VISUALIZING THE CYBERSEMIOTIC EXPERIENCE

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Space-Time Aesthetics in the Meta Environment:
A Cybersemiotic Analysis and Case for Knowledge Art

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Dyslexic + ADHD + Hearing Impaired
Brazil + USA
User experience

Design

USER EXPERIENCE  versus  DESIGN
Ultra-tiny computers are embedded into stars. 

Intelligent light 
Intelligent ceiling 
Intelligent air conditioner 

Intelligent wall 
Intelligent chair 
Intelligent desk 

Communication terminal 

Intelligent wall 
Intelligent floor 

To the outside 

Ubiquitous network
Hi Lee,

Michael Lehman from our Sydney office is working on the same marketing proposal with you. It might be helpful to connect with him when you have a chance.
Why Art?

- Skills
- Language
- Aesthetics
- Communication
- Self-Expression
- Awareness + Consciousness
Components of Art

Subject Matter
- The What
- Person
- Thing

Content
- The Why
- Message:
  - Emotional
  - Intellectual
  - Political

Context
- Background
- Religious
- Culture/Language
- Political
- Environmental

Form
- The How
- Design
  - Elements
  - Principles
The understanding of how the Components of Art work together to help us experience art is an established knowledge. Art historians and art practitioners use these four aspects to analyze and understand artworks but when it comes to understanding our reality, we fragment reality in its different aspects. Mind, body, emotional, intuitive. Our experiences manifest holistically but are cut into different areas/fields which don’t necessary share the same concepts, words, meaning…

Claudia Jacques

Marcel Duchamp, Nude Decending a Staircase, No. 2, 1912
Oil on canvas, 58 x 35 in.
HUMAN PERCEPTION
- semiotics

USER EXPERIENCE INTERFACE DESIGN
- user
  - physical
  - embodied
  - temporal
  - perception
  - meaning

COMPUTER INTERFACE PROCESS
- cybernetics, information design, digital media

INTERFACE DESIGN
- interface
  - physical & digital
  - embodied & disembodied
  - temporal & atemporal
  - logic

Perception x Process
- digital logic processes
- disembodied atemporal
interface information

user

Meta-Environment
Human element

“One that uses” something:

- information
- interface

user
• Entropic transmission of data and metadata in binary format that generates communication as a whole.
• Metadata is not only the description of the content but also the description of the structure of the content.
• “A difference that makes a difference”
  Gregory Bateson's definition of a “bit” or “elementary unit” of information.

Weiner, 1948, 1965, p61
Shannon & Weaver, 1959, p100
Interface is described in physics as a “surface separating two phases of matter.”

Encyclopaedia Britannica

physical machine, hardware + software, applications and processes utilized by these machines

Medium — hardware+software — that facilitates the interaction between humans and information.

interface
“Cybersemiotics is a transdisciplinary theory of Information, Cognition, Meaning, Communication and Consciousness that integrates Cybernetics and Peircean Semiotic paradigms in a common framework.”

Soren Brier, 2008
“Information and meaning, logic and emotion have to be united in new creative ways.” Brier
It is also important to consider in this analysis the understanding that the Meta-Environment is here seen as a closed system with three distinctive interactive elements, and individually each element have many distinctive interactive parts. As such, it can be regarded as a Dynamic Complex System where the influence of the individual elements on the system is greater than the sum of these elements (nonlinearity) affecting the system’s predicted stability – chaos (Gershenson and Heylighen, 2005.)
<table>
<thead>
<tr>
<th>Categories/Elements</th>
<th>User</th>
<th>Information</th>
<th>Interface</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatiality</td>
<td>Physical</td>
<td>Digital</td>
<td>Physical + Digital</td>
</tr>
<tr>
<td>Temporality</td>
<td>Temporal</td>
<td>Atemporal</td>
<td>Temporal + Atemporal</td>
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<tr>
<td>Essence</td>
<td>Atoms</td>
<td>Bits</td>
<td>Atoms + Bits</td>
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<tr>
<td>Sign Processes</td>
<td>Subjective</td>
<td>Objective + Subjective</td>
<td>Objective</td>
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<tr>
<td>Embodied Cognition</td>
<td>Embodied</td>
<td>Disembodied</td>
<td>Embodied + Disembodied(^{17})</td>
</tr>
<tr>
<td>Dynamic Complexity</td>
<td>Linear + Nonlinear</td>
<td>Nonlinear</td>
<td>Linear</td>
</tr>
</tbody>
</table>

Table 1
Meta-Environment

The Cybersemiotic Experience

Generative Dynamic Complex Adaptive System
Meta-Environment

The Cybersemiotic Experience

Generative Dynamic Complex Adaptive System

Cybersemiotic Framework

Context

User Interface

Information
THE CYBERSEMIOTIC STAR

LIVING SYSTEMS

FORM

KANTIAN WHOLES AND AGENCY (S. KAUFFMAN)

ORGANIC EVOLUTION

BIG BANG COSMOLOGY

NON-ERGOTIC AND NON-EQUILIBRIUM (PRIGOINE)

SUBJECT MATTER

MATTER/ENERGY

EXPERIENTIAL CONSCIOUSNESS

CONTENT

CHOOSE BASED PERSONAL DEVELOPMENT (MERLEAU-PONTY)

EXPERIENTIAL CONSCIOUSNESS

HISTORY OF CULTURE

ABDUCTIVE AND LANGUAGE-DRIVEN KNOWING (POPPER)

SOCIAL MEANING

LIVING EMBODIMENT

INNER MENTAL WORLD

LANGUAGE

CONSCIOUSNESS

SOCIAL SEMIOTIC PRACTICES

PHYSICAL NATURE

THE OTHER LANGUAGE

CONTEXT

MATTER
THE CYBERSEMIOTIC EXPERIENCE IN THE META-ENVIRONMENT
Integration: Polyhedron
Generative
Dynamic
Complex Adaptive System

Visualization Models
Thank you!

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