Material-immaterial Duality of Digitalized Media

Zilu Cai

Guangzhou Broadcasting Network, Guangzhou, Guangdong, China

Abstract: Media, as the physical embodiment for texts, has gone through drastic changes since the invention of printing press that allows for fast reproduction of physically identical copies. We have been endowed with a symbolizing system that is tuned to allographically separate the mind and the matter conveyed through media. However, with digitalization, the materiality of media has been diminished. The digitalized media are so highly manipulable and easily changeable that it deprives most of physical properties away. The "content", the immaterial seems to be the only definitive characteristic for a digitalized media. Would this implies that the materiality is now determined by the immateriality and the end now justifies the means? In this essay, we put the dialectical relation that supports material-immaterial duality of digitalized media under examination. We believe that before any digitalized media can transcend beyond the physical world, its materiality must be fully recognized.

Keywords: media, digitalization, material-immaterial

1. Elucidation

We are signal-processing devices, programmed to send and receive. Language is a fine-tuned scheme that allows collation of signals: material flows from and is symbolically fed back to the system within predetermined bounds. Beyond certain limits, it ceases to subsist. As Derrida notes in Dissemination, "what it is is not what it is, identical to itself and unique, unless it adds the potential of being repeated as such" (1875); the basic prerequisite for its being or transmission lies in its reproducibility or symbolic existence. This is how we read texts. Work that is singular and unrepeatable loses existence within a symbolic register.

Being registered through our symbolizing system (language, culture codes etc), a text, such as any individuated material or cultural object, passes in an exchange between the sender and the recipient. A video, as it combines various materials, is instantiated across different such exchanges. But still, it remains bounded in its existence and identity. Texts can exist independent of its physical manifestation; not an idea but based on similar thinking.

Much had been said when Descartes examined the dichotomous duality of matter and mind. It became even more explicit when Gutenberg invented printing press that automated, mass-produced and mechanized the reproduction of texts, gave rise to a process that continually withdraws the physical, mechanical and material activity from experience. Texts, as meterial realization of the mind since then have became more susceptible to slippage from subject to object, from mind to matter. Copyright covers this slippage, originally for books, then extends to photographs, paintings, sound recordings, computer programs. Intellectual property articulates that embodiment doesn't define a text, it exists in the purely symbolic system of mind outside matter. Each word is a sign, whose identity is determined by "sameness of spelling". We are like "allographic" reading machines that substantiate such immateriality because we have a constant error detection and correction component in the language system that operates within certain tolerances. How far a text has a singular existence depends on how good this component socially programmed.

2. Evolution

The books, representing the printing press, retain a certain degree of materiality. Digital reproduction, however, by offering possibility of embedding of the immaterial into the material, promises the separation of mind and matter. It forms a different symbolizing channel for intact transmission, which in turn, folds immateriality over itself. A computer, for instance, creates a caveat for peeking into a realm beyond our physical world. The potential that it possesses in duplication and recreation is incomparable.

Since the advent of digital technology, the conception of digital space has been prone to be confused with an unmediated immateriality divorced from its material ground. An otherness no longer defined by a self. Digital texts aren't immaterial because first of all, they share a root in material ground. Yet more importantly they have an existence in a symbolic system, a system that transcends materiality . It is not that digital space isn't immaterial, it is, but it's supported in a dialectical

relationship with a real matter. As pointed out by Poster (Poster, 111), the computer simplifies the written trace. As inputs enter into the computer through the keyboard, pixels are illuminated on the screen and aligned into letters. Since these letters are deep down represented by binary strings in cache memory, they are alterable practically at the speed of light. The writer assembles and calibrates his or her words in a form that is ephemeral, instantly changeable form, which is thus easily mistaken for being immaterial.The production of an Internet artwork in a physical space is hence nothing but a process of materialization. The point is, it's a version of immateriality that was never defined against a material; it is a purely allographic existence.

It is needed to distinguish between "materiality" and "medium" when it comes to the interaction between artistic creation and physical vehicle for it. The materiality is "that which comprises the substance" of the recording or reproducing medium.Unlike a medium, materiality isn't necessarily defined by the work it bears. In the digital context the material does not uniquely define the medium. This is not because the material is now immaterial, but rather a single material (computer) simulates multiple mediums normally supported by different materials. The medium in a digital environment transcends its own material embodiment and evolves into something much more vibrant and richer. The "medium" of painting for example, in a digital interface attempts to emulate the material of paint and canvas though its material is ultimately magnetic inscription.

Digitalization undermines materiality or the medium itself. When all media is generalized, its physical form degenerates and the distinctions between media seem arbitrary. A video reel's true value lies not in its physical shell and is completely determined by its content instead, "with the postmodernist mentality, we 'accept things at their interface value "(Zizek, 131). A video file stored on a computer, is in a digital state that contains no inherent properties besides its bit size. It bears no material disclosures, therefore it could just as easily manifest itself as any other files.

3. Elevation

Variable interfaces that render the raw data of reality are no longer "motivated" (Hansen, 22), the physical properties that defines media as a material is mostly lost in the digital environment. Digitalization gets described as a infinitely manipulable space in which physical resistances that separate media collapse into one another. Kittler restates this: "'the general digitization of channels and conformations erases the differences among individual media'" (Kirschenbaum, 106) therefore "any medium can be translated into any other" (Kittler, 2).

The homogeneity of digital material enables the full translation from media to media. All prior media can be re-presented and re-produced via "play of signals" (Bolter), a ubiquitous technique of digitalization. This transferrability is referred to as "Remediation" by David Bolter and Richard A. Grusin, who define it as "the depiction of one medium into another" (45). Television, for instance, is a remediation for books, paintings and audios. Remediation is a determining feature of the digital world, and its potential to reshape all past media is unmatched. The new digital media operate between immediacy and hypermediacy; between the transparent existence of the portrayed object and its mediated experience (Bolter, 19). However, the power of digital media to remediate all media is viewed as a poststructuralist example, where Postmodern culture of involvement with the surface play of signals and simulation has replaced the modernist technology that exposed its material operation in a clear manner (Zizek, 131).

"The immaterial is the source of the material" (Heidegger). The material and the immaterial are bifurcated yet interlined twins . Current explanations of immateriality in digital objects do not take a material other into consideration. This does not imply that the immaterial item is the operation of an underlying material or, as Kirschenbaum implies, a "illusion" of immateriality based on actual material computing. Texts may transcend their embodiments; this is what makes semantic representation possible. In a materialist definition, immateriality is merely a concept, but it is also the foundation of our social reality. In the logic of alterity, it would be equivalent to asserting an otherness without acknowledging the self.

However, digital ontology can neither be conceptualized as spiritualist immaterialism nor as the obvious presence of positivist materialism. Similarly to how dissolving matter is the prerequisite for matter's existence, instantiating immateriality is the condition for immateriality. As a change, both are dependent on one another. Similar to how language must forget its material instantiation in order to exist, we must recognize digital material in order to disregard it.

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