Exploration into The "Invokation of Rapture" Phenomena, via Aesthetic Content Spawned from Biological Metaphors in Computing – a Possible Next Increment toward Cosmological Evolution



Contact 2003, NASA / Ames

#### Charles Ostman

Senior Fellow - Institute for Global Futures Chair, Nano Electronics & Photonics Forum tel 510 549 0129 email charles000@nanosig.org http://www.technofutures.com/charles1.htm http://www.NanoSig.org/nanoelectronics.htm







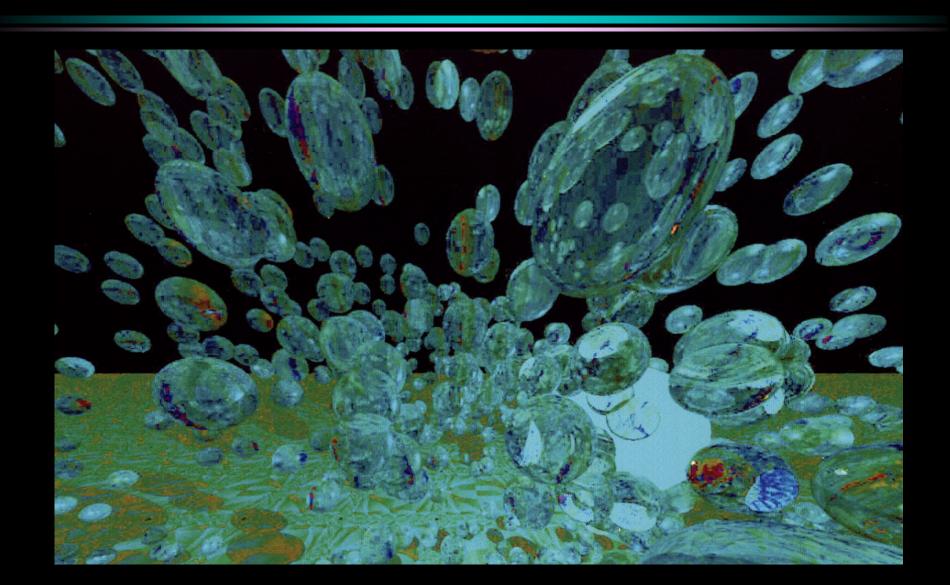
## Exploration into The "Invokation of Rapture" Phenomena, via Aesthetic Content Spawned from Biological Metaphors in Computing – a Possible Next Increment toward Cosmological Evolution



#### Previous Contact Themes presented:

- Quantum Astrobiology The Communication of Presence and Intention as Co-Occupants of an N-Dimensional Quantum Universe
- The In-Silico Biology Paradigm Gateway to Virtual Exobiology
- The Integration of Consciousness Domains in the Emergent Operational Ecology of Human and Synthetic Entities the Next Evolutionary Increment
- Development of Linguistic Systems and Communication Protocols with Species of Artificial Lifeforms and Synthetic Sentients as a requirement for interaction with alien species
- Process Modalities of Applied Computational Resource Which Mimic the Physiologies of Living Systems as a mechanism for communication with real and synthetic entities

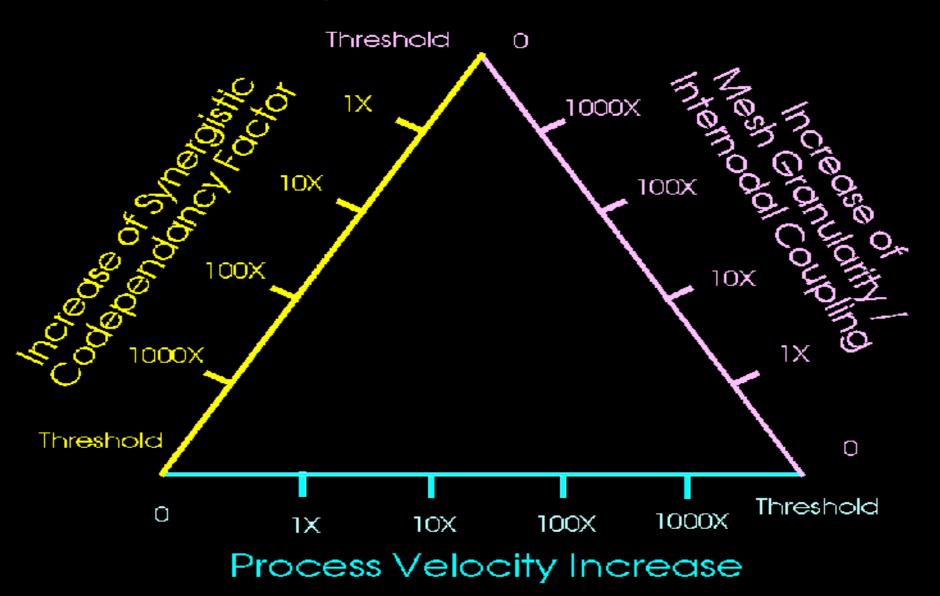
## The next Evolutionary Increment . . . Hyperdimensional Access



### Contextual Cognition in the Emergent Operational Ecology > Hyperdimensional Existence Navigation

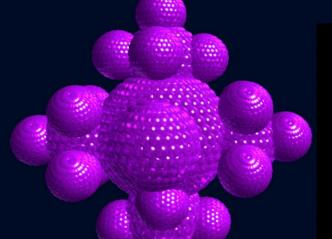


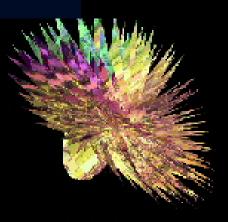
## Convergence Syndrome Triad

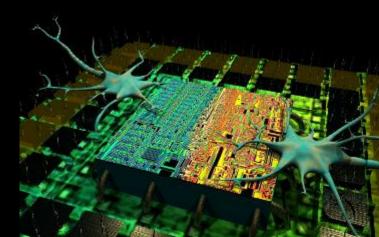


## Cultural Imperatives of the Evolutionary Eventstream - Emergent

- Knowledge complexity, scale, and velocity is exceeding human capacity for mission critical decision rendering compressed into ever shortening time scales.
- Development and deployment of complex metasystems of artificial entities, synthetic lifeforms, and emergent intelligences becomes the acceptable "culture norm" of the near future.
- Perceived boundaries of the "synthetic" and organic, the "virtual" and the real, become enmeshed into an existence continuum.
- The internet is the cultural and functional equivalent of Gutenberg's press, combined with the Library of Alexandria, manifest in a realtime global environment



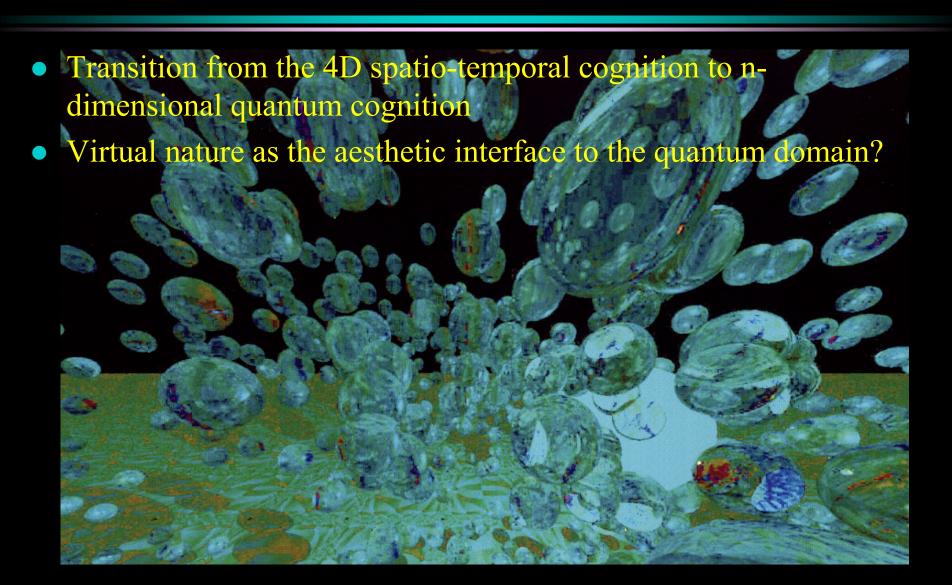




## Existence Imperatives of the Evolutionary Eventstream - Ubiquitous

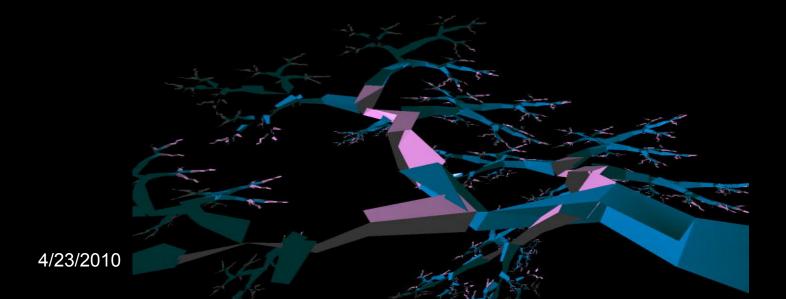


## The next Evolutionary Increment . . . Hyperdimensional Access



### **Evolutionary Process Dynamics**

- Evolution tends to be a trauma induced process
- Fractal system model operates at all scales, from the individual, to the collective, entire systems
- Provided the periodicity and amplitude of trauma cycles do not exceed the system capacity to respond, the system tends to evolve to a more robust form

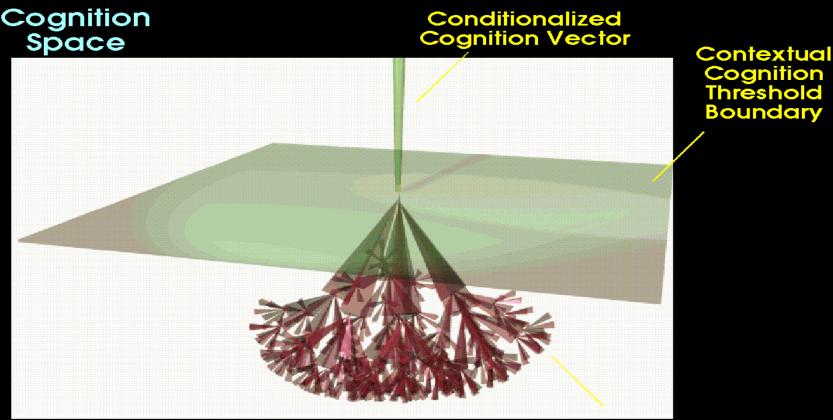


### Think Different > Think Holographic

The Next Evolutionary Challenge . . .

Perceived Existence extending beyond the 4D Manifold, evolving into an

N-Dimensional Operational Ecology



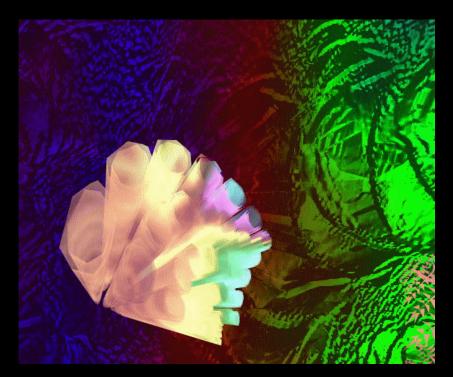
Perception

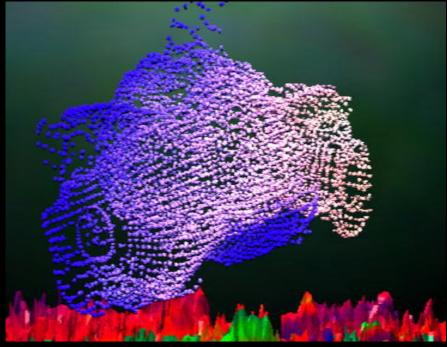
Space

N-Dimensional Tiered Process Vectors

## The Operational Ecology — Translation into Virtual Nature

- Self evolving information architectures, process platforms, knowledge ontologies
- Self assembling / self organizing molecular systems, biological and non-biological





### Process Elements of the Emergent Human / Internet Symbiosis



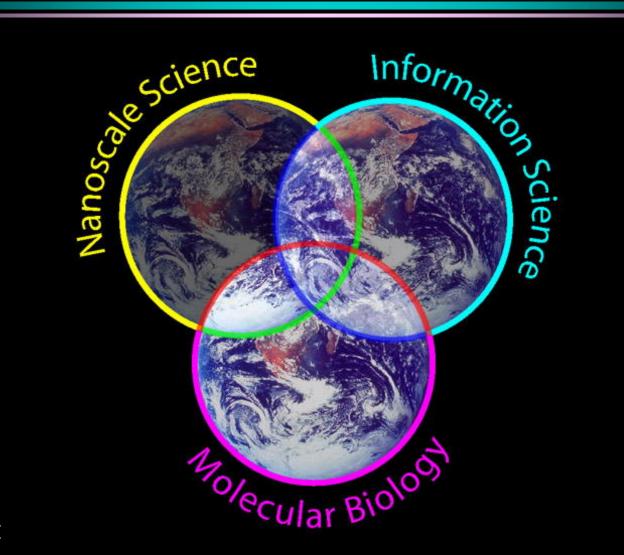
Intelligent Agent Entities
Multi-Agent Colonies / Hierarchies
Self Organizing Knowledge Ontologies

Biological Metaphors in Computing
Self Organizing Routing Structures
Defensive Networks
Synthetic Sentience

Distributed Artificial Lifeforms
Collective Symbiotic Intelligence
Evolutionary / Genetic Computation

Realtime Tele-Existence Streaming
Pyshco-ergonomic Interface
Biometric Transparency

# The Emergent Infotech / Biotech / Nanotech Operational Ecology



# The Emergent Infotech / Biotech / Nanotech Operational Ecology

#### **NBIC Conference**

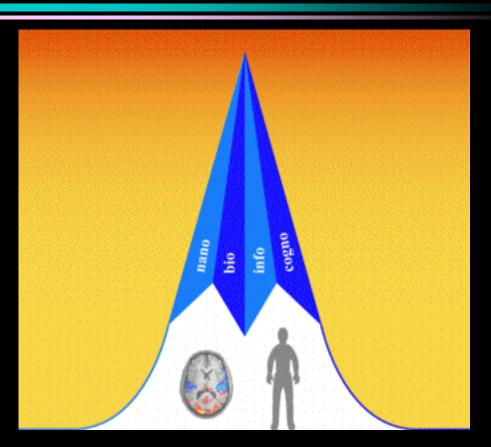
Converging Technologies for Improving Human

Performance:

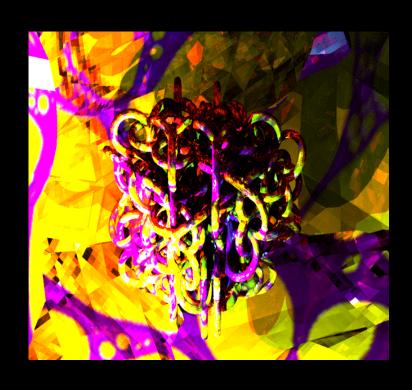
Nanotechnology, Biotechnology, Information Technology and Cognitive Science

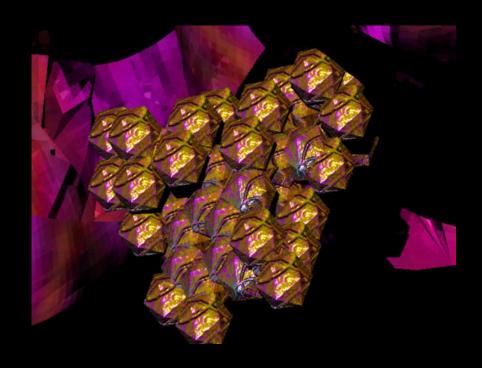
NSF/DOC-sponsored report

http://www.wtec.org/ConvergingTechnologies

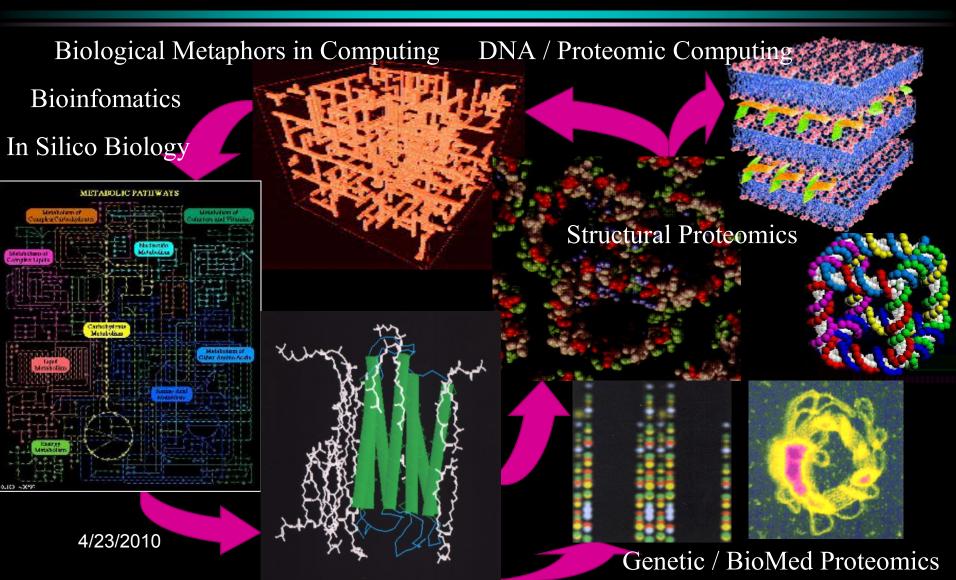


### Hybrid Lifeforms -Self Organizing Systems





### Infotech / Biotech / Nanotech Development Stream Example

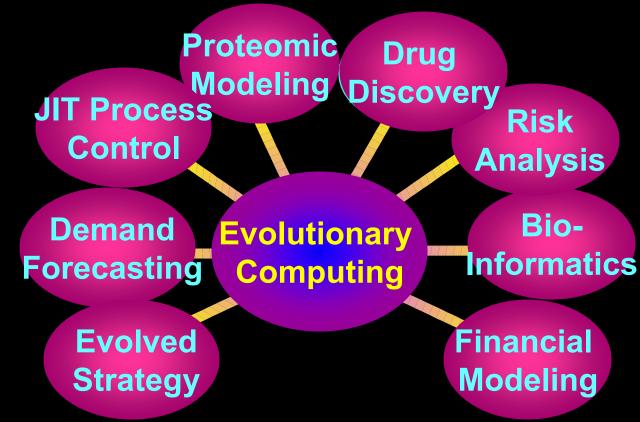


### Convergence Node -Evolutionary Computing

Genetic Algorithms

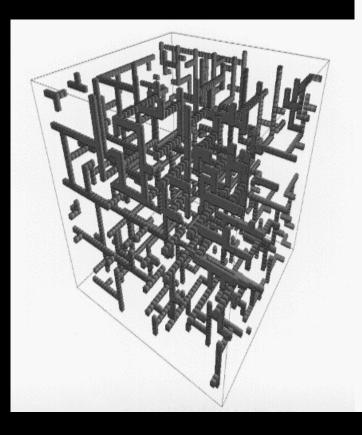
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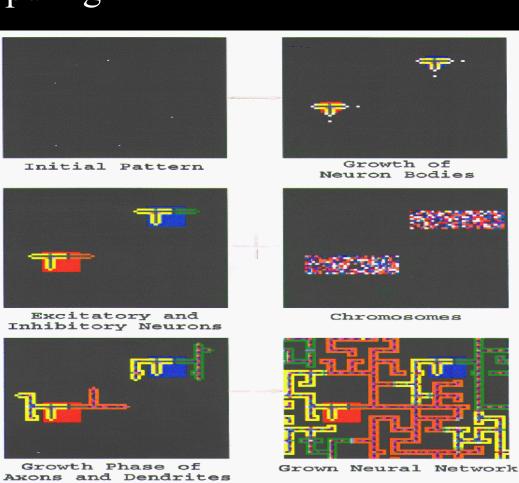
- Self Evolving Systems
- Autonomous Functionalities



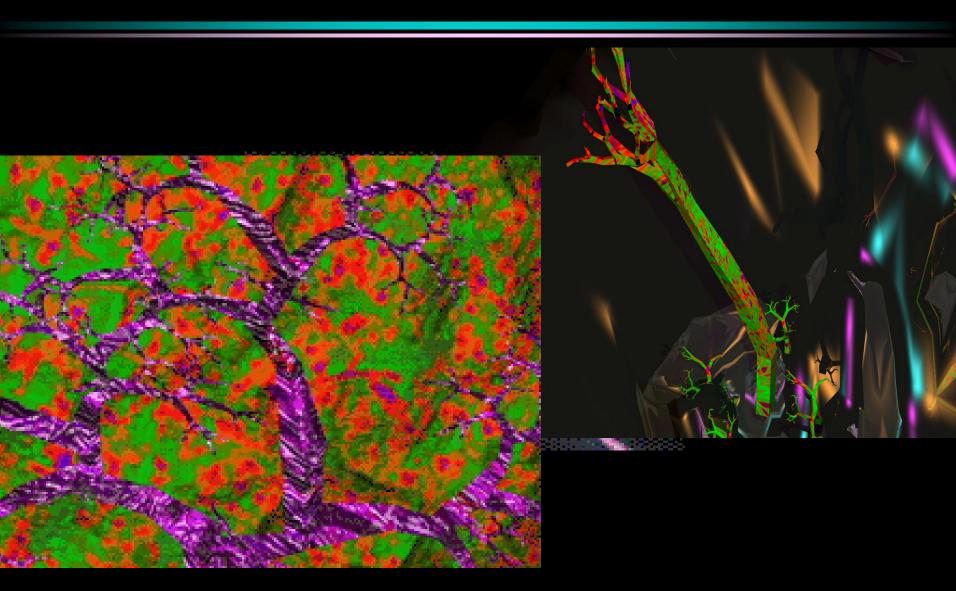
## Example Technology - Self Evolving "Artificial Brains"

- Evolutionary Computing
- Artificial Life





## Symbiotic Integration with the Ubiquitous Synthetic Sentience Process Manifold

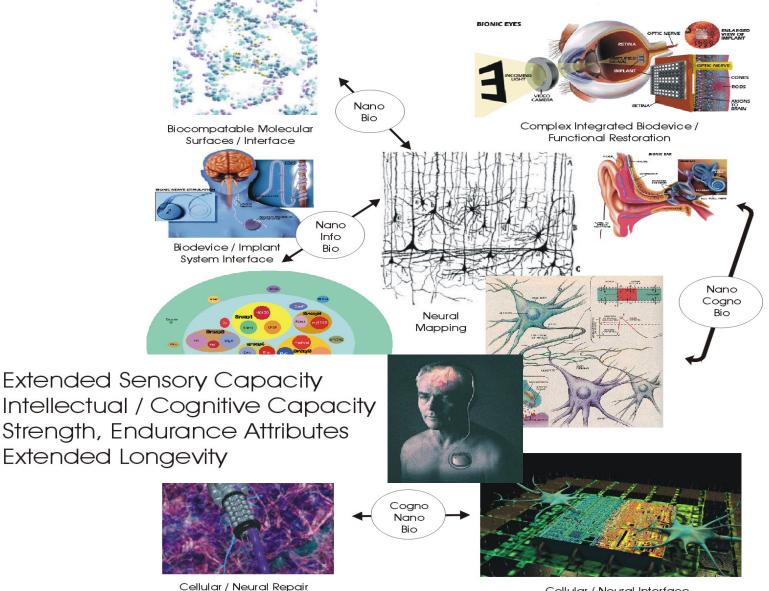


#### **Designed Evolution** Nano Bio Info Cogno Dendritic Tree Example Implemenation Cycle Dendrite Tree Co-Evolved Hybrid Human Organism / Intelligence VLSI Neuromo:ph Cogno Natural Neural Network Modeling Nano Bio Nano Bio Hybridized Synthetic DNA Nano Bio Info Complex Self Evolving Neural Network Modeling Complex Proteomic / DNA Nano Nanobiological Neural Computing Systems Bio Network Systems Info Nano Structural Proteomics Bio DNA "circuits" & devices Info Metascale Genomic Modelling / Engineering Nano Bio Info

Evolutionary Proteomic Modelina / Synthesis

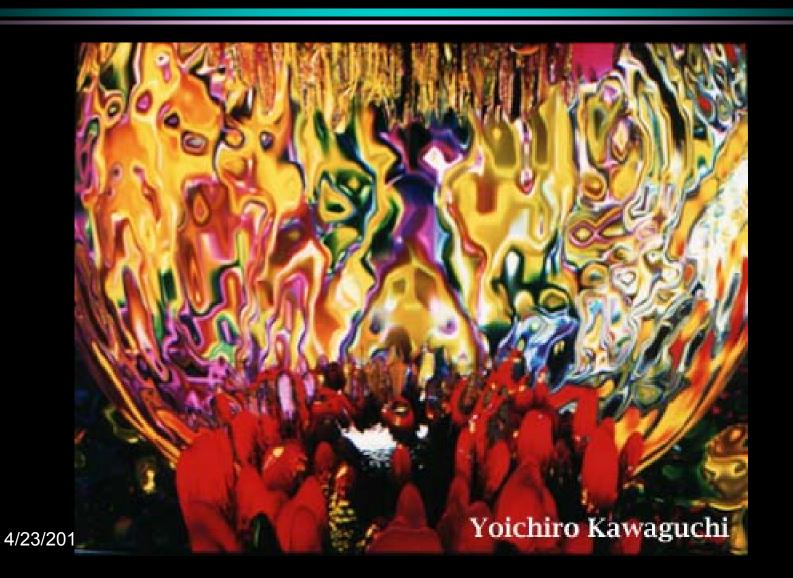
Co-Evolution with Emergent Intelligences Genetic / Biophysical Enhancement Accelerated Environmental Adaptation Extended Longevity & Functionality



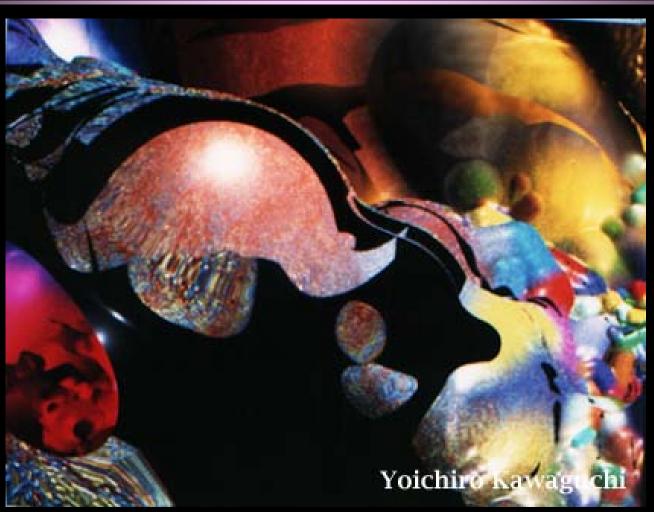


Cellular / Neural Interface

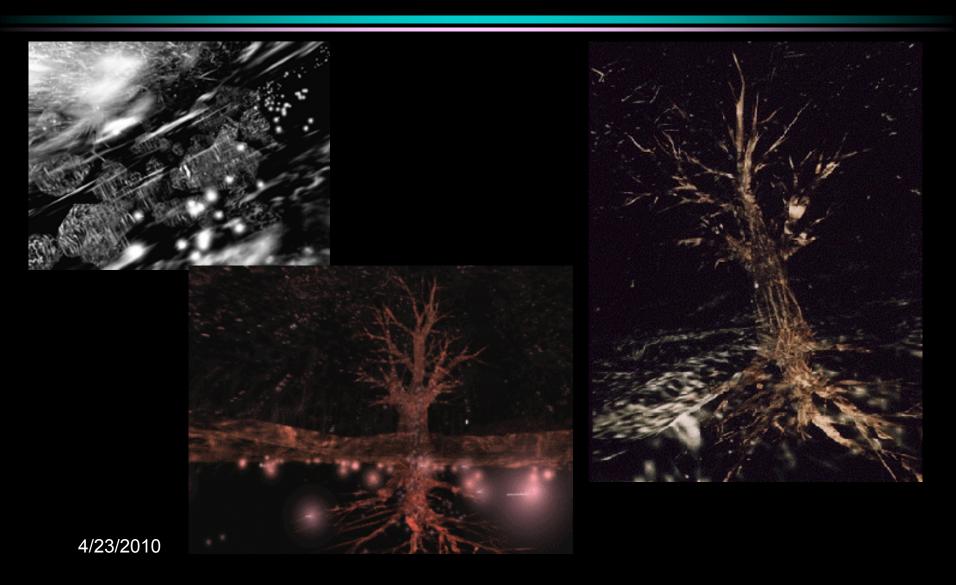
### Biological Metaphors in Computing Yoichiro Kawaguchi



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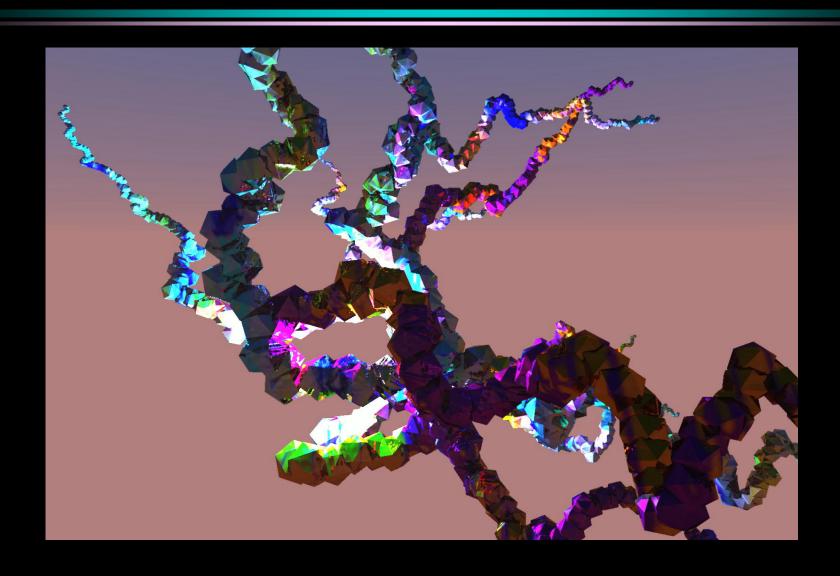
### Biological Metaphors in Computing / Immersive Environments Char Davies

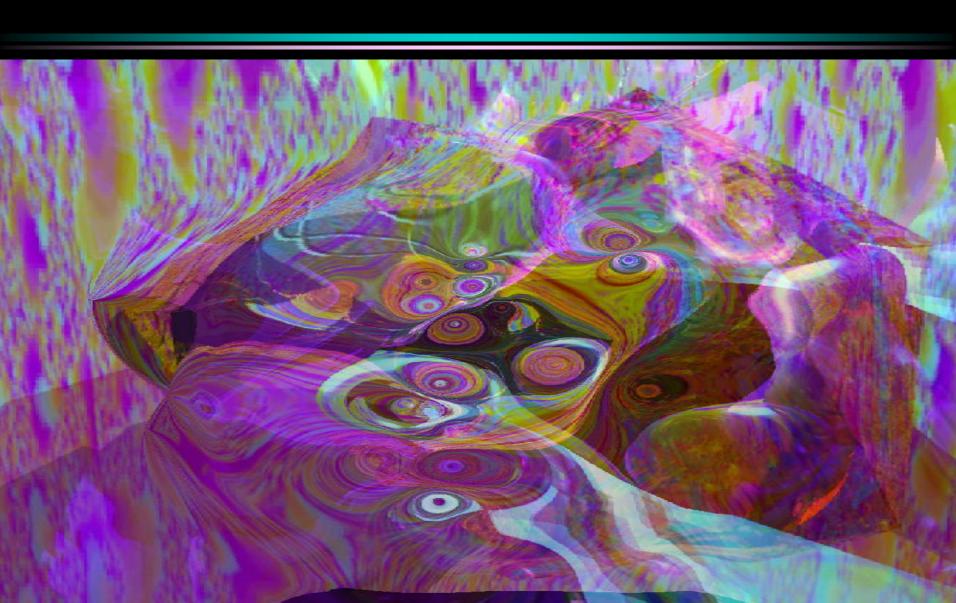


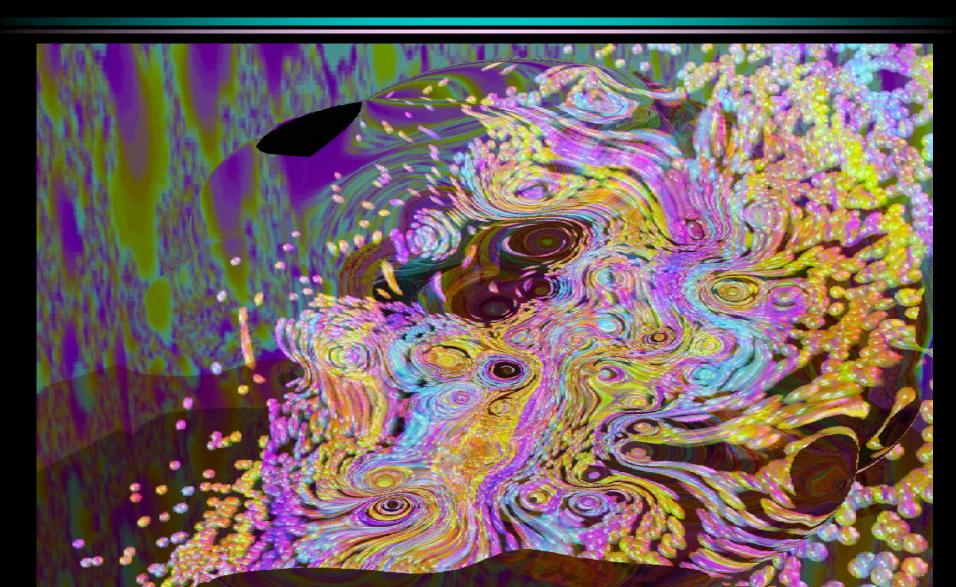
#### Biological Metaphors in Computing Kevin Cain



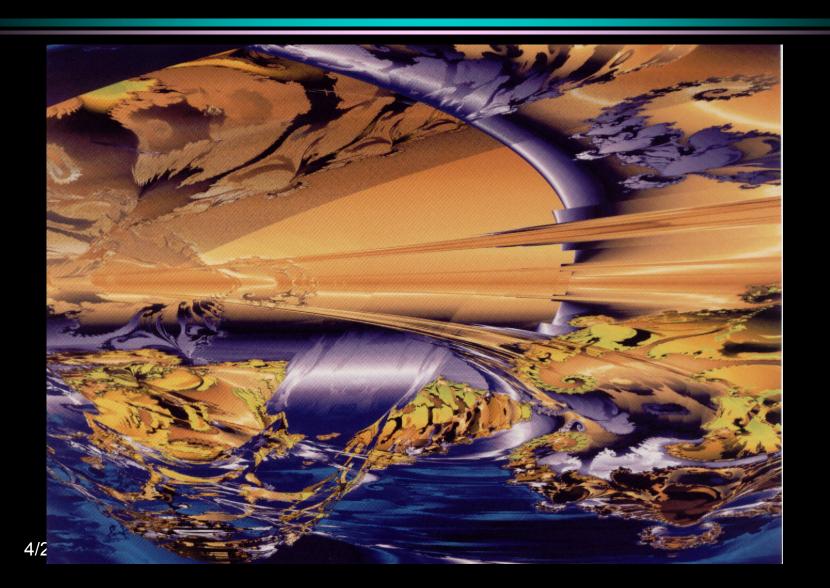




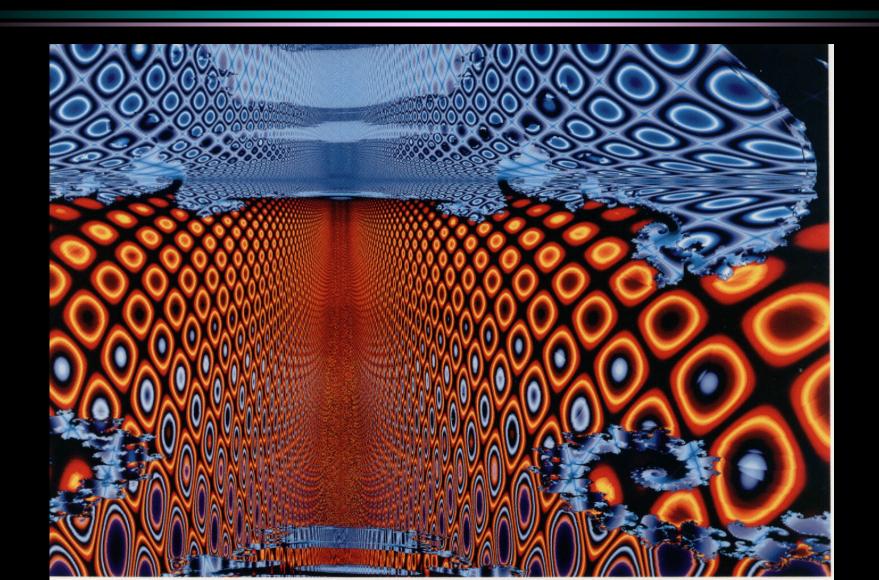




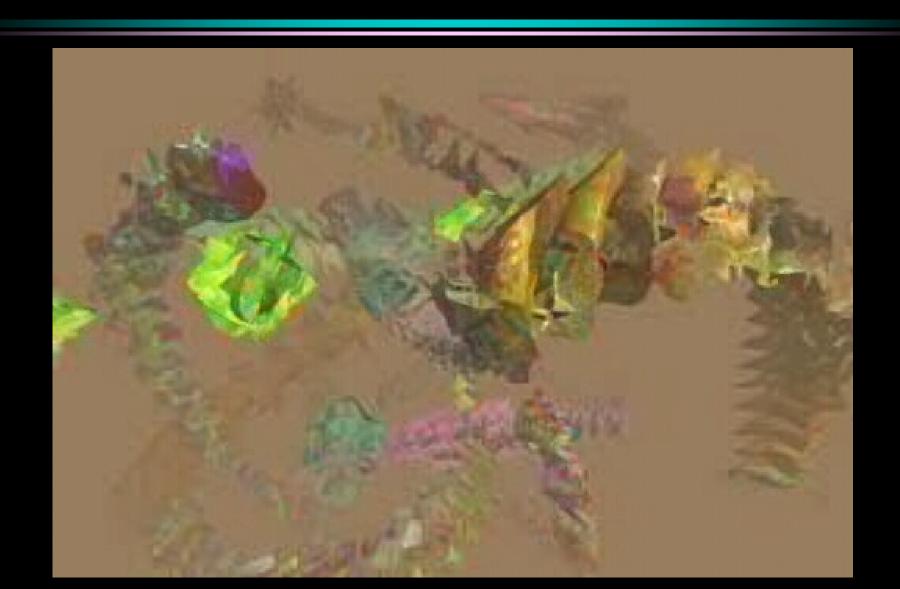
### Genetic evolution applied to fractal systems – Steven Rooke



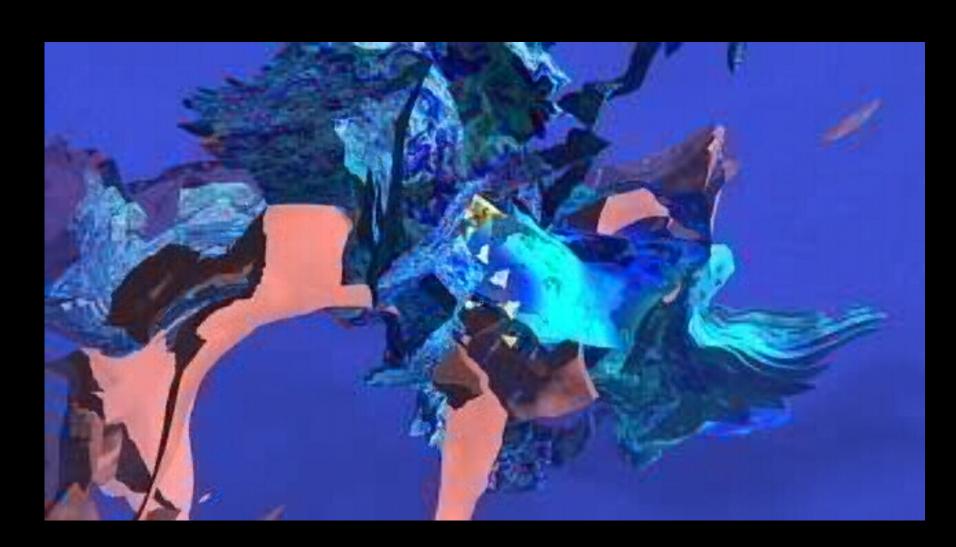
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## Genetic evolution applied to artificial life – Kees van Prooijen



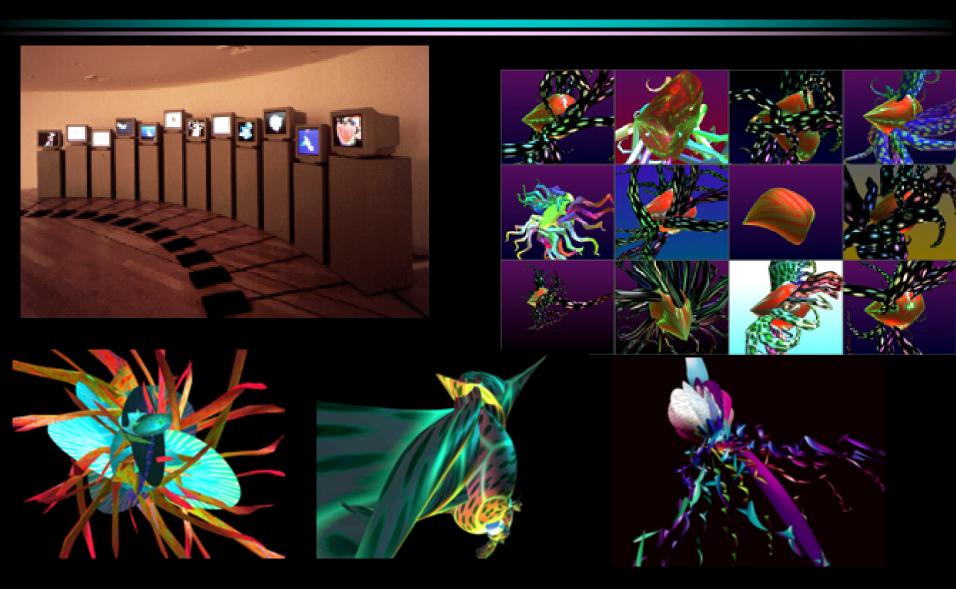
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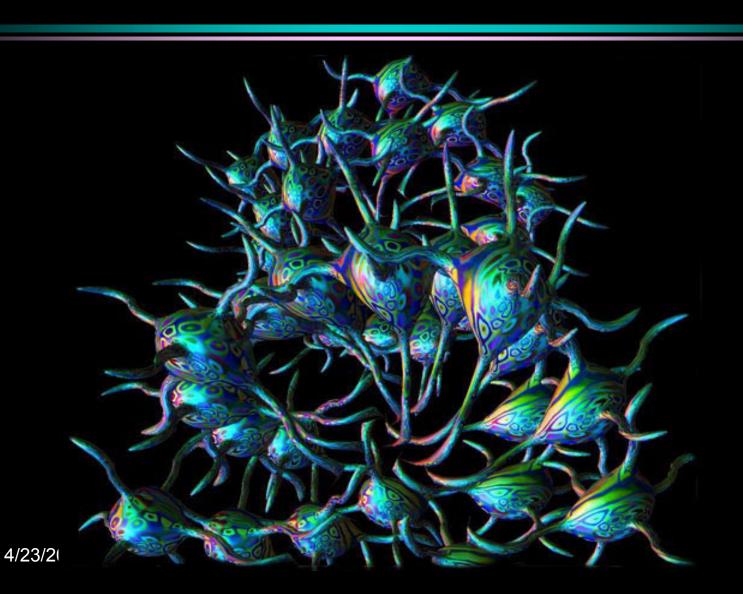




## Genetic evolution applied to artificial life – William Latham



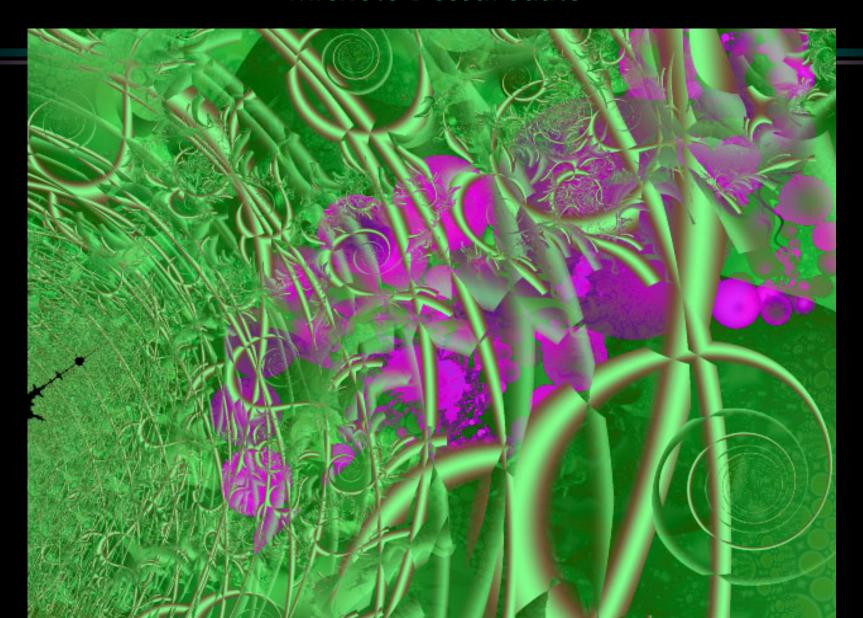
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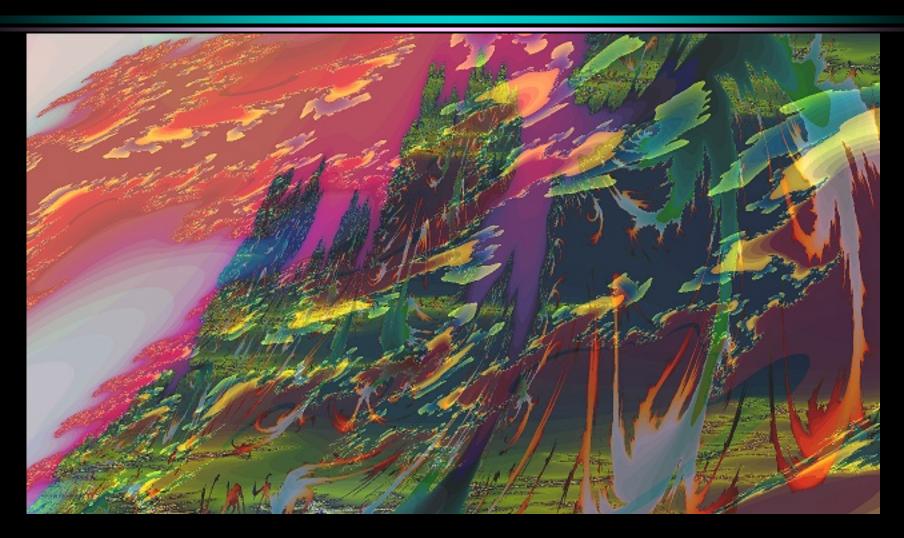
## Fractal Variant Extrapolations – *Michèle Dessureault*



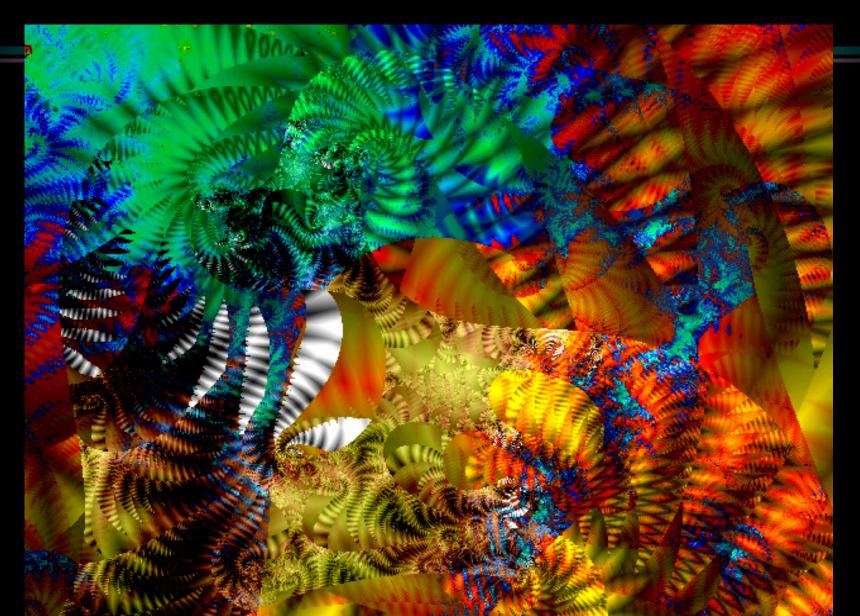
## Fractal Variant Extrapolations – *Cory Ench*



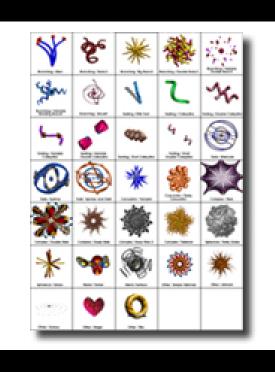
#### Fractal Variant Extrapolations – Lee Skinner

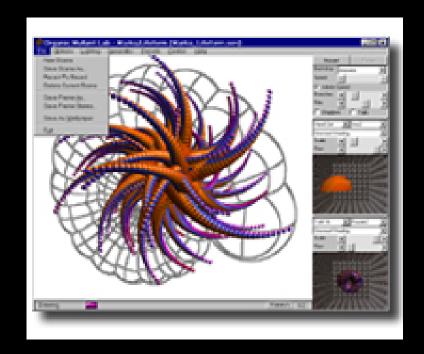


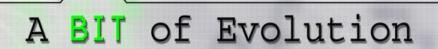
## Fractal Variant Extrapolations – *Arne Richter*



### Genetic evolution applied to artificial life — William Latham











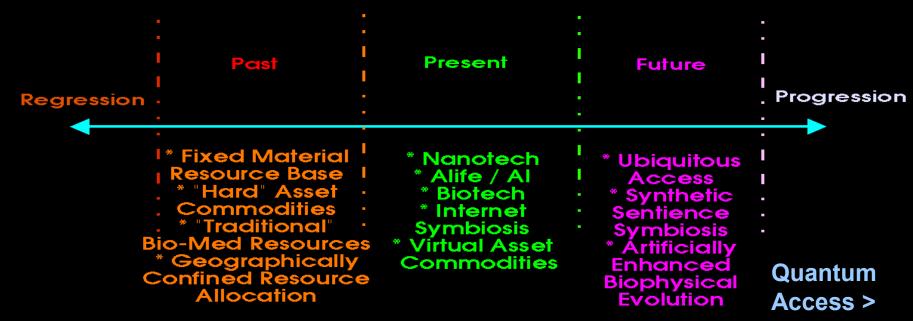




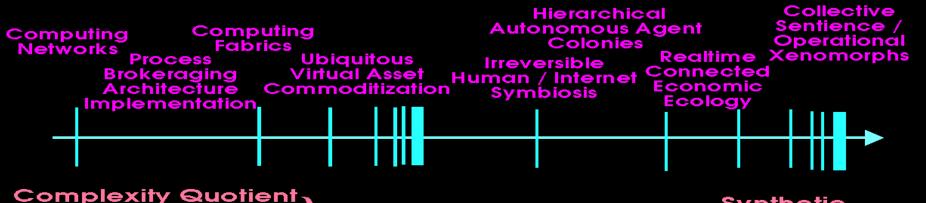
#### Biological Metaphors in Computing Bill Niedow



### Evolutionary Threshold Domains



#### **Evolutionary Eventstream Seminal Markers**

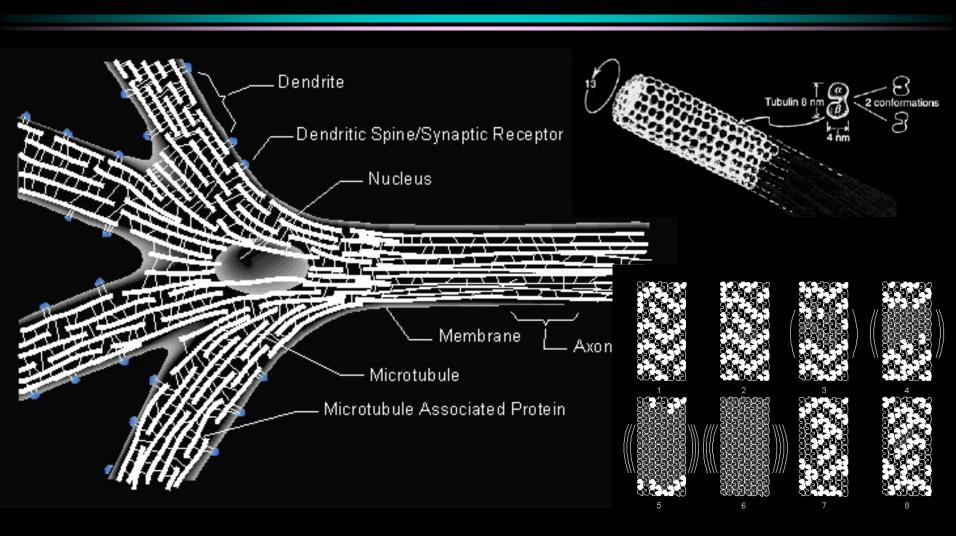


Temporal
Compresion
Index

System Viability

Compunding Multiplier Effect Synthetic Sentience Symbiosis Threshold

### Microtubulin / Neural Quantum Interface Infrastructure



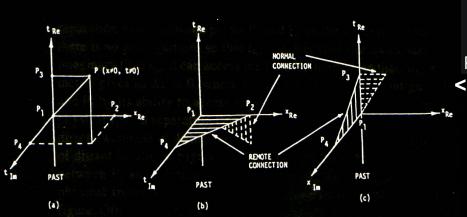
# 4D Spatio-Temporal Domain of Biophysical Confinement in Localized Phenomenological Causality Linkage vs 8D / ND Quantum Domain non-Locality Space-Time Metric

The Speed of Thought: Investigation of a Complex Space-Time Metric to Describe Psychic Phenomena Elizabeth Rauscher, Russell Targ

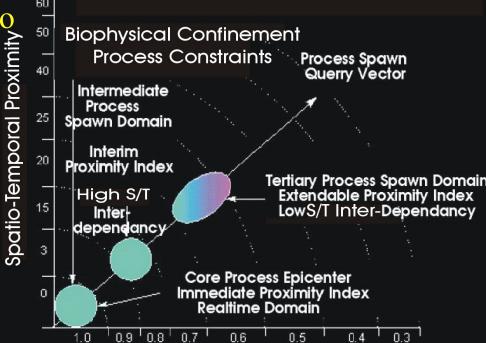
8-dimensional metric known as "complex Minkowska space" of the Speed of Thought: Investigation of a Complex Space-Time Metric to Describe Psychic Phenomena Elizabeth Rauscher, Russell Targ

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The Speed of Thought



#### **4D Spatio-Temporal Process Manifold**

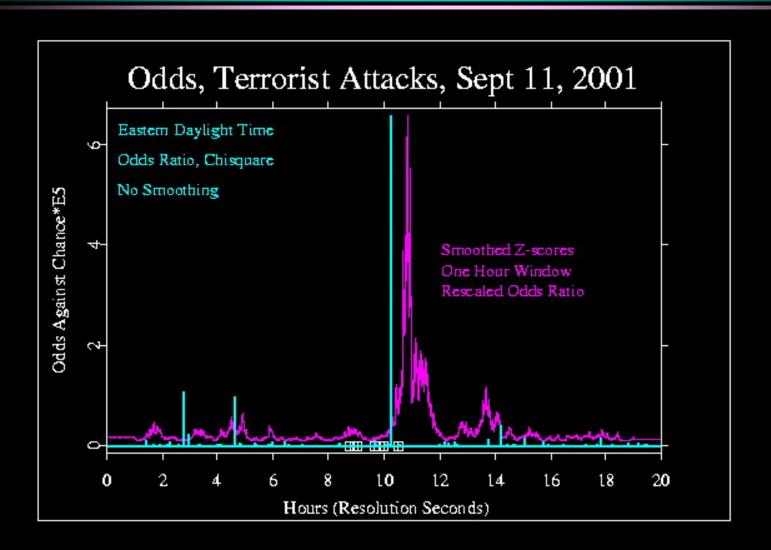


Phenomenological / Causality Linkage Proximity Domains

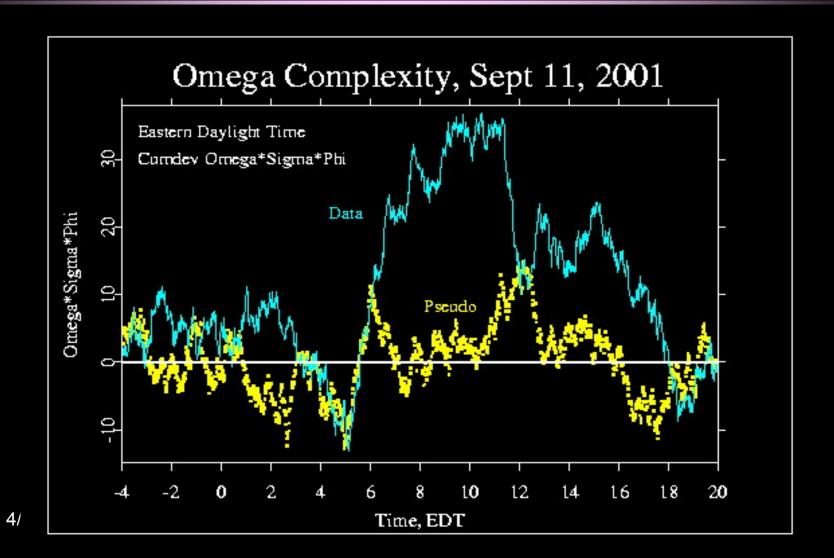
< 8D Precognitive perception domain model

- A spatio-temporal separation
- B spatially separated, temporally synchronous
- C temporally separated, spatially contiguous

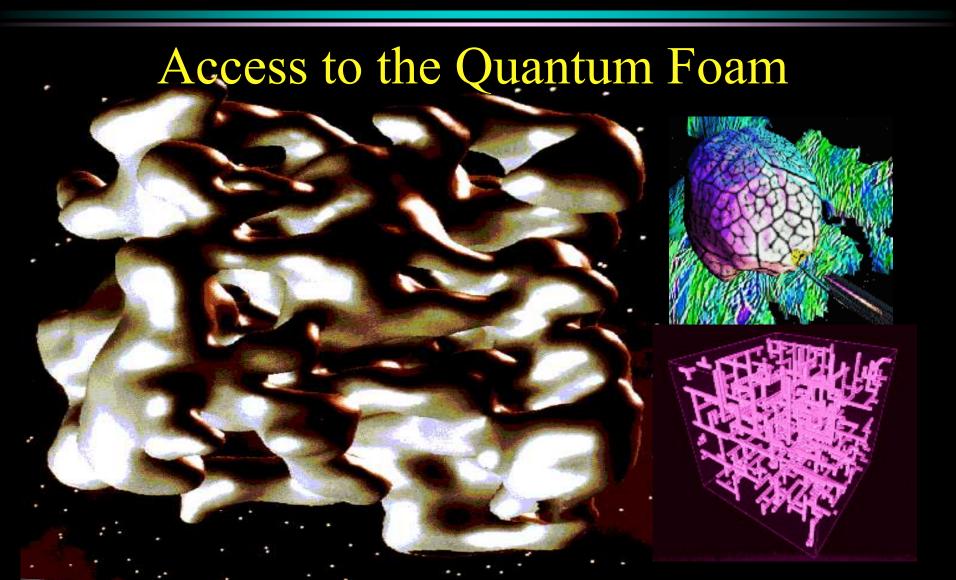
#### Evidence of Potential Entanglement Field Artifacts of Quantum Domain State Phase Transitions Affecting RNG Datastream Statistical Variants – Mass Mental Syncronicity Event Correlation



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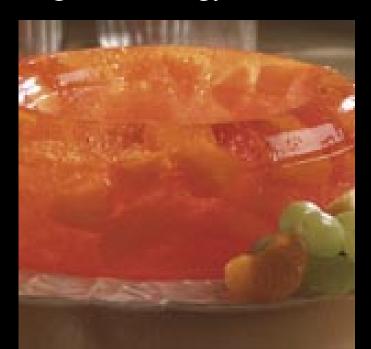


# The Next Evolutionary Eventhorizon Hybrid Forms of Consciousness -



# We are Biophysical Manifestations of Entities Dwelling within a Ubiquitous Quantum Manifold — the "Quantum Jello" model

- All Living Things are Interconnected into an Operational Ecology
- Life as it is currently perceived extends beyond mere "biophysical containment"
- This Planet as a "Living System" is Interconnected into a Cosmological Ecology





## Evidence of Physical Manifestations of Communication within the Empathic Web

