The Work of Culture in the Age of Cybernetic Systems

Bill Nichols (1988)

Jee Yeon Hwang
“Cybernetic” Systems

- Array of machines that exhibit computational power
- Dynamic, even if limited, quotient of intelligence
- Self-regulating mechanisms or systems within predefined limits and in relation to predefined tasks
- **Computer** - symbolizes the entire spectrum of networks, systems, and devices that exemplify cybernetic or “automated but intelligent” behavior
Walter Benjamin

- Correspondences among three types of changes
  - Economic mode of production
  - Nature of art
  - Categories of perception
- “The Work of Art in the Age of Mechanical Reproduction”
- Nichols recalled contrast characteristics of cybernetic systems in Benjamin’s essay
Contrast Characteristics of Cybernetic Systems

- The contrast characteristics establish a central metaphor to understand the cybernetic systems
- How the metaphor acquires the force of the real
- How the preoccupation of a cybernetic imagination have gained institutional legitimacy in areas such as the law
- Tension between the liberating potential of the cybernetic imagination and the ideological tendency to preserve the existing form of social relations
Mechanical Reproduction & Film Culture

- Take away art of its *aura = authenticity*
- Replace aura with *mystique*
- Change categories of perception
- Make **copies** of visible objects regarded as unique
- Has had an impact on the art itself: its form, its content, and how it is perceived
Mechanical Reproduction & Film Culture

- **Montage**
  - Element of film that testifies the new form of machine-age perception
  - Rips things from original place and reassembles them
  - Dadaism: “Changes of place and focus which periodically assail the spectator”
  - Transcends and completes the project of the Dadaists
    - strips aura from the work of art
  - Liberating potential, prying art away from **ritual** toward **political** engagement
Developing new ways of seeing to the point where they become habitual is not ideological but transformative.

Benjamin writes: the shock effects needed in order to adjust to threatening changes.

Montage
- Connecting dissimilars to shock an audience into insight
- Major principle to artistic production in a technological age
Beyond mechanical reproduction what changes with cybernetics?

- Does the technological changes introduce new forms of culture into the relations of production at the same time as the “shock of the new” helps emancipate us from the acceptance of social relations and cultural forms as natural, obvious, or timeless?

- Have cybernetic systems brought about changes in our perception of the world that hold liberating potential?
Beyond mechanical reproduction
what changes with cybernetics?

- **Mechanical reproduction** centers on the question of **reproducibility** and renders authenticity and the **original** problematic.

- **Cybernetic simulation** renders **experience**, and the **real** itself, problematic.
  - Instead of reproducing, and altering, our relation to an original work, cybernetic communication simulates, and alters, our relation **to our environment and mind**.
  - Computer systems simulate into **existence**, **being here**, **life itself**.
Cybernetic Systems & Electronic Culture

- Substantial slippage on the concept of “text”
  - Although a textual element can still be isolated, computer-based systems are interactive and open-ended
  - Dialogue of digital computation de-emphasizes authorship and take fixed but continually variable form
Cybernetic Systems & Electronic Culture

- Cybernetic systems
  - Offer almost immediate and personal response like face-to-face encounter
  - Give form, external expression, to process of the mind
  - Provide freedom the illusion of control and reduce risks of direct encounter
Cybernetic Systems & Electronic Culture

- The chip replace the copy

- As mechanical reproduction of copies revealed the power of industrial capitalism to reorganize and reassemble the world around us, rendering it as commodity art, the automated intelligence of chips reveals the power of postindustrial capitalism to simulate and replace the world around us, rendering both its exterior and interior realm of consciousness, intelligence and intersubjectivity as commodity experience

- The copy reproduces the world, the chip simulates it
The Cybernetic Metaphor: Transformations of Self and Reality

- Central metaphors of the cybernetic imagination
  - Human as an automated, intelligent system
  - Automated, intelligent systems as human
  - The simulation of reality but the reality of the simulation

- Cyborg (cybernetic organism) - Norbert Wiener’s term
  - Instead of seeing humans reduced to automata, sees simulacra which encompass the human elevated to the organic

- Human cognitive apparatus is expected to negotiate the world by means of simulation – The real becomes simulation
The Cybernetic Metaphor: Transformations of Self and Reality

- The cybernetic organism distinguish intellectual and technological property

- Patent – only original, unobvious, practical applications of the "laws of nature" are eligible for protection

- Copyright – providing economic incentive to bring new ideas to the market
  - Not protect ideas, processes, procedures, systems or method, only a specific embodiment of such things
Transformative Potential vs. Conservative Practice

- Mechanical reproduction (the ability to take things apart and reassemble them) extends further with cybernetic systems (which was mere possibilities or probabilities manifest themselves in the simulation)

- Through recombination, what falls open to apperception is:
  - The relativism of social order and how liberation from imposed order is possible
  - The set of systemic principles governing order itself, its dependence on messages-in-circuit, regulated at higher levels to conform to predefined constraints
Transformative Potential vs. Conservative Practice

- Discover how liberation from them is possible by refining those constraints
- Cybernetic systems & cyborg (as human metaphor) refute individual free will and subjectivity
- Liberating potential – seeing ourselves as part of a larger whole that is self-regulating and capable of long-term survival
- Conscious purpose guides the invention and legitimization of cybernetic systems
Transformative Potential vs. Conservative Practice

- Gregory Bateson
  - Man is only a part of larger systems and that the part can never control the whole

- In the larger ecosystem, the unit of survival is:
  - The adaptive organism-in-relation-to-its environment
  - Not the monadic individual or any other part construing itself as autonomous or “whole”
Transformative Potential vs. Conservative Practice

- “Transgression does not negate an interdiction; it **transcends and completes** it”

- The cybernetic metaphor is for enhanced future inside a **prevailing model** that
  - substitutes part for whole
  - simulation for real
  - cyborg for human
  - conscious purpose for the de-centered goal-seeking of the totality (system + environment)
  - The task is not to overturn the prevailing cybernetic model but to transgress its predefined interdictions and limits