Interaction with media

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How does interaction with media affect how we manage and understand complexity?

The human nervous system is an extraordinarily resourceful and adaptive structure. We continually look for meaning and connections because we are biologically and culturally conditioned to make coherence. Media maintains the coherence of a community by materializing agreed upon ways of managing and understanding complexity that stabilize uncertainties. Driven by curiosity, we continue to invent new ways to experience and understand who we are and who we can be.

.:. Jean Baudrillard, French cultural theorist and post-structuralist philosopher, argues that people only understand the meaning of signs in relation to a system of signs. Meaning is, therefore, reduced to a self-referential simulation that is valued over the real. Influenced by Marshall McLuhan, Baudrillard developed a theory, which states that the forms used to communicate within a culture determine the nature of social relationships. His simulacra and simulation discussions credit media with the creation of a hyperreal in which we experience the simulation of reality through imagery and signs as though they are reality. We are conditioned to value the mediated representation because we rely on social interaction to stabilize uncertainty. Interaction with media, however, is disconnected from the real, which devalues direct interaction with the real as a valuable source of information. (Baudrillard, 1995)

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Media is a representation of experience. It literally mediates the exchange of experiences and knowledge among people. Each form allows a specific type of interaction to emerge, which prescribes specific values for how to express and think about information. As members of the culture, we consent to the values in order to communicate and cooperate; as designers, we perpetuate the values through the interactive qualities of form.

To anticipate emerging mediated experiences, it is helpful to first frame the value structures of existing media. Each media is part of an ongoing relationship among complex individual, communal, and cultural systems. The following briefly describes how interaction with media frames specific ways to understand.

PRINT MEDIA

Printed media quickly became a strategy to disseminate knowledge to distant populations with different cultural beliefs and lifestyles. Interaction with it, therefore, instigates a suspension of disbelief long enough for a reader to accept, or at least fathom, the prescribed meanings. The interaction forces the audience to negate the surrounding peripheral space and escape into composed representations of experience. It also conditions the creator to prepare an argument of a belief to an anonymous audience. (Not exclusive to this document.) Each entity encapsulates a self-referential system, which is open to enough interpretation for the audience to connect. The audience controls the pacing of the fixed form to reflect and reference parts that resonate. Although the representations over simplify the messy implications of direct experience, isolated interactions are an efficient way to argue believed truths and experiences.
.:.By experiencing the world through common frames, we develop skills to interpret mediated representations. We learn to value focused interaction over ambient and peripheral experience.

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TELE-ELECTRIC MEDIA

Exchanging knowledge with foreign populations fueled the desire to overcome physical distance and bodily limitations. Optical technologies, such as microscopes, telescopes, and cameras, frame the world as two-dimensional experiences. Tele-electric systems, such as televisions, further facilitate the experience of the world through viewfinders and framed portals, which connect people to consistent representations of experience. A viewer experiences individual “shows” as a stable series of episodes, which are within the larger system of interactions with televisions

as devices. The fidelity of the mediated experience assigns value to the image as evidence and inhibits reflective interpretation. Documented evidence is also an efficient way to construct and share knowledge.

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When I experience a static document, I find comfort in knowing that it is reviewed and packaged with intention. I can watch passively because I know that it can be watched again. I use a different strategy for viewing live imagery because anything could potentially occur in the limited view. The experience creates a feeling of displacement to know that through the frame, the event I am watching is occurring simultaneously with my immediate space. It stretches me in such as way as to acknowledge that things are happening beyond the perimeter of my senses and I could potentially experience, affect, and be affected by it. Controlling an “instant replay” is similar to déjà vu in that I can instantly reference, change, and reframe recent experiences. It is an experience between live and documented information from which I determine relevancy.

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DIGITAL MEDIA

As communities grow, reliance on documented communication is imperative. The quantity of de-contextualized entities that growth entails, however, is overwhelming. The computer has forged a path for digital media so deep that interaction with all information is limited to a singular fixed frame—one system. With the task of managing this complex system, we label and group data based on a relative logic within the system. Whether through tagging, hyper linking, or diagramming, we design structures that reveal connections between the fragments in order to understand the greater implications of the information. Digital media values fragments as both connections within a system and isolated capsules of knowledge. Experiencing information as a network of re-orderable nodes exposes the flexibility of meaning and the importance of context. Associating meaning through pattern recognition is also an efficient way to construct and share knowledge.

.:. Lev Manovich argues that “we are in the middle of a new media revolution–the shift of all culture to computer-mediated forms...affects all stages of communication, including acquisition, manipulation, storage, and distribution; it also affects all types of media–texts, still images, moving images, sound, and spatial constructions (Manovich, 2001).

”By storing flexible data in a database, the system can generate information beforehand or on demand. We conceive of data as a live and up-to-date resource from which to create many different experiences depending on how we combine it. In this sense, data related to a specific person can be assembled to create contextually significant experiences. In studying the language of new media, Manovich outlines the following principles:

- Numerical Representation: all is made up of ones and zeros, therefore, it can be described mathematically and is subject to algorithmic manipulation.
- Modularity: the same structure is used throughout the system to assemble groups from parts.
- Automation: Numeric representations and modularity allow the system to generate many variations removed from human intention.
- Variability: it is mutable and can exist in many different forms.
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Transcoding: new media is created, distributed, stored, and archived on a computer. The logic of the computer, therefore, influences the cultural logic of media. (Manovich, 2001)

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Telepresence and virtual reality are also new interactions that digital media affords. Virtual reality strips away the peripheral by isolating a user in a predetermined simulated space. However, it begins to reintroduce visceral movement back into interaction with information. Digital media gives users agency to manipulate prosthetics and witness personal affects in distant physical and virtual systems. With the entanglement of physical and digital movement, the separation between mind and body may blur to the point of a new experience in reality all together.

A user can study a 3D model of a tumor in a vein at a scale equivalent to the user’s body. He/she can rotate and move through the rendering to see it from multiple perspectives in virtual reality. Unlike the passive interaction of televisions, telepresence create opportunities for a participant to actively manipulate distant spaces.

Systems, such as the Da Vinci Surgical System, allow a surgeon to perform a surgeries through augmented sight and tactility, which is more precise and less intrusiveness than traditional practices.

As an additional example, NASA can explore and collect samples from Mars through a remote control robot, which is otherwise humanly impossible.

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Designers can continue reducing and expanding the scale of boundaries, but some thresholds are more important to individuals than others for constructing meaningful relationships. As digital media approaches and exceeds now, different interactions can develop that are closer to the needs of real time interaction.