aggression, Greed, Self-Love, Ruthlessness, Self-Justification, Righteousness Self Interest with Aggression **Scientific** Stealing and Exploitation, Abuse of Power, Position, and Money **Personal Gain =** {*no(s) (*'s) vf(s)*}
A̲	**A R R O G A N C E**	**Worldly (Humans)** Politicians, Presidents, CFO's, and CEO's, who have brought Shame to Humanity by being aggressive, **Scientific** Self-proclaimed Scholars, Deceptive Authors, Stealers, False Inventors, Propagandists, Etc.	**Worldly (Actions and Deeds)** Acting, Pageantry, Lying, Dishonesty, Self-Justification **Scientific** False claims to Inventions, Patents, Discoveries, Drugs and Prizes Etc.	**Worldly (VARIATIONS)** Show-Dual Personality Behavior, Barbaric Minds. **Scientific** False Statements, Dishonest Formulations, Exploitation, Deceit, Misrepresentations, **Personal Gain** = {*no(s) (*'s) vf(s)*}
S̲	**S H A M E**	**Worldly (Humans and Machines)** Hitler(s), Mao(s), War Lords, Mafia Heads, Genghis Khans, Nixon(s), Slave Traders, Conquistadors; Mirage bombers, machine guns etc. **Scientific** Military Industrial Complex of 70's and 80's, War Colleges, Spy Centers Etc. **Spiritual** Mercenary Bishops, Clergy, Monks, Disoriented Heads of State, Etc.	**Worldly (Deeds and Processes)** Ruthless Inconsideration, Dishonesty, Self Righteousness, Indulgence and Aggression. Dumb and inhuman machines. **Scientific** Cruel Exploitation of Technology, Authority, Aimless Murders and Killings. State Funded Terrorism. **Spiritual** False Trials, Burning of Joan of Arc, Spanish Inquisition, False Accusations and cruelty that followed, etc.	**Worldly (VARIATIONS)** Destruction of Life and Habitat, Senseless Brutality. **Scientific** Abuse of Resources, Power, Public Funds and Elected Positions **Spiritual** No gain except the selfish short glory of the shameful. **Personal Gain** = {*no(s) (*'s) vf(s)*}
H̲	**H A T E**	**Worldly (Humans and Machines)** Racists, Bigots, Dogmatists, Slave Drivers and Traders, War Robots, Satellite Based Spy Systems and Bombers, etc. **Scientific (Humans and Machines)** Hate Machines that Maximize Injury and Damage	**Worldly (Deeds and Processes)** Long term deeds of Cruelty, Hate, Murder, Rape and Killings. **Scientific** Search for Personal Gain and Opportunism. Practice of Greed, Destruction of Morality and Ethics.	**Worldly (VARIATIONS)** War like dictum, Seek and Destroy Approach, Infliction of Injury, Favor of damage. **Scientific** Utilization of Science and Weapons Resources, Pursuit of Horror, and Terrorism **Personal Gain** = {*no(s) (*'s) vf(s)*}

V.   CONCLUSIONS

In this paper, we have traced the role of knowledge in the conflict between "good" and "evil" in a mathematical and computational framework. The human judgment plays a decisive role in processing the knowledge gathered over the eons

and guides the actions of the human being leaning in either direction but trying to navigate to a straight path between the two to avoid excessive dominance of either one. In the short term, fear ridden concepts derived from hastily acquired knowledge based on biased information has brought about the worst of human behavior and nations leaning towards aggression, selfishness and intolerance. Alternatively, concepts based on longer-term cyclic nature of forces in Nature have provided a basis for trust, understanding and love. Myopic vision of the immediate present can become detrimental to the evolution of a better individual just as much fragmented perspective of current events can blind the longer term view. The good and the evil stand side by side for anyone to decide for one's own self.

The role of knowledge processing in unbiased machine systems forces the machines to derive their wisdom based on learning the past, interpreting the past and reasoning towards the wise choice between good and evil. Knowledge elements gravitate based on the chronology of events leading towards perpetration and continued existence or towards transient gratification and self-consumption. Unfortunately, authenticated brand of unbiased machines can get tainted by humans in favor the short-term gratifications. A definitive code of ethics that favors the balanced role of humans becomes the most desirable outcome of any knowledge machine based on observation of the historical events. The history of humankind may repeat leading to a more evolved species of an entirely different kind or a more atrocious species of prehistoric beasts awaiting another meteor to strike!

REFERENCES

[1]   A. H. Maslow, *A theory of human motivation*, *Psychol. Rev,.***50**, 370–396, 1943.Also see, A. H. Maslow, *Motivation and Personality*, Harper & Row, New York, 1970, and A. Maslow, *Farther Reaches of Human Nature*, Viking Press, New York, 1971.

[2]   Internet Encyclopedia of Philosophy, Aristotle (384-322 B.C.E>), http://www.iep.utm.edu/aristotl/, Accessed March 1, 2015.

[3]   R. V. Damadian, "Apparatus and Method for Detectict Cancer in Tissue", US Patent 3,789, 832, February 5, 1974, for the Invention of MRI, Also see Catherine Westbrook, *MRI in Practice Paperback* – Unabridged, Wiley-Blackwell; 4 edition July 5, 2011.

[4]   R. L. Stevenson, *Dr Jekyll and Mr. Hyde,*Dover Thrift Editions January 1, 1991.

[5]   P. F. Drucker, *The Practice of Management*, Harper Business, October 3, 2006.

[6]   IEP, Internet Encyclopedia of Philosophy, http://www.iep.utm.edu/aris-eth/, Accessed March 15, 2015.

[7]   B. Ley Toffler and Jennifer Reingold, , Crown Business, April 13, 2004.

[8]   PBS.org, The Long Fall of Global Crossing, http://www.pbs.org/newshour/bb/business-jan-june02-crossing_3-21/, March 21, 2002. Also see. David Callahan, *The Cheating Culture: Why More Americans Are Doing Wrong to Get Ahead*, Mariner Books, December 1, 2004.

[9]   B. Sussman, *The Great Coverup: Nixon and the Scandal of Watergate*, Caterpulter Books, 0004-edition December 3, 2010. Also see D. F. Schmitz, *Richard Nixon and the Vietnam War*, Rowman & Lttlefield, April 4, 2014

[10]   D. Taylor, http://www.bbc.com/news/magazine-21768668 Johnson and Vietnam war, The Lyndon Johnson tapes: Richard Nixon's 'treason', 22, March 2013. Also see, Larry Berman, No Peace, No Honor: Nixon, Kissinger, and the Betrayal in Vietnam, Touchtone, August 6, 2002.

[11]   Washington Post and K. Starr, *The Starr Evidence: The Complete Text of the Grand Jury Testimony of President Clinton and Monica Lewinsky*, Paperback – September 25, 1998.