

Original Research Article

Digital Epistemology as an Attitude Based on McLuhan's Thoughts*

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Received: 16/05/2024 ;

accepted: 22/08/2024 ;

available online: 21/11/2024

Abstract

Problem statement: In the contemporary world, the term “digital” surpasses mere neutrality, it has evolved beyond a mere collection of tools. The digital age introduces the concept of “digital epistemology” into people’s lives. Digital epistemology, influenced by McLuhan’s “mosaic logic”, adopts a lens-like approach, viewing the interplay between cultural galaxies through digital interfaces. Contemporary individuals now comprehend existence through this multifaceted lens. This research raises fundamental questions:

Does digital merely encompass neutral tools and concepts, or does it actively shape our perception and understanding of life? Do the effects of digital epistemology extend beyond the present and future, impacting our interpretation of the past and historical events? How have “Emblems” influenced people’s lives in this digital age?

Research objective: To explore these inquiries, this article delves into the subject of digital contemplation, shedding light on digital epistemology.

Research method: This research method draws from genealogy—an approach that examines events and their dispersion resulting from conflicting forces. Unlike linear historical studies, genealogy provides a broader perspective.

Conclusion: In conclusion, the findings reveal that digital transcends neutrality; it introduces digital epistemology into an individual’s daily experiences. This epistemological framework shapes understanding of both past and present concepts. Furthermore, the pervasive influence of emblems in the digital age imbues them with an epistemological function.

Keywords: *Digital Epistemology, Media Archeology, Cabinet of Curiosity, Emblem, Marshall McLuhan.*

Introduction

The impact of digitalization reverberates across various facets of life—communication, information,

media, and daily routines. Yet, its influence extends beyond the confines of purely digital domains. In addition to spawning novel concepts and opportunities in fields like art, humanities, and economics, digitalization also reshapes our understanding of past experiences and achievements. The concept of “digital epistemology,” as employed by the author, transcends

*This article extracted from Ph.D. thesis of “Mohadeseh Vahidimehr” entitled “The Influence of Power Institutions on the Formation of the Episteme of the Art Economy in Digital Era” that under supervision of Dr. “Abolfazl Davodiroknabadi and Mahsa Khoie” and in consultation of Dr. “Aliakbar Jahangard” which is in the process at Islamic Azad University, Kish International Branch, Faculty of Art Research, Kish Island, Iran in 2024.

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mere reliance on digital objects. Its consequences ripple through texts and works that don't explicitly address digital themes. This study doesn't confine itself to computer games, electronic art, or digital literature; rather, it reveals how digitization permeates even non-digital creations. The following key questions guide this exploration through the article: Can digital serve as a contemplative lens, akin to Sherry Turkle's notion of "things to think about"? Does digital encompass only neutral tools and concepts, or does it also shape the perception of existence? How does digital epistemology influence our view of the past and history?

The genealogical analysis further illuminates this terrain. We inquire into the resurgence of emblems—elements dating back to the 16th century—in the digital age, transcending conventional cause-and-effect criteria. Digital emerges as a perspective, a lens for historical reflection. Marshall McLuhan's approach, akin to juxtaposing the television age with Renaissance culture, informs our understanding. By studying pre-digital thought, we decode our technological present. Simultaneously, reflecting on contemporary tech culture unveils insights into pre-digital aesthetics, rhetoric, and epistemological discourse. This article adopts a media archaeology approach, viewing the digital not merely as tools or networks but as intellectual practices. McLuhan's lens metaphor resonates—the media as an interface for observing culture, history, and society. To clarify the digital age's characteristics, we invoke two pre-digital concepts: "cabinets of curiosity" and "emblems". These serve as touchstones for exploring digital epistemology alongside McLuhan's theories.

Literature Review

The digital age has been scrutinized from diverse angles, revealing its multifaceted nature. Notably, scholars have delved into the epistemological dimensions of this era, unearthing intriguing insights.

Deception in the Post-Digital Era: McKenzie and Bhatt delve into the epistemology of deception. Their book explores how platforms and algorithms manipulate human perception and belief systems, even influencing the formation of governments and social movements

(Mackenzie et al., 2021). *Augmented Reality and Epistemological Challenges*: Turner focuses on augmented reality. He dissects three key epistemological issues within the digital landscape: digital distraction, deception, and divergence. Augmented reality's capabilities and phenomenology are also under scrutiny (Turner, 2022). *Media Perspectives on Epistemology*: Schwarzenegger examines epistemology through a media lens. Concepts like selective criticism, pragmatic trust, and trust in competence come into play in the digital age (Schwarzenegger, 2020). *Human Rights and Digital Epistemology*: Risse explores epistemological rights in the digital world. Comparing China and Western countries, he reflects on the Universal Declaration of Human Rights—a document conceived in an analog era—and its relevance today (Risse, 2021). In this evolving field of digital epistemology, much remains unexplored. This research treats digitality as a theoretical concept, transcending immediate technological referents that examine it through various lenses to gain deeper insights into the past, present, and future.

Research Method

The present research method departs from conventional historical approaches, drawing inspiration from genealogy. Unlike methods fixated on origins or causal links, genealogy highlights discontinuities. It directs our gaze toward the diverse, scattered nature of events—acknowledging that historical phenomena emerge from conflicts and forces (Khanifar & Moslemi, 2018).

Through this historical lens, genealogy recognizes the evolution of understanding over time. It challenges the assumption that meanings have always existed, inviting exploration of shifts in perception and semantics. When we view concepts through a digital "lens," our understanding undergoes a transformation (Foucault, 2015). Even seemingly unrelated historical elements gain new significance when juxtaposed with digital contexts. This perceptual shift enriches our exploration of digital epistemology.

In this analysis, the author employs McLuhan's insights, assembling disparate concepts into a non-linear collage.

The resulting article bridges the past and present, unveiling fresh perspectives on the interplay between digitality and human cognition.

Theoretical Foundations

The theoretical foundation of this review draws heavily from Marshall McLuhan's insights, particularly his exploration of mosaic logic. McLuhan posited that dissecting individual components of phenomena often leads to a distortion of their true recognition and comprehension. Instead, he advocated for a holistic approach—one that considers various elements collectively to arrive at novel understandings.

In light of this perspective, examining pre-digital modes of thought becomes crucial. By juxtaposing past and present elements within a single image, we gain valuable insights into the contemporary era. In the subsequent sections, the author will delve into some of McLuhan's key ideas, aligning them with the central theme of this article, and will employ these concepts to explore the role of digital epistemology.

• McLuhan's juxtaposition: Mosaic logic

Marshall McLuhan contends that the study of phenomena should occur in a broad, mosaic-like manner. Rather than isolating individual elements, he advocates for viewing them collectively. As Lamberti aptly puts it: "McLuhan employs his mosaic approach to challenge conventional notions of knowledge, shifting readers from a linear (logical, orderly, exclusive) perspective to an irrational, simultaneous, and inclusive one" (Lamberti, 2012). This perspective encourages multidimensionality and the discovery of fresh meanings. In alignment with media archaeology, McLuhan regards media as lenses or interfaces for observing culture, history, and society. According to him, by examining phenomena through this lens, we can retrospectively connect the television era with Renaissance culture, thereby generating novel insights. McLuhan rejects the notion of phenomena following a strict linear order; instead, he likens them to mosaic pieces that must be assembled for deeper comprehension. From his vantage point, this encounter leads to transformative shifts in understanding both the television era and the Renaissance period.

In Gutenberg's Galaxy, McLuhan asserts: "Two cultures or technologies can pass like astronomical galaxies without colliding. But not without a change of configuration... This intersection [acting as an 'interface' between cultures] is the primary catalyst for the renaissance in our 20th century" (McLuhan, 1962). Moreover, adopting McLuhan's approach benefits contemporary authors seeking insights into the digital age and pre-digital concepts. Digitality transcends mere tools, machines, or electronic networks—it becomes a mindset. McLuhan's method, characterized by assembling disparate elements, challenges the logical and linear order of modernity. The writer views McLuhan's mosaic as emerging from the principle of proportionality, countering the standard Western knowledge paradigm. To delve deeper into the function of McLuhan's mosaic, we explore its relationship with this fundamental principle.

• McLuhan's principle of proportion and mosaic

In modern times, classification based on the principle of origin played a pivotal role. This approach involved categorizing different phenomena according to their kinship relationships. Visually, this classification resembled a tree diagram. Notably, it was this very method that guided Darwin toward a fresh understanding of the diverse animal species' formation. Presently, this type of classification finds particular application in museums.

Conversely, an alternative approach involves classification based on suitability. Here, elements are organized according to similarity, topic, and thematic connections—a method historically employed in data archives and repositories. Categorization grounded in relevance offers a fertile ground for creative comprehension. It juxtaposes concepts and objects without rigid logical constraints, akin to McLuhan's mosaic. Through this lens, new meanings emerge.

The author contends that our encounter with information and its management in the digital age follows a similar basis. The mental framework shaped by this classification influences contemporary culture profoundly.

• Past and present

In a video clip from Marshall McLuhan's website titled "The Future is the Present," McLuhan asserts that most media incorporate elements from the past while giving rise to new cultural phenomena. He emphasizes that media and technology are not neutral tools; rather, they act as powerful agents of cultural change, shaping human perception and behavior. Regardless of background, these forces foster a sense of connectedness and shared experience among people.

Expanding on McLuhan's words, he states: "New things are always constructed using old elements, or, more precisely, what people perceive in new things often mirrors the old—the rearview mirror. The future of the future resides in the present, a notion that can evoke both fascination and fear" (McLuhan, 1967).

From McLuhan's perspective, the past actively permeates the present and the building blocks of the future lie within current circumstances. Donald F. Theall, one of McLuhan's students, adds: "Paradoxically, McLuhan, like Eliot, views history's significance as intertwined with the 'here and now.' Moreover, he elevates history by using it as a lens for understanding the present. Without delving into the realms of ancient Greece, the Middle Ages, and the Renaissance, we remain blind to the unfolding events of our own time" (Theall, 1969).

• The Flow of concepts from the past to the present

The convergence of historical discourses gives rise to a situation informed by McLuhan's mosaic perspective. Within this context, events are not viewed linearly; instead, they form a mosaic of interconnected elements.

To explore the epistemological nature of the digital world—encompassing the Internet and digital objects—the author employs two ancient concepts: the cabinets of curiosity from the early modern era and the 16th-century notion of the emblem. This genealogical inquiry culminates in a carefully crafted collage. Here, discrete historical concepts are juxtaposed within a single image, allowing for the extraction of fresh insights.

• The cabinet of curiosity

The "cabinet of curiosity" stands as a fascinating phenomenon from the early modern era. Its heyday spanned the 16th, 17th, and 18th centuries. These cabinets—sometimes grand, multi-compartmental closets or even entire rooms—served as precursors to museums. Their purpose? To encapsulate the accumulated knowledge of their time. Within these cabinets, an eclectic mix unfolded: works of art (often delightfully peculiar), natural specimens, and unique artifacts, all meticulously arranged. Fig. 1 shows an example of a cabinet of curiosity. Beyond mere collections, these cabinets also served as symbolic memorials, signifying the influence and power of their owners.

Creating a cabinet of curiosity involved blending tangible materials with relatively strict guidelines, social conventions, and artistic sensibilities. Art historian Horst Bredekamp sheds light on Francis Bacon's approach to designing these cabinets. Bacon emphasized the role of "play" in connecting diverse objects within the collection. Here, play encompasses associations, humor, games, and the interplay of elements (Bredekamp, 1995). For Bacon, the associative method and hedonistic curiosity were central to engaging with the curiosity cabinet.



Fig. 1. "Musei Wormiani Historia", (1655) from the Museum of Wormianum, depicting the cabinet of curiosities belonging to Ole Worm. Source: <http://www.sil.si.edu/Exhibitions/wonderbound/crocodiles.htm> Smithsonian Museum

Expanding on this scientific play, Bredekamp highlights the Cabinets of Curiosity's significant contribution: They shifted the focus from knowledge as a hidden core to knowledge as a result of free association. The legacy of this mindset persists in psychoanalysis and iconography—an enduring belief that playfulness fuels creative minds, unencumbered by predetermined goals (*ibid.*).

Within curiosity cabinets, phenomena lacked a cause-and-effect order. Objects were juxtaposed without obvious purpose, stimulating the mind's playfulness, creativity, and reflection. Susan Crane characterizes these cabinets as places where "curiosity" awakens—an invitation to explore the freely collected objects and their intertwined stories, blending fantasy and reality. Some cabinets even showcased imaginary items like unicorn horns, weaving narratives far removed from reality. In contrast, 19th-century museums meticulously organized their exhibits to convey a systematic historical narrative (*Crane, 2000*).

As in the past, the arrangement of objects in curiosity cabinets followed principles of proportion. In our digital age, human exposure to information and its management similarly adhere to thoughtful design.

Emblem

In this article, we delve into the concept of the emblem as a mode of thought intricately linked to epistemology. Peter M. Daly posits that we should distinguish between the "symbol" as an artistic form and the emblem as a distinct way of thinking (*Daly, 1979*). Emblems, existing in various forms—titles, images, or comments—flourished during the 16th and 17th centuries, particularly in France, Germany, Belgium, and the Netherlands. These emblem books served as repositories of wonder, blending legends, morals, and sometimes even grotesque compositions. Stylistically, they echoed remnants of medieval courts, a rich source of inspiration. Emblem books defy rigid rules; some contain no images at all, while others rely solely on visual representations. Notably, this genre evolved alongside the burgeoning book printing industry. John Manning and Peter M. Daly view symbols as tools that ignite thought processes,

often imbued with moral or religious connotations (*Daly, 1979; Manning, 2002*). Rather than mere interpretation, they evoke a call to creation.

Daly proposes a shift—from studying emblems as a form to understanding them as a mode of thought. Emblems transcend mere signs and symbols; they correspond to biblical, mythological, and allegorical presuppositions about the world's organization (*Daly, 1979; Manning, 2002*). Here, the focus isn't on the emblem's shape or realism; it's about reflecting the reader's or viewer's experiences.

John Manning's observations of 16th and 17th-century Europe reveal an iconic universe where everything potentially held meaning. The four elements, heavenly bodies, animals, plants, stones, and insects guided the "eye of understanding." Unlike the medieval "book of nature," this symbolic world invited active participation from individuals in constructing meaning (*Manning, 2002*).

As a mode of thought, the emblem demands engagement—a departure from the passive interpretation prevalent in medieval approaches to the Book of Nature. Interestingly, the epistemology rooted in emblems during the 17th century bears striking parallels with our digital age. Let's explore this further.

Discussion

In the exploration of digital epistemology, the author shifts the spotlight away from technology itself and toward its impact on art, organizational structures, and archival systems. Rather than dissecting big data, databases, tablets, smartphones, applications, and networks, the focus turns to abstract relationships. Digital epistemology probes how literature, art, philosophy, and worldviews intersect with the digital. At its core, digital epistemology reshapes the figure/ground relationship within digital culture. It transcends mere technicalities, emphasizing the broader implications of our digital existence.

Drawing inspiration from Gestalt psychology, the concept of figure/ground emerges. Consider the classic image that simultaneously depicts face profiles and a vase (*Fig. 2*). Depending on which aspect the viewer



Fig. 2. Gestalt Figure/Ground. Source: https://www.researchgate.net/figure/The-most-common-example-of-a-gestalt-image-of-a-vase-formed-by-two-profiles-of-human_fig1_335889230

perceives as “ground” or “figure,” their understanding shifts—a reminder that context profoundly influences interpretation.

Marshall McLuhan employs a powerful concept—the shift from describing media content to examining media itself—to illuminate a fundamental change in perspective. According to the author, the entry into the digital era marks the genesis of digital epistemology. This epistemological lens reshapes human perception, prompting reorientation and reconfiguration. Traditional notions of knowledge, truth, and information undergo transformation in the wake of digital technologies and the culture they engender. The digital age invites us to view the world through a new filter—one that challenges established paradigms and invites fresh insights.

• Digital epistemology

In our contemporary landscape, a vast network of media and communication systems profoundly differs from the situation experienced just a few decades ago. This transformation significantly impacts knowledge production, accumulation, and dissemination. The digital realm—pervasive through games, social media, economic tools, artificial intelligence, and applications—challenges not only artistic, cultural, and economic norms but also influences our modes of thinking and methodologies. Lindhe introduces the

digital as a transformative tool—one that prompts us to reevaluate prior knowledge and concepts from this fresh perspective. “Digital perspectives on classical concepts can disrupt or revise long-held assumptions in the humanities and arts” (Lindhe, 2013). Consequently, the author positions the digital as a critical lens akin to post-structuralism or gender theory. It transcends mere technical tools (computers, databases, networks) or objects (digital art, archives, Twitter poetry, games, electronic literature); instead, it becomes an analytical and critical discourse within media.

Enter digital epistemology—a concept that views digital culture as both a lens and an interface. Comparable to aesthetics and genres in the pre-digital era, digital epistemology emphasizes relationships. These connections span art and context, body and text, human and machine, and even bridge postmodern and early modern thought. Throughout cultural history, these relationships persistently shape our understanding. Don Ihde, in *Technological Bodies* (2002), explores how technological tools reflect epistemological shifts. Technical innovations, he argues, blend human and mechanical factors, leading to knowledge production. These tools serve as paradigmatic metaphors for understanding (Ihde, 2002). Ihde terms these man-machine relationships “epistemological engines,” raising questions about perception, environmental understanding, and distribution. In the digital age, knowledge production and distribution extend beyond centralization. Instead, they thrive within a dynamic network—a fusion of people and interconnected digital tools.

To illustrate the impact of digital epistemology, consider search engines—an everyday example that bridges past and present. Platforms like Google, Bing, and Instagram’s search section encourage users to explore specific topics by juxtaposing past studies and seemingly random historical moments. Within this mixed space of past and present, new knowledge emerges. Examining the evolution of search engines and digital databases reveals that in digital epistemology, novelty isn’t entirely novel, and the past isn’t left behind. Instead, the past and present intertwine in novel

ways. Analogous to curiosity cabinets, the internet playfully presents information—a heterogeneous blend from different times and places. This digital cabinet of curiosity allows simultaneous access to diverse content, fostering creative understanding through associative connections. When navigating the internet, users engage in an endless game of selecting and assembling information—a process that continually reshapes their understanding.

Now, let's delve into specific cases that exemplify digital epistemology's bold use of the lens approach, transcending mere tools or objects. Through digitization, new dimensions emerge, shedding light on concepts, genres, and cultural artifacts from both old and new perspectives. The author has thoughtfully selected two contrasting examples for analysis:

• **Salon culture versus social media**

In the past, salons served as informal yet structured meeting places for intellectuals. Within their walls, conversations flowed, ideas exchanged, speeches resonated, and cultural intrigues unfolded. Salons transcended social barriers, bolstering the self-confidence of attendees and fostering candid discussions—even on sensitive topics like sexuality. In essence, these private spaces where art, politics, and culture converged share common features with today's digital social media platforms: blogs, vlogs, Instagram, Facebook, YouTube, TikTok, and Twitter (X). Consider the overlapping functions: Building Self-Confidence, Social Engagement, Navigating Intimate Matters, Informal Conversations, Daily Notes and Reflections, and Navigating Controversies: From riots to debates, both realms grapple with societal tensions. These digital social media functions are shared online and in more or less closed communities. However, differences emerge between the salon and social media: Membership Dynamics: Salons rely on social class, status, and cultural positions; social media recruits via invitations or requests. Social Control: Salons enforced stricter norms; social media operates within more fluid, open communities.

Yet, the intriguing part lies in viewing each through the other's lens. By reexamining salon culture in light of

social media and vice versa, we uncover fresh insights into both phenomena. The past and present converge, revealing how digital spaces echo—and sometimes transform—age-old dynamics.

• **Electronic literature versus the emblem of the renaissance period**

The intersection of electronic literature and the emblem genre invites intriguing comparisons. Consider Manning's assertion that "there was literally nothing under the sun that was not symbolic" (Manning, 2002). This observation resonates with the pervasive emblem found in our surroundings—whether natural or artificial. Notably, the digital game Pokémon Go exemplifies this phenomenon. Released a few years ago, it captivated players by blending augmented reality (AR) with the hunt for virtual creatures known as Pokémon. As users moved through the real world, their mobile devices displayed an AR overlay, allowing them to spot and capture these elusive creatures by following their virtual footprints.

Augmented reality extends beyond gaming. Smartphone apps can virtually restore ancient ruins, bridging the gap between past and present. Similarly, emblems permeate electronic literature, computer games, and web pages. In the realm of sign-based epistemology, meaning emerges gradually from the observation of emblems. Web pages and memes, too, engage audiences through layered symbolism—combining text, sound, and visual elements that often reference contemporary myths and beliefs.

Conclusion

In the contemporary era, the omnipresence of digital elements has transformed the mundane into something more profound. Digital no longer merely signifies neutral objects; it now encompasses an entire epistemological framework. Imagine digital technology as a lens—one that shapes the perception of both past and present concepts. This lens, akin to a cabinet of curiosity, invites exploration. Within its virtual confines, diverse ideas from different temporal dimensions coalesce, forming a mosaic of knowledge and perspective. Marshall McLuhan's insights resonate here. Our

modern gaze - whether conscious or unwitting - filters through this digital lens. Unlike hermeneutics, which seeks fixed meanings, our perception resembles a rotating page where events find no predetermined place. The digital age immerses us in a tangible world of emblems. From simple emoji to video game logos, these symbols transcend mere representation; they permeate our thoughts and attitudes. Consider this: Could we eventually communicate concepts solely through emblems?

The author poses this intriguing question, drawing parallels to humanity's evolution from cave paintings to language and calligraphy. As we navigate this digital landscape, how will these shifts impact human communication?

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HOW TO CITE THIS ARTICLE

Vahidimehr, M., Davodiroknabadi, A., Khoie, A., & Jahangard, A. (2024). Digital Epistemology as an Attitude Based on McLuhan's Thoughts. *Bagh-e Nazar*, 21(138), 5-12.

DOI: 10.22034/bagh.2024.457224.5604

URL: https://www.bagh-sj.com/article_208592.html?lang=en

