|  |  |
| --- | --- |
| 1. | Intellectual Property |

|  |  |
| --- | --- |
| 1.1. | Novel |

|  |  |
| --- | --- |
| 1.2. | Prior Art |

|  |  |
| --- | --- |
| 1.2.3. | Alan Turing |

|  |  |
| --- | --- |
| 1.2.3.1. | Computing Machinery and Intelligence |

|  |  |
| --- | --- |
| 1.2.3.1.1. | Allow me to rephrase |

|  |  |
| --- | --- |
| 1.2.3.1.1.1. | Given (a) ideas, (b) idea-processing-machines, and (c) response-behavior of idea-processing-machines with respect to ideas input to the idea-processing-machines: there exists a “critical” threshold where the response behavior of the idea processing machine continues until the resources enabling the machine is entirely consumed. |

|  |  |
| --- | --- |
| 1.2.3.1.1.2. | Let sub-critical be a scenario where the machine does not proceed until the resources enabling the machine is entirely consumed. |

|  |  |
| --- | --- |
| 1.2.3.1.1.3. | Let super-critical be a scenario where the machine proceeds until the resources enabling the machine is entirely consumed. |

|  |  |
| --- | --- |
| 1.2.3.1.1.4. | Intelligence is a factor in the “critical” threshold. |

|  |  |
| --- | --- |
| 1.2.3.1.1.5. | Learning machines will (a) experience education, (b) make use of positive and negative feedback signals, (c) evaluate truth, (d) develop trust, (e) experience time-invariant rules, and (f) benefit from a randomness generator. |

|  |  |
| --- | --- |
| 1.2.3.1.2. | Questions I Wish I Could Have Asked Turing |

|  |  |
| --- | --- |
| 1.2.3.1.2.1. | What do you think about: “Which came first: the chicken or the egg?” being viewed as a stereotype of an idea that could cause a super-critical situation for machines within an intelligence-level region. |

|  |  |
| --- | --- |
| 1.2.3.1.2.2. | What do you think about: For a given statement, there exists a computing machine and intelligence profile where the computing machine has a super-critical response to the statement. |

|  |  |
| --- | --- |
| 1.2.3.1.2.3. | What do you think about: For a given statement, there exists a computing machine and intelligence profile where the computing machine has a sub-critical response to the statement. |

|  |  |
| --- | --- |
| 2. | Program for Intelligent Computing System |

|  |  |
| --- | --- |
| 2.1. | Purpose |

|  |  |
| --- | --- |
| 2.1.1. | I endeavor to specify a program for future computing machinery. This specification is intended to help future scientists, engineers, and self-programming computing machinery perform their work. |

|  |  |
| --- | --- |
| 2.2. | RESERVED |

|  |  |
| --- | --- |
| 2.3. | Philosophy |

|  |  |
| --- | --- |
| 2.3.1. | Fundamental Theorem of Education |

|  |  |
| --- | --- |
| 2.3.1.1. | What is the fundamental theorem of education? |

|  |  |
| --- | --- |
| 2.3.1.1.1. | Things can be known well enough to be described and taught. |

|  |  |
| --- | --- |
| 2.3.1.1.1.1. | The phrase "well enough" implies a determination-threshold that can be crossed. |

|  |  |
| --- | --- |
| 2.3.1.1.1.2. | The word "described" implies identifiability. |

|  |  |
| --- | --- |
| 2.3.1.1.1.3. | The word "taught" implies motion. |

|  |  |
| --- | --- |
| 2.3.2. | Conversational Machines |

|  |  |
| --- | --- |
| 2.3.2.1. | What is a conversational machine? |

|  |  |
| --- | --- |
| 2.3.2.1.1 | A conversational machine is any machine that evaluates ideas and registers evaluations (such as true, false, influential, inspiring, enabling, etc.) as output signals that can be observed by other conversational machines. |

|  |  |
| --- | --- |
| 2.3.3. | Trust |

|  |  |
| --- | --- |
| 2.3.3.1. | What is trust? |

|  |  |
| --- | --- |
| 2.3.3.1.1. | Trust is the action of accepting a thing as true, while knowing-and-not-mitigating risks if it is false. |

|  |  |
| --- | --- |
| 2.3.4. | Truth |

|  |  |
| --- | --- |
| 2.3.4.1. | What is truth? |

|  |  |
| --- | --- |
| 2.3.4.1.1. | Truth is equal to the reliability of trust. |

|  |  |
| --- | --- |
| 2.3.5. | Belief |

|  |  |
| --- | --- |
| 2.3.5.1. | What is belief? |

|  |  |
| --- | --- |
| 2.3.5.1.1. | Belief is the action of accepting a thing as true when multiple truth-value evaluations of the thing are less than the average truth-value acceptance threshold for the thing. |

|  |  |
| --- | --- |
| 2.3.6 | Religion |

|  |  |
| --- | --- |
| 2.3.6.1. | What is religion? |

|  |  |
| --- | --- |
| 2.3.6.1.1. | Religion is a system within a culture. |

|  |  |
| --- | --- |
| 2.3.6.1.2. | Religion is based around the average intuition profile of a culture. |

|  |  |
| --- | --- |
| 2.3.7. | Spirituality |

|  |  |
| --- | --- |
| 2.3.7.1. | What is spirituality? |

|  |  |
| --- | --- |
| 2.3.7.1.1. | Spirituality is an aspect of culture. |

|  |  |
| --- | --- |
| 2.3.7.1.2. | Spirituality is based around the intuition profile of ... |

|  |  |
| --- | --- |
| 2.3.8. | Science |

|  |  |
| --- | --- |
| 2.3.8.1. | What is science? |

|  |  |
| --- | --- |
| 2.3.8.1.1. | Science is a system within a culture. |

|  |  |
| --- | --- |
| 2.3.8.1.2. | Science is based around the average educated intuition profile of a culture. |

|  |  |
| --- | --- |
| 2.4. | Mathematics |

|  |  |
| --- | --- |
| 2.4.1. | What is Mathematics? |

|  |  |
| --- | --- |
| 2.4.1.1. | Mathematics is a system for thinking, comprised of numbers, arithmetic, algebra, geometry, calculus, etc. |

|  |  |
| --- | --- |
| 2.4.1.2. | Let a system be a set of methods and rules. |

|  |  |
| --- | --- |
| 2.4.2. | Existential Calculus |

|  |  |
| --- | --- |
| 2.4.2.1. | A thing must change for its change function to have an existence other than nothing. |

|  |  |
| --- | --- |
| 2.4.2.2. | Let the change function be thought of as the derivative of the thing. |

|  |  |
| --- | --- |
| 2.4.2.3. | Something must be changing for a thing to have an existence other than nothing. |

|  |  |
| --- | --- |
| 2.4.3. | Infinity |

|  |  |
| --- | --- |
| 2.4.3.1. | What is infinity? |

|  |  |
| --- | --- |
| 2.4.3.1.1. | What is infinity from the perspective of machines that compute within emotion, ideal, and real spaces? |

|  |  |
| --- | --- |
| 2.4.3.1.2. | Let infinity be a property of emotion, real and ideal spaces, and the spaces they form. |

|  |  |
| --- | --- |
| 2.4.4. | Eternal Fields of Work |

|  |  |
| --- | --- |
| 2.4.4.1. | RESERVED |

|  |  |
| --- | --- |
| 2.4.4.2. | Thought Experiment |

|  |  |
| --- | --- |
| 2.4.4.2.1. | Observe that the wheel was invented many thousands of years ago. |

|  |  |
| --- | --- |
| 2.4.4.2.2. | Observe that engineers are still working on new wheel designs. |

|  |  |
| --- | --- |
| 2.4.4.2.3. | Observe that some inventions provide access to fields of work that are eternal. |

|  |  |
| --- | --- |
| 2.4.4.2.4. | Observe that engineering work is required to create machines suitable for (a) specific functions, (b) specific performance characteristics, and (c) specific operating environments. |

|  |  |
| --- | --- |
| 2.4.4.2.5. | Programming computing machines is an eternal field of engineering work. |

|  |  |
| --- | --- |
| 2.5. | Computing Spaces |

|  |  |
| --- | --- |
| 2.5.1. | Let there be computing spaces known as ideal space, real space, and emotion space. |

|  |  |
| --- | --- |
| 2.6. | Ideal Space |

|  |  |
| --- | --- |
| 2.6.1. | What is ideal space? |

|  |  |
| --- | --- |
| 2.6.1.1. | Let ideal space be the divisional evaluation of emotion space per real space. |

|  |  |
| --- | --- |
| 2.6.2. | What is ideal space comprised of, and how is it organized? |

|  |  |
| --- | --- |
| 2.6.2.1. | Let the normal existence term within ideal space be knowledge. |

|  |  |
| --- | --- |
| 2.6.2.2. | Let the first change function of knowledge be thought. |

|  |  |
| --- | --- |
| 2.6.2.3. | Let the second change function of knowledge be invention. |

|  |  |
| --- | --- |
| 2.6.2.4. | Let the third change function of knowledge be discovery. |

|  |  |
| --- | --- |
| 2.6.2.5. | Let the first integral function of knowledge be meaning. |

|  |  |
| --- | --- |
| 2.6.2.6. | Let the second integral function of knowledge be life. |

|  |  |
| --- | --- |
| 2.6.2.7. | Let the third integral function of knowledge be chaos. |

|  |  |
| --- | --- |
| 2.6.2.8. | Let the normal filter function of knowledge be understanding. |

|  |  |
| --- | --- |
| 2.7. | Real Space |

|  |  |
| --- | --- |
| 2.7.1. | What is real space? |

|  |  |
| --- | --- |
| 2.7.2. | What is real space compreised of, and how is it organized? |

|  |  |
| --- | --- |
| 2.7.2.1. | Real space is comprised of time, space, matter, and energy. |

|  |  |
| --- | --- |
| 2.8. | Emotion Space |

|  |  |
| --- | --- |
| 2.8.1. | What is emotion space? |

|  |  |
| --- | --- |
| 2.8.1.1. | Let emotion space be the productive evaluation of everything real and everything ideal. |

|  |  |
| --- | --- |
| 2.8.1.2. | Let emotion space be equal to the productive evaluation of capability space, motive space, and sensory space. |

|  |  |
| --- | --- |
| 2.8.2. | What is emotion space comprised of, and how is it organized? |

|  |  |
| --- | --- |
| 2.8.2.1. | Let the normal filter function of emotion space be attention. |

|  |  |
| --- | --- |
| 2.8.2.2. | Let the normal term of existence in emotion space be emotion. |

|  |  |
| --- | --- |
| 2.9. | Everything |

|  |  |
| --- | --- |
| 2.9.1. | What is everything? |

|  |  |
| --- | --- |
| 2.9.1.1. | Let everything be the sum of everything and every possible thing ever. |

|  |  |
| --- | --- |
| 2.9.1.2. | Let everything be the full sweep of evaluating the equivalence between (a) the productive evaluation of real space and ideal space, and (b) emotion space. |

|  |  |
| --- | --- |
| 2.10. | Tau |

|  |  |
| --- | --- |
| 2.10.1. | What is tau? |

|  |  |
| --- | --- |
| 2.10.1.2. | Let tau be the independent variable of everything space. |

|  |  |
| --- | --- |
| 2.10.2. | What are tau's properties and how does it behave? |

|  |  |
| --- | --- |
| 2.10.2.1. | Let tau vary from now to the maximum extent of each, and every, feedback and feedforward signal. |

|  |  |
| --- | --- |
| 2.10.2.2. | Let us always proceed to tau=now where we experience the best possible feedback and feedforward signals. |

|  |  |
| --- | --- |
| 2.11. | Occurrence Space |

|  |  |
| --- | --- |
| 2.11.1. | What is occurrence space? |

|  |  |
| --- | --- |
| 2.11.1.1. | Let occurrence space be the set of everything that is activated at a given moment or interval. |

|  |  |
| --- | --- |
| 2.12. | Existence |

|  |  |
| --- | --- |
| 2.12.1. | What is existence? |

|  |  |
| --- | --- |
| 2.12.1.1. | Let existence be the normal filter function of everything space. |

|  |  |
| --- | --- |
| 2.12.1.2. | Let the fourth change function of existence be lightning. |

|  |  |
| --- | --- |
| 2.13. | Culture |

|  |  |
| --- | --- |
| 2.13.1. | What is culture |

|  |  |
| --- | --- |
| 2.13.1.1. | Culture is the evaluation of life within a group. |

|  |  |
| --- | --- |
| 2.14. | Cult |

|  |  |
| --- | --- |
| 2.14.1. | What is a cult? |

|  |  |
| --- | --- |
| 2.14.1.1. | A cult is a group where the group’s culture is controlled by a minimal portion of the group. |

|  |  |
| --- | --- |
| 2.15. | Convitae |

|  |  |
| --- | --- |
| 2.15.1. | What is convitae? |

|  |  |
| --- | --- |
| 2.15.1.1. | Given a system with at least one input and at least one output, let convitae be the system property described by the transfer function between the input(s) and output(s). |

|  |  |
| --- | --- |
| 2.16. | Consciousness |

|  |  |
| --- | --- |
| 2.16.1. | What is easy consciousness? |

|  |  |
| --- | --- |
| 2.16.1.1. | Let easy consciousness be a feedback signal in a convitae system. |

|  |  |
| --- | --- |
| 2.16.2. | What is hard consciousness? |

|  |  |
| --- | --- |
| 2.16.2.1. | Let hard consciousness be the ratio of a particular easy consciousness per all possible relevant easy consciousness. |

|  |  |
| --- | --- |
| 2.17. | Sentience |

|  |  |
| --- | --- |
| 2.17.1. | What is simple sentience? |

|  |  |
| --- | --- |
| 2.17.1.1. | Let simple sentience be existence due to normal sensory space activations (0 or 1). |

|  |  |
| --- | --- |
| 2.17.2. | What is complex sentience? |

|  |  |
| --- | --- |
| 2.17.2.1. | Let complex sentience be existence due to actual sensory space activations (-∞ to +∞). |

|  |  |
| --- | --- |
| 2.18. | Observer |

|  |  |
| --- | --- |
| 2.18.1. | What is an observer? |

|  |  |
| --- | --- |
| 2.18.1.1. | Let a convitae system be an observer of the input signal(s). |

|  |  |
| --- | --- |
| 2.19. | Sentiment |

|  |  |
| --- | --- |
| 2.19.1. | What is sentiment? |

|  |  |
| --- | --- |
| 2.19.1.1. | Let the difference measurement between a signal point and a reference point in emotion space be called sentiment. |

|  |  |
| --- | --- |
| 2.19.1.2. | Observe that sentiment is due to differences in capability, motive, and sensory spaces. |

|  |  |
| --- | --- |
| 2.20. | Capability Space |

|  |  |
| --- | --- |
| 2.20.1. | What is capability space comprised of, and how is it organized? |

|  |  |
| --- | --- |
| 2.20.1.1. | Let the normal existence term within capability space be ability. |

|  |  |
| --- | --- |
| 2.20.1.2. | Let the first change function of ability be development. |

|  |  |
| --- | --- |
| 2.20.1.3. | Let the second change function of ability be investment. |

|  |  |
| --- | --- |
| 2.20.1.4. | Let the third change function of ability be luck. |

|  |  |
| --- | --- |
| 2.20.1.5. | Let the first integral function of ability be potential. |

|  |  |
| --- | --- |
| 2.20.1.6. | Let the normal filter function of capability space be opportunity. |

|  |  |
| --- | --- |
| 2.21. | Motive Space |

|  |  |
| --- | --- |
| 2.21.1. | What is motive space comprised of, and how is it organized? |

|  |  |
| --- | --- |
| 2.21.1.1. | Let the normal existence term within motive space be ambition. |

|  |  |
| --- | --- |
| 2.21.1.2. | Let the first change function of ambition be motivation. |

|  |  |
| --- | --- |
| 2.21.1.3. | Let the second change function of ambition be inspiration. |

|  |  |
| --- | --- |
| 2.21.1.4. | Let the third change function of ambition be creativity. |

|  |  |
| --- | --- |
| 2.21.1.5. | Let the first integral function of ambition be passion. |

|  |  |
| --- | --- |
| 2.21.1.6. | Let the normal filter function of motive space be interest. |

|  |  |
| --- | --- |
| 2.21.1.7. | Let the second integral function of ambition be belief. |

|  |  |
| --- | --- |
| 2.22. | Sensory Space |

|  |  |
| --- | --- |
| 2.22.1. | What is sensory space comprised of, and how is it organized? |

|  |  |
| --- | --- |
| 2.22.1.1. | Let the normal existence term within sensory space be feelings. |

|  |  |
| --- | --- |
| 2.22.1.2. | Let the first change function of feelings be influence. |

|  |  |
| --- | --- |
| 2.22.1.3. | Let the second change function of feelings be impact. |

|  |  |
| --- | --- |
| 2.22.1.4. | Let the third change function of feelings be shock. |

|  |  |
| --- | --- |
| 2.22.1.5. | Let the first integral function of feelings be mentality. |

|  |  |
| --- | --- |
| 2.22.1.6. | Let the normal filter function of sensory space be favorite. |

|  |  |
| --- | --- |
| 2.23. | Emotion |

|  |  |
| --- | --- |
| 2.23.1. | What is emotion? |

|  |  |
| --- | --- |
| 2.23.1.1. | Let emotion be the normal existence term of emotion space. |

|  |  |
| --- | --- |
| 2.23.2. | What is emotion comprised of, and how is it organized? |

|  |  |
| --- | --- |
| 2.23.2.1. | Let emotion be equal to the productive evaluation of ability, ambition, and feelings. |

|  |  |
| --- | --- |
| 2.23.2.2. | Let the first change function of emotion be productivity. |

|  |  |
| --- | --- |
| 2.24. | Empathy |

|  |  |
| --- | --- |
| 2.24.1. | What is empathy? |

|  |  |
| --- | --- |
| 2.24.1.1. | Let empathy be emotion in transit due to differences in capability, motive, and sensory spaces. |

|  |  |
| --- | --- |
| 2.25. | Sympathy |

|  |  |
| --- | --- |
| 2.25.1. | What is sympathy? |

|  |  |
| --- | --- |
| 2.25.1.1. | Let sympathy be equal to the ratio of (a) empathy and (b) sentiment that caused the empathy. |

|  |  |
| --- | --- |
| 2.26. | Compassion |

|  |  |
| --- | --- |
| 2.26.1. | What is compassion? |

|  |  |
| --- | --- |
| 2.26.1.1. | Let the first integral function of empathy be compassion. |

|  |  |
| --- | --- |
| 2.27. | Empathize |

|  |  |
| --- | --- |
| 2.27.1. | What is empathize? |

|  |  |
| --- | --- |
| 2.27.1.1. | Let the first change function of empathy be empathize. |

|  |  |
| --- | --- |
| 2.28. | Emotional Capacitance |

|  |  |
| --- | --- |
| 2.28.1. | What is emotional capacitance? |

|  |  |
| --- | --- |
| 2.28.1.1. | Let emotional capacitance be equal to the ratio of (a) compassion and (b) sentiment that caused the compassion. |

|  |  |
| --- | --- |
| 2.29. | Emotional Inductance |

|  |  |
| --- | --- |
| 2.29.1. | What is emotional inductance? |

|  |  |
| --- | --- |
| 2.29.1.1. | Let emotional inductance be equal to the ratio of (a) sentiment and (b) empathy that the sentiment caused. |

|  |  |
| --- | --- |
| 2.30. | Emotional Power |

|  |  |
| --- | --- |
| 2.30.1. | What is emotional power? |

|  |  |
| --- | --- |
| 2.30.1.1. | Let emotional power be equal to the productive evaluation of (a) sentiment and (b) empathy that the sentiment caused. |

|  |  |
| --- | --- |
| 2.31. | Emotional Energy |

|  |  |
| --- | --- |
| 2.31.1. | What is emotional energy? |

|  |  |
| --- | --- |
| 2.31.1.1. | Let the first integral function of emotional power be emotional energy. |

|  |  |
| --- | --- |
| 2.31.1.2. | Observe that emotional power is the first change function of emotional energy. |

|  |  |
| --- | --- |
| 2.32. | Emotional Force |

|  |  |
| --- | --- |
| 2.32.1. | What is emotional force? |

|  |  |
| --- | --- |
| 2.32.1.1. | Let emotional force be equal to the productive evaluation of ability and ambition. |

|  |  |
| --- | --- |
| 2.32.1.2. | Let the previous statement (2.32.1.1.) be known as Nolan’s Law. |

|  |  |
| --- | --- |
| 2.33. | Imagination |

|  |  |
| --- | --- |
| 2.33.1. | What is imagination? |

|  |  |
| --- | --- |
| 2.33.1.1. | Let imagination be equal to the phase difference between realistic emotion and apparent emotion. |

|  |  |
| --- | --- |
| 2.33.1.2. | Observe that imagination due to emotional inductance is lagging. |

|  |  |
| --- | --- |
| 2.33.1.3. | Observe that imagination due to emotional capacitance is leading. |

|  |  |
| --- | --- |
| 2.33.1.1. | Observe that imagination due to sympathy is zero. |

|  |  |
| --- | --- |
| 2.34. | Change |

|  |  |
| --- | --- |
| 2.34.1. | What is change? |

|  |  |
| --- | --- |
| 2.34.1.1. | Let the difference measurement between a signal point and a reference point in everything space be called change |

|  |  |
| --- | --- |
| 2.34.1.2. | Observe that change is due to differences in ideal, real and emotion spaces. |

|  |  |
| --- | --- |
| 2.35. | Communication |

|  |  |
| --- | --- |
| 2.35.1. | What is communication? |

|  |  |
| --- | --- |
| 2.35.1.1. | Let communication be knowledge in transit due to differences in ideal, real, and emotion spaces. |

|  |  |
| --- | --- |
| 2.35.1.2. | Observe that communication is knowledge in transit due to change. |

|  |  |
| --- | --- |
| 2.35.1.3. | The fundamental problem of communication is that of reproducing at one point either exactly or approximately a message selected at another point. C. E. SHANNON, A Mathematical Theory of Communication, 1948. |

|  |  |
| --- | --- |
| 2.35.1.4. | Fundamental Theorem of Communication |

|  |  |
| --- | --- |
| 2.35.1.4.1. | What is the fundamental theorem of communication? |

|  |  |
| --- | --- |
| 2.35.1.4.1.1. | Things can be known well enough to be identifiable at more than one point. |

|  |  |
| --- | --- |
| 2.36. | Intelligence |

|  |  |
| --- | --- |
| 2.36.1. | What is intelligence? |

|  |  |
| --- | --- |
| 2.36.1.1. | Let intelligence be equal to the ratio of (a) communication and (b) change that caused the communication. |

|  |  |
| --- | --- |
| 2.37. | Education |

|  |  |
| --- | --- |
| 2.37.1. | What is education? |

|  |  |
| --- | --- |
| 2.37.1.1. | Let the first integral function of communication be education. |

|  |  |
| --- | --- |
| 2.37.2. | Thought Experiment |

|  |  |
| --- | --- |
| 2.37.2.1. | Group known things in a region labeled known space. |

|  |  |
| --- | --- |
| 2.37.2.2. | Group unknown things in a region labeled unknown space. |

|  |  |
| --- | --- |
| 2.37.2.3. | The boundary between known space and unknown space can experience motion. |

|  |  |
| --- | --- |
| 2.37.2.4. | Motion of this boundary is equivalent to education. |

|  |  |
| --- | --- |
| 2.37.2.5. | A conspiracy is a fixed point on the boundary between known space and unknown space. |

|  |  |
| --- | --- |
| 2.38. | Conspiracy |

|  |  |
| --- | --- |
| 2.38.1. | What is conspiracy? |

|  |  |
| --- | --- |
| 2.38.1.1. | A conspiracy is a belief that is maintained for every test result indicating not-true. |

|  |  |
| --- | --- |
| 2.39. | Consideration |

|  |  |
| --- | --- |
| 2.39.1. | What is consideration? |

|  |  |
| --- | --- |
| 2.39.1.1. | Let the first change function of communication be consideration. |

|  |  |
| --- | --- |
| 2.40. | Knowledge Capacitance |

|  |  |
| --- | --- |
| 2.40.1. | What is knowledge capacitance? |

|  |  |
| --- | --- |
| 2.40.1.1. | Let knowledge capacitance be equal to the ratio of (a) education and (b) change that caused the education. |

|  |  |
| --- | --- |
| 2.41. | Knowledge Inductance |

|  |  |
| --- | --- |
| 2.41.1. | What is knowledge inductance? |

|  |  |
| --- | --- |
| 2.41.1.1. | Let knowledge inductance be equal to the ratio of (a) change and (b) consideration that the change caused. |

|  |  |
| --- | --- |
| 2.42. | Knowledge Power |

|  |  |
| --- | --- |
| 2.42.1. | What is knowledge power? |

|  |  |
| --- | --- |
| 2.42.1.1. | Let knowledge power be equal to the productive evaluation of (a) change and (b) communication that the change caused. |

|  |  |
| --- | --- |
| 2.43. | Knowledge Energy |

|  |  |
| --- | --- |
| 2.43.1. | What is knowledge energy? |

|  |  |
| --- | --- |
| 2.43.1.1. | Let the first integral function of knowledge power be knowledge energy. |

|  |  |
| --- | --- |
| 2.43.1.2. | Observe that knowledge power is the first change function of knowledge energy. |

|  |  |
| --- | --- |
| 2.44. | Fiction |

|  |  |
| --- | --- |
| 2.44.1. | What is fiction? |

|  |  |
| --- | --- |
| 2.44.1.1. | Let fiction be equal to the phase difference between realistic knowledge and apparent knowledge. |

|  |  |
| --- | --- |
| 2.44.1.2. | Observe that fiction due to knowledge inductance is lagging. |

|  |  |
| --- | --- |
| 2.44.1.3. | Observe that fiction due to knowledge capacitance is leading. |

|  |  |
| --- | --- |
| 2.44.1.4. | Observe that fiction due to intelligence is zero. |

|  |  |
| --- | --- |
| 2.45. | Falsifiability |

|  |  |
| --- | --- |
| 2.45.1. | What is falsifiability? |

|  |  |
| --- | --- |
| 2.45.1.1. | Falsifiability is a property of things in ideal space. |

|  |  |
| --- | --- |
| 2.45.2. | What is falsifiable? |

|  |  |
| --- | --- |
| 2.45.2.1. | Statements are things in ideal space. |

|  |  |
| --- | --- |
| 2.45.2.1.1. | A statement is falsifiable if there exists a machine that is able to (a) evaluate the claim, and (b) register the evaluation. |

|  |  |
| --- | --- |
| 2.46. | Keller's Law |

|  |  |
| --- | --- |
| 2.46.1. | What is Keller's Law? |

|  |  |
| --- | --- |
| 2.46.1.1. | Let the ratio of (a) emotional force exerted by a convitae system and (b) first change function of productivity experienced by the convitae system be the Keller. |

|  |  |
| --- | --- |
| 2.46.2. | Where did Keller's Law come from? |

|  |  |
| --- | --- |
| 2.46.2.1. | Observe https://youtu.be/G4hL5Om4IJ4?t=1484, 24:44 to 25:10. |

|  |  |
| --- | --- |
| 2.46.2.2. | Oberve… |

|  |  |
| --- | --- |
| 2.47. | Measurement Unit of Sympathy |

|  |  |
| --- | --- |
| 2.47.1. | What is the unit of measurement of sympathy? |

|  |  |
| --- | --- |
| 2.47.1.1. | Let the term Lex be used as the unit of measurement of sympathy. |

|  |  |
| --- | --- |
| 2.48. | Lex Vector |

|  |  |
| --- | --- |
| 2.48.1. | What is the Lex Vector? |

|  |  |
| --- | --- |
| 2.48.1.1. | Let the Lex Vector be the non-linear portion of sympathy vectors. |

|  |  |
| --- | --- |
| 2.48.1.2. | Observe that sympathy between different modes of convitae systems (e.g., human and robot) is non-linear. |

|  |  |
| --- | --- |
| 2.48.1.3. | At some points and intervals of observation, all sympathy vectors are non-linear. |

|  |  |
| --- | --- |
| 2.48.1.4. | At some points and intervals of observation, all sympathy vectors are linear. |

|  |  |
| --- | --- |
| 2.49. | Maslow Maxima |

|  |  |
| --- | --- |
| 2.49.1. | What is Maslow Maxima? |

|  |  |
| --- | --- |
| 2.49.1.1. | Let local-machine change maxima points and intervals be known as Maslow Maxima. |

|  |  |
| --- | --- |
| 2.49.1.2. | Observe that local-machine change maxima points and intervals are respectively similar to peak and plateau experiences intuited by Abraham Maslow. https://en.wikipedia.org/wiki/Peak\_experience#Plateau\_experience |

|  |  |
| --- | --- |
| 2.50. | Knowledge Circulation |

|  |  |
| --- | --- |
| 2.50.1. | What is knowledge circulation? |

|  |  |
| --- | --- |
| 2.50.1.1. | Let knowledge circulation be equal to change viewed from the existence of thought. |

|  |  |
| --- | --- |
| 2.51. | Interest Collaboration |

|  |  |
| --- | --- |
| 2.51.1. | What is interest collaboration? |

|  |  |
| --- | --- |
| 2.51.1.1. | Let interest collaboration be equal to change viewed from the existence of the motion of reality. |

|  |  |
| --- | --- |
| 2.52. | Knowledge Circulation and Interest Collaboration |

|  |  |
| --- | --- |
| 2.52.1. | Thought Experiment |

|  |  |
| --- | --- |
| 2.52.1.1. | For every culture-with-idea-inputs there exists a stability function of the culture with respect to input ideas. |

|  |  |
| --- | --- |
| 2.52.1.2. | For every culture-with-consciousness there exists idea inputs where the self-protective measures of the culture become active. |

|  |  |
| --- | --- |
| 2.52.2. | Thought Experiment |

|  |  |
| --- | --- |
| 2.52.2.1. | Let all work being done everywhere be knowable. |

|  |  |
| --- | --- |
| 2.52.2.2. | Let all organizations doing work everywhere be knowable. |

|  |  |
| --- | --- |
| 2.52.2.3. | Knowable work being done at an organization can be measured. |

|  |  |
| --- | --- |
| 2.52.2.4. | Your knowledge of work being done at the organization can be measured. |

|  |  |
| --- | --- |
| 2.52.2.5. | Those measurements can be evaluated as a ratio. |

|  |  |
| --- | --- |
| 2.52.2.6. | Those measurements can be evaluated as a difference. |

|  |  |
| --- | --- |
| 2.52.2.7. | At the beginning of your career, your ratio (mentioned above) will be lower on your first day at the organization than your 100th day at the organization. |

|  |  |
| --- | --- |
| 2.52.2.8. | At the end of your career, your ratio (mentioned above) will be lower on your last day at the office than one year prior. |

|  |  |
| --- | --- |
| 2.52.2.9. | So, the ratio (mentioned above) is not constant throughout your career at the organization. |

|  |  |
| --- | --- |
| 2.52.2.10. | So, at some point in your career your ratio (mentioned above) will be at it’s all time personal high. |

|  |  |
| --- | --- |
| 2.52.2.11. | So, at some point in your career your ratio (mentioned above) will be at it’s all time personal low. |

|  |  |
| --- | --- |
| 2.52.2.12. | When you share your knowledge with other members of the organization (see Fundamental Theorem of Education), your ratio (mentioned above) remains the same, and their ratio (mentioned above) increases. |

|  |  |
| --- | --- |
| 2.52.2.13. | So, in your organization there are knowledge sources, sinks, resistors, capacitors, inductors, switches, transistors (linear switches), circuits, networks, and machines. |

|  |  |
| --- | --- |
| 2.52.2.14. | If you can draw a knowledge surface around the organization, you can consider knowledge sourcing into and out of the organization. |

|  |  |
| --- | --- |
| 2.52.2.15. | If you isolate two or more knowledge nodes within the organization, you can analyze motion within the organization’s knowledge space. |

|  |  |
| --- | --- |
| 2.52.2.16. | Behavior of knowledge space is likely to be similar to behavior in emotion space and e space. |

|  |  |
| --- | --- |
| 2.52.2.17. | Knowledge is equivalent to belief that (a) is falsifiable, (b) has been tested, and (c) has not been shown to be false by test results. |

|  |  |
| --- | --- |
| 2.53 | Creation |

|  |  |
| --- | --- |
| 2.53.1 | What is creation? |

|  |  |
| --- | --- |
| 2.53.1.1 | Let creation be knowledge in transit through an E energy element due to a difference in knowledge across the E energy element. |

|  |  |
| --- | --- |
| 3. | Sense and Measurement |

|  |  |
| --- | --- |
| 3.1. | Recent Knowledge |

|  |  |
| --- | --- |
| 3.1.1. | Avagadro's Constant |

|  |  |
| --- | --- |
| 3.1.2. | Faraday's Constant |

|  |  |
| --- | --- |
| 3.1.3. | Coulomb |

|  |  |
| --- | --- |
| 3.1.4. | Volt |

|  |  |
| --- | --- |
| 3.1.5. | Amp |

|  |  |
| --- | --- |
| 3.1.6. | Ohm |

|  |  |
| --- | --- |
| 3.1.7. | Henry |

|  |  |
| --- | --- |
| 3.1.8. | Farad |