Neosentience | The Benevolence Engine

Bill Seaman and Otto E. Rössler

Foreword by Siegfried Zielinski

Introduction - Bridging • Descartes • Karel Capek • Roy Ascott - Behaviourist Art and the Cybernetic Vision • Neosentience - A New Branch of Scientific and Poetic Inquiry • Background - Operative Definition of Neosentience • The N_S.E.N.T.I.E.N.T. paradigm • Identity - When is it mine? • A.I. Background • von Foerster – Circuitry Clues To Platonic Ideation • Norbert Wiener and Gregory Bateson • Heinz von Foerster and the Biological Computer Laboratory • Macy Conferences • Ross Ashby • Rodney Brooks • Ray Kurzweil • Bill Joy • History and Mythology • Anaximander • Casti's Emergence • Introduction to the Brain Equation • Marvin Minsky • John Holland • Neumannology • Deb Roy • Recursive Evolution • Pattern Flows • Qualia's Emotional Force Triggers • Color and Chaos • Memory and its Relation to Perception in an N dimensional space • Roger Shepard • Meaning Becoming • Time • Siegfried Zielinski – Variantology or Archaeology of the Media • The Brain Equation • Deductive Biology • Marvin Minsky • One Now • Global Brain • (Re)sensing the Observer - Open Order Cybernetics • Deviation-Amplifying Mutual Causal Processes • Gödel Boundary Overstepped • The Russell, Bateson, Pavlov Paradox • Bateson – Double Bind Theory • Asimov's Laws - Some observations by Rodney Brooks Concerning the Laws and Reality • Cantor's Diagonals • Bruno Marchal • Norbert Wiener – Mathematics • The Pattern Game • The World is not Separate From Us • A Linguistics of Pattern Flows • Computer Code - New Ideas Approaching Pattern Recognition • Michael Arbib • World Generator – Generative VR • The Thoughtbody Environment • Toward a Model for an Electrochemical Computer • Gordon Pask • Maverick Machines – Gordon Pask • Protein Computers – Gordon Pask • Panadaka pygmaea • Self-knowledge – David Finkelstein • Non-two value logic • Nonsense Logic • Induction / Abduction • The Case of Brains in a Vat – Hilary Putnam • Well Stirred Computer • Oswald's Living Fluid • Zeeman – The Construction of a Pseudo Continuum • Well stirred life on Jupiter - Gliese 581c • The Great Everett - Many Minds Theory • Many Worlds / Many Minds • The Machine Has Perceived A • Murry Gell-Mann - The Quark and the Jaguar • The Aharonov / Bohm Effect • Assignment Conditions • The World As Interface • Different Definitions of the Observer • Naked Mole Type Intelligence • Special Senses and Equivalencies Across Minds • Fulguration • High Resolution Magnetic Senses - Hammer Head Shark • Lao Tzu • The Now • Time Buffer – Temporal Fovea • Brian Massumi • Peter Cariani • The Now Equation • Dreams • Gödel Time Machine and The Illusion of Time • Einstein • Non-local Coupling • Who Needs Emotions? The Brian Meets the Robot • Simple Languages – Deb Roy • Micro-time Reversal • Time's Arrow • Alfred Korzybski - Science and Sanity --- New Theory of Language • C. Andy Hilgartner • The Second Force • World Change Machines • Endonomadology – Endomonadology • Kurt Lewin – Typological Psychology • Bonding, Imprinting and other Lorenzes – Innate Releasing Mechanisms? • Behind the Mirror • Ed Lorenz – Butterfly • Single Spin Chemistry • Spin-based Computers • Hospitalism • Lorenz – Thinking Is Acting In Imagined Space • Artificial Ethology | Ethomathematics • Innate and Acquired Releasing Mechanisms – Priming (Lorenz) • Bonding Drive / Attachment Theory - John Bowlby / Mary Ainsworth • The Invention of Benevolence as a Transcendence of Biology • Natural Brains Artificially Produced • McCulloch and Pitts' Neural Logical Calculus • Is the Brain a Digital Computer? John R. Searle • Jeff Hawkins – Hierarchical Temporal Memory • Jim Olds • W. R. Hess • Kurt Gödel • Peter Weibel • Douglas Hofstadter • Mirror Neurons / Mirror Competence • A Neural Transmitter for every mood - Electrochemical Computers Revised • Pattern Flows: Notes toward a Model for an Electrochemical Computer - The Thoughtbody Environment • The Relation of the Body to an Embodied Electrochemical Computer • Qualia • Candice B. Pert - Molecules of Emotion • The Physiognomic Side of Nature and its Spatial Relation to the Body • Light Computer • A Geon Computer • The Elephant looking into it's own mouth • The Creation of a new Techno-species • The Invention of Benevolence • Smile Theory (Don't laugh!) • Are we making an immortal? • Analogical Computing (Hava Siegelman) • The World As Interface / Interface as Continuum • Interfaciology • Cooperation in Robotics (Luc Steels) • Games and Seduction • The Science of Charm • What is Second Life? • Tom Ray – Tierra • Embodied Souls • Robotic Care Givers • Benevolence from a Doll • Descartes' Doll • How to Build a Superluminal Computer • Computers began as people • A multi-perspective approach to understanding that which is at operation in the body contributing to thought • Neosentientology • The Glass Ceiling and Vertical Breakthrough • Potato Washing • Poly-sensing Potentials • Multi-modal Machinic Sensing vs. Human Sensing • Related Robotic projects - Luc Steels • Artificial Seal • Ralph Hollis – Floator • The Scandal of Benevolence • Leibniz and Benevolence • The Benevolence of Cooking • Charm • The Naked Soul • The Scandal of Color • The Physics of Immortality (Everett) • The Thing About the Shared Mind's Eye (Einstein) • The Omega Point - Jacob, Avicenna, Teilhard • The Jump • The Purring Little White Seal • The Sims by Bill Wright • Konrad Lorenz — Endogenous Mood Pressure • Play • Arthur Koestler • Wilfried Hou Je Bek • Sex • Ongoing Goals for the Neosentient • Threshold of Personhood • Long Term Mutation • Neo-sentience - Positive Techno-evolution or Extreme, Hostile Takeover Environment? • Stephen Smale – Axiom A Attractor • Rossler (In the spirit of the Haiku) • Wilfried Musterle • David Marr and Tommaso Poggio – Vision System • Sue Savage-Rumbaugh, Roger Lewin and the Soul of the Ape • Buddha • Multiple Approaches to Time and the Now • The Seduction Toward The Good • Second Class of Brains • Vannevar Bush's Differential Analyzer • Kant – The Dreams of a Ghost Seer • Bob Rosen – On Biological Systems As Paradigms For Adaptation • 3 Branches of Mathematics • Klaus-Peter Zauner - Molecular Information Technology • Howard Pattee – How Does a Molecule Become a Message • Yukio-Pegio Gunjia • Kunihiko Kaneko • The Angel of Redness • All Aesthetics Are Neural Aesthetics • Neosentient Aesthetics • Some Reflective Projections on the Internal Screen • Kleist • Turing • Dystopian Techno-evolution (continued) • Male Mothers • Fear of an Awesome Responsibility • Spielberg's Epic AI • Post Darwinian Symbiosis (Lion, Lamb and Computer) • Turing Test • Bringing Up The Computer • Epictetus and the Turing Test • Descartes and the Turing Test • Galactic Export • Computational Potentiality • The Physics of Meaning • The Purring Little White Seal • The Tale of the Whale • Fighting Evil • Buddha [Smile] • The benevolence Engine in a Nutshell • TechnoSpecies • A Model for a Neosentient system - The Benevolence Engine . We list the main functional parts of the diagram • The Diagram • Poly-sensing Input • Pattern Matching Mechanism • Buffer Generated VR • Force Field Generator • Control Driver [the great joystick] / Simulator Mechanism (imagined space) • Overlap Buffer • Efference Copy / Reafference • Movement Potentials • Long-term Memory • Neosentience • Discussion • Summary • Endnotes • Addendum •

Neosentience:
The Benevolence Engine

By Bill Seaman and Otto E. Rossler

Coined by artist and media researcher Bill Seaman, 'neosentience' describes a new branch of scientific inquiry related to artificial intelligence. This volume explores the groundbreaking work of Seaman and chaos physicist Otto E. Rossler in exploring the potential of an intelligent robotic entity in possession of a form of sentience similar to that of a human being. Chapters approach the concept from a range of disciplines, including psychology, linguistics and the arts. This book encourages readers to reflect on how we experience and interpret the world, how memory works and what it is to be human.