OPEN ACCESS

Review Article

The Historical Evolution of the Media in McLuhan's Theory

Yuxuan Zhu[1*]
[1]Jinzhong University, Shanxi Province, China

Abstract: It starts with the idea that "form precedes content," this article explains that the presuppositions and parameters projected on senses by media structures or by the media through man's senses have always been the medium's power. Then, we introduce McLuhan's sensory system to expand his biological mediation theory. The core of his argument for media is the impact of the emergence of media and the change in the human sensory ratio resulting from it on human perception and interaction. Basedon this, a literature review of relevant concepts and theories concerning the conceptsof structural and historical media evolution and the role of amplification and maintenance of their subsequent impact and influence on society is discussed.
Keywords: McLuhan; Media; sensory system; Media evolution.

INTRODUCTION

Media use has become closely intertwined with the daily lives of modern people, and no one will doubt that humans live in an information-driven world where media technologies have enhanced the overall process of creating, distributing, and consuming information. The explosion of new media was always so sudden and widespread that social understanding of it was initially lagging, rendering any new or digital forms lumped under the collective term of new media. That is, the rupture was the result of technological continuity, but analytical frameworks were caught napping. In time, new media's differences, roles, functions, and objectives evolved, took shape, and became increasingly distinct (Tomaselli & Tomaselli, 2021). However, returning to McLuhan's theory, which pioneered the use of 'medium' as an object of study and placed 'form' ahead of 'content,' it is clear that this approach is still enduring. This article aims to sort out McLuhan's theoretical lineage and, on this basis, study the process of media evolution.

"Form" precedes "Content"

Media are the means of communication. In the development of our modern societies, they have mutated into high-tech forms of communication that now replace the classical communication media of the voice, the book, and the letter. As "mass media," they tend to develop their regimes of sensemaking that do not necessarily follow the rules of what have come to accept as scientific sensemaking. Marshall McLuhan, a modern media guru, has already argued in his book Understanding Media that the media serve as a tool for delivering information and have also realigned our epistemological paradigm, the communication structure, and the characteristics of society (Kim, 2004: 83-99).

McLuhan saw something that had been ignored by Western sociologists - the medium. He believed that the medium's power was to impose its presuppositions on human perception. One of the most famous assertions by McLuhan is that "media is information" comes from "Understanding the Media: On the Extension of Man." For culture, the change of the medium does not mean the change of the information transmission method but the change of the entire cultural model: the medium is the actual "content" of the culture. The philosopher Protagoras once proposed that "Man is the measure of all things," but for McLuhan, the real influence of the media is that it is a new scale, a scale for measuring culture. Like the message, the effect of the medium is contained in the form, not in the content (McLuhan, 2016: 194). Early in The Mechanical Bride: Folklore of Industrial Man, early research on the influence of media culture and popular art, McLuhan asserted that society's folklore is determined not by education and religion but by the mass media.

All media are reshaping all the forms of life they reach. Their particular materiality participates in the making of sense, to the extent, that the medium itself tends to become the message that it communicates (Rheinberger, 2016:161-162). McLuhan's attention to

---

Quick Response Code

Journal homepage:
https://saspublishers.com/

the medium itself came from the influence of Innis. Innis shows us how to use the biases of culture and communication as a research tool. He draws attention to the dominant images in culture and the biases and distorting forces of technology to show how to understand the culture (McLuhan & Zingrone, 2000: 141). Whereas most authors would be bent on giving their readers the content of philosophy, science, libraries, empire, and religion, Innis invites a consideration of the forms and processes of power that emerge from the interplay of structural components. His line of research is what role each form of structural power plays concerning the others.

Medium is the destiny of contemporary humanity. Destiny means evolvement, but a predetermined one in the meantime. Plato teaches that humans should employ his idea to observe the world, whereas Aristotle transforms this idea into form. Kant tells us that the idea and the form are transcendental concepts, only by which humans can understand objects. No essential difference with those predecessors, but concretely and practically, McLuhan submits that idea, form and transcendental concepts are not at all esoteric or mystic. They are the media deal with in our daily lives. He argues that the medium is the message and emphasizes the defining role that the medium plays in the making of information. It seems that this defining role is a precondition, that is to say, if there is no medium, there will be no message. Broadly, if there is no medium, humans will not know any object in the world. Stuart Hall assures us that news will not be news unless encoded. Similarly, a message will not be a message unless mediated (Jin, 2015).

Along these lines, McLuhan found that the presuppositions and parameters projected on our senses by media structures or by the media through man's senses have always been the overarching pattern of individuals and groups in the West. Initially, through meaningless symbols linked to meaningless sounds, the image and the meaning of Western culture were established. However, the Western media technologies - from the manuscript to the printing press, Gutenberg to Guglielmo Marconi - were specialized. Specialization produces not stability and peace but change and trauma. In the electronic age, all this comes to an end. The medium then substitutes all-at-once for one at a time (McLuhan & Zingrone, 2000:274). The flow of information near the speed of light has become the largest industry. Meanwhile, the structures of human relationships built on slow media no longer applied overnight. McLuhan knew that the communications media had great potential to enhance our collective experience. Media technology has many unintended by-products, including transforming the world into a global village.

The components and content of the medium in no way have revealed the power of the media,

especially in shaping and accelerating the flow of information through the eyes and ears, shaping and accelerating the flow of information through the tactile and kinesthetic senses. The dissolution of the entire Western structure of perception stems from how information flows. Like it or not, the torrent of this revolution will sweep us in and ask us to study ways and forms of media that shape and reshape perception (McLuhan & Zingrone, 2000: 285).

Sensory system

The sensory system that McLuhan introduced expanded his theory of biological mediation. This concept refers to the medium technologies that have changed the five senses of human beings and their interrelationships. The impact of technology does not only occur at the level of opinion or perception but firmly and irresistibly changes the sensory ratio and patterns of perception (McLuhan, 1995: 18). It can be said that the core of McLuhan's argument for Media is the impact of the emergence of media and the change in the human sensory ratio resulting from it on human perception and interaction.

First, most technology amplifies quite explicitly in its separation of the senses. Radio is an extension of the aural, high-fidelity photography of the visual. Phones are an extension of our voices. However, what is transmitted through the phone is only the voice, and all other senses are excluded and reduced. There are no facial expressions, gestures, or eyes. In this way, even in a personalized relationship close to the most natural state of perception among the relationship patterns between technology and humans, technology and tools cause sensory transformation different from the bare experience. However, TV is an extension of the sense of touch, which involves a maximal interplay of all the senses (McLuhan, 1995:368). The tactile theory of perception was the focus of art theory in the late 19th century. At that point, the paradigm of art theory sought to understand how artworks inflicted interventions (McLuhan, 2016:23). McLuhan connected the sense of touch with television, which he asserted was sensual and enabled deep involvement. It begins to be evident that "touch" is not skin but the interplay of the senses, and the "keep in touch" and "getting in touch" is a matter of the fruitful meeting of senses, of sight translated into sound and sound into movement, and taste and smell (McLuhan, 1995:72).

Any extension in this system due to technological expansion has obvious effects on the proportions of the individual senses. Any form of sensation, heated to a dominant position, produces a sense of exclusionary comfort (McLuhan & Zingrone, 2000:254). Language is the technological form produced by the simultaneous inflation or externalization of all the senses so that they are immediately subject to the impact or invasion of any mechanical extension of the senses.

Second, if one of the senses or faculty is expanded technically, the other senses will seek a new equalization. Because the sensation is a 100% constant, if one component is intensified, the others are immediately affected. Suppose sound, for example, is intensified. In that case, touch, taste, and sight are affected at once (McLuhan, 1995:55). Media affects social patterns and directly influences the human psyche and how people think and learn. As an extension and expediter of the sense life, any medium at once affects the entire field of the senses (McLuhan, 1995:55). In the field of art, a study has been carried out that deliberately attenuates certain senses. Georg von Bekesy deliberately avoided the common 'perspective' method and used a 'mosaic' to investigate the spatial nature of the senses of hearing and sound. This approach is described in The Auditory Experiment: the 'two-dimensional' mosaic or painting is a way of visual reduction, which allows all the other senses to be used to their full potential (McLuhan & Zingrone, 2000:214). McLuhan considers this approach ingenious as discussing acoustic space itself is problematic. Using a mosaic approach to visual reduction makes it possible to examine the synchronization of sound and vision.

Third, any technology or invention that extends a certain human sense could also induce self-amputation. The high intensity or definition characteristic produces specialization and fragmentation in life, which simultaneously implies "inhibition," any form of medium that in one way or another speeds up the process of exchanging or circulating information, acts as fragmentation and dismemberment (McLuhan & Zingrone, 2000:254). Most media may be thought of as having their basis in technologies that serve as prostheses, extending human capacities beyond their previous bounds (this, at least, is the basis of McLuhan s conception). Thus, the invention of the telephone bypassed the need for face-to-face interaction, allowing speech to be instantaneously transmitted (initially down phone lines; later by wireless means) beyond the previous constraints of space (set by the distance a voice would carry).

In the view of McLuhan, the impact of technology is not at the level of opinions and perceptions, but the human sensory ratio and perception patterns are irresistibly changed (Wang, Kim, and Hong, 2020:127-130). Something is changing about humans who have been in contact with the media for a long time. The first is the possibility of sensory expansion, and the second is the possibility of sensory paralysis. In the former case, when we recognize an object, the sense of representation is extended by the media, meaning that the media change the sense of distance or speed. For example, today's people's sense of the world far away is entirely different from those of the past.

Furthermore, today, the sense of the speed of communication among people who communicate with smartphones is entirely different from the sense of people who only wrote letters in the past. The latter case is the possibility of sensory paralysis that arises along with expanding such senses. This is about the sensation before contacting the media falling into a state of sensory inability to respond to the environment created by the media while contacting the media, the resulting confusion, and the transformation of the senses that occurs after experiencing the confusion (Kim, 2017:5-35).

This sensory paralysis does not mean that all existing senses are stopped, which does not mean a direct disability or damage to the function of our sensory organs. Rather than media transforming the function of the sensory organs, it changes the ratio of senses. This change in ratio can be thought of as the media enhancing a specific sense or as the media creating multiple senses to cool them down. The meaning or content of the technology or tool used becomes known only when the use of the tool or technology is stopped or disturbed. This can be said that the meaning of the relationship between technology and humans and all human relationships appears clearer only when the relationship is disconnected or eliminated. In other words, using any human extension changes the patterns of interdependence between people, just as the ratio between our senses changes (McLuhan, 1995:143-144).

Historical evolution of the media

In linking the media to society, Innes profoundly influenced McLuhan's thinking. Arguments such as "technological devices are naturally going to change human habits and inevitably the structure and function of society" led McLuhan to see every technological device. From the wheelbarrow to the airplane, it has and should mark a new era in the development of society in terms of providing a new and more efficient means of mobility.

Review of the three major technological innovations in human history: First, the invention of the Alphabet broke the balance of primitive society's facial features and highlighted the role of vision. It converts sound language into visual language from oral to written language, leading to a dynamic process that reshapes language, thought, and society. Then came the promotion of mechanical printing in the fifteenth century, which encouraged people to think in straight lines and to arrange their perceptions of the world in forms convenient to the visual order of the printed page (Roncallo-Dow, & Scolari, 2016:141-152). Which further accelerated the process of sensory imbalance. The telegraph, invented in the mid-nineteenth century, predicted the coming of the electronic age. The main of electronic media is to give auditory media features. Content follows form, and the insurgent technologies

give rise to new structures of feeling and thought (Roncallo-Dow, & Scolari, 2016:141-152). McLuhan viewed the invention or progress of communication technology as the driving force of social reform. Based on this, McLuhan divided human history into four epochs – the tribal age, the literacy age, the print age, and the electronic age (Griffin et al., 2019).

The tribal age characterized oral culture with a balance of multiple human senses used simultaneously, and the majority of essential information was communicated instantly through the voice. Without human-made media technologies, there was little division of labor regarding human senses (McLuhan, 1969). By the Literacy age, the intensifying and amplifying the visual function, the phonetic Alphabet separated the visual sense from the rich interplay with other senses that characterized the tribal society. It reduced the roles of other primary senses of hearing, touch, taste, and smell (McLuhan, 1969). Then, people out of the sensory balance and assigned dominance to the eye, putting sight at the top of the sensory hierarchy. Following the literacy age, the print age made it possible to reproduce the same text repeatedly, rendering visual dependence and private detachment even more widespread as mass-produced books further allowed the masses to read in privacy and be isolated from others (Sun & Zhong, 2020). In the electronic age (and mobile media age), new media technologies have been liberating and transforming humans' sensory systems and fulfilling their psychological and social needs at profound levels (McLuhan, 1969) by enacting behaviors like multitasking.

The cool features of electronic media can bring humans back into oral circumstances and allow us to confront multiple relationships. Unlike pure vision, the ears receive information from all directions to create a spherical experience field. This spherical pattern has the characteristics of perception, and all the elements are synchronized. From the segmented written culture, the linear space to the spherical field of auditory and electronic information, McLuhan believes that human senses-mainly vision and hearing-will tend to balance. Humans retribalize electronic media to integrate perception, Return to the pre-printing era of overall thinking, and ultimately re-tribalizing people by restoring their natural sensory balance (Sun & Zhong, 2020).

No medium has meaning and existence in isolation; anyone can only realize its meaning and existence in interaction with other media. In the evolution of media, one medium acts as the content of another medium. Printing is the content of the telegraph, and the text is the content of printing, words are the content of the text, and until the content of the spoken language, the mental processes, which is a non-verbal phenomenon. Moreover, the new medium is often situated within the parameters and frameworks of an old medium, as they permeate and transform new media. At the same time, media are interactive, and the hybridization and assimilation of media provide an opportunity to note their structure, composition, and characteristic (McLuhan & Zingrone, 2000:266). McLuhan is interested in what forces are unleashed when each medium encounters the others and causes a change.

The result has often been to blur the functioning mechanisms of the two mediums. In artistic creation, artists first discovered how one medium could exploit or unleash the power of another - for example, by adapting a best-selling book into a film. McLuhan believes it is a battle between the medium of literature and film. The monolithic descriptive and technical content compressed into the textual plane by the print was immediately freed from that bondage by the film medium. Not all agree with McLuhan; in her book The Picture, Lillian Ross has criticized the adaptation of the novel The Red Warrior's Medal into a film. McLuhan shot back: the moment when the two mediums intermingle or intersect is a moment of true discovery and enlightenment. The similarity between the two mediums, which keeps us on the border, awakens us from our narcissistic and numbing state (McLuhan & Zingrone, 2000:273).

Without a doubt, McLuhan himself was more partial to the qualities of the cool. He quotes Mumford in The Historic City to illustrate his preference for low-definition, loosely structured cities over high-definition, jam-packed ones. Finally, the distinction between hot and cool allows McLuhan to evaluate the epistemic, economic, social, and political range of the various media he analyses in Understanding Media. On the one hand, the hot media of the mechanical era tend to favor the diffusion of professional specialization, logical, linear thinking, individualism, nationalism, and the detribalization of culture. And on the other hand, the cool media of the electric era tend to favor instead a return toward integral, nonlinear, simultaneous forms of knowledge, as well as toward a renewed unity of the social community and new forms of tribalism. It is in the framework of these reflections upon the cultural, social, and political impact of cool and hot media that McLuhan expresses his clear preference for cool media characterized by low definition and high participation. A finding is that the avant-garde is cool and primitive, with its promise of the depth of involvement and integral expression (Casetti & Somaini, 2013).

CONCLUSION

McLuhan has gained a mixed reputation for becoming a "prophet" of the electronic age. Although his celebrity never rose or fell, the controversy surrounding him was constant. The first, possibly the most common and the weakest, is the possibility of falling into technological determinism. The second would have to deal with the potential linearity that can

be glimpsed in his proposal, which should be placed alongside certain notions today under scrutiny, such as those of modernity and progress, anchored to a linear vision of history (Roncallo-Dow, & Scolari, 2016:141-152).

Beyond these criticisms that stem from cultural and subaltern studies, the main issue is related to the use of terms concerning media, which always seemed incongruent. Headings (1966) argued that the distinctions between ear culture (primitive) and eye culture (print technology) from McLuhan sometimes are convincing and sometimes are strained. Science is usually credited with the rise of logic and systematic method, which grew the mechanistic models McLuhan attributes to the printed line (Headings, 1966:109–128). Nevertheless, the idea of interconnection and environment reduction are essential when understanding the sensorium in which unfurl every day. The cultural forms turn upon us instantly and continually (McLuhan & Fiore, 2001:14), and the electric circuits have upset the experience had with time and space.

Therefore, it is understandable that McLuhan tried to converge civilization history into media history. Above all, the voice has changed to text at the junction between Neolithic tribal society and civilized society. However, McLuhan's view of the media is oriented only to the visual contraction of the tactile and auditory senses. In the era of electric media, the sense of humanity is leaning on mythical optimism that it will regain its original form. McLuhan even put language, radio, and television together, ultimately turning the media into the key to restoring the purity of the senses. Indeed, electronic media create new images at the same speed as the speed of light, distinguishing oral narratives into first and second-nature oral narratives. The former is characteristic of a purely oral culture, where language exists only in sound. On the other hand, the latter continues not only into the written culture but also into the age of electronic culture. However, the information conveyed through electronic media such as telephone, radio, and television is an extension of the "communication-oriented oral culture" (Suh, 2017:249-271). Taking on the characteristics of previous electronic media (e.g., radio, telephone, and television), today's mobile media can enhance our sensory system, bringing us back in touch with ourselves and others, much like in a tribal village. For example, the smartphone contributes to haptic media by providing functions like touch (screen), vibration, and proprioception (Goggin, 2017).

Human capabilities to employ multiple senses and multitasking skills have ebbed and flowed with the inventions of different media technologies in human history. Nowadays, humans seem to have come full circle with the ability to engage multiple senses rejuvenated by mobile media technologies in multitasking, a capability once dominating human activities in the tribal age. Media generations (those growing up with or without the pervasive use of mobile media) were directly associated with media multitasking. Moreover, mobile media power use mediated the relationship between media generations and media multitasking. Sun and Zhong (2020) employ Marshall McLuhan's (1964) media ecology theory to assess the mediating role of mobile media use and the moderating role of the need for cognition in the relationship between media generations and media multitasking. It thus provided empirical support to the theoretical arguments made by McLuhan more than half a century ago.

Media evolution, like biological evolution, represents the simulation and substitution of aspects of the environment that represent problems for a species or culture. This process is organized at both the individual and transpersonal cultural levels, both of which are. Autonomous yet interactive. When problems arise owing to the blind spot any medium creates, a new medium emerges, representing the previously hidden environment, thus making it communicable and controllable and changing the environment in which that new knowledge is gained. However, the term new media has stuck, despite its literal redundancy. Technological references often denote distinctions applicable to specific moments of their evolution that are not re-contextualized despite developments in their contemporary application (Tomaselli & Tomaselli, 2021).

REFERENCES

- Tomaselli, K. G., & Tomaselli, D. R. (2021). New media: Ancient signs of literacy, modern signs of tracking. *New Techno Humanities, 1(1-2),* 100002.
- Kim, S. (2004). Philosophical Analysis of the Media - McLuhan's media theory & Poster's mode of information. *Humanities Contents, (3),* 83-99.
- McLuhan, M. (2016). *Marshall McLuhan Unbound. (D. He, Trans., T. Gorden, Ed.)*. China Machine Press.
- Rheinberger, H. J. (2016). Afterword: Instruments as media, media as instruments. *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences, 57,* 161-162.
- Mcluhan, E., & Zingrone, F. (2000). *Essential McLuhan. (D. He, Trans.).* Nanjing: Nanjing University Press.
- Jin, H. (2015). Understanding media's extensions Commemoration of the 50th anniversary of the publication of Marshall McLuhan's Understanding media: the extensions of man. *Critical Arts*, 29(6), 818-826.
- McLuhan, M. (1995), *Understanding Media: The Extensions of Man.* Cambridge, MA: The MIT Press.

- Wang, S., Kim, Y., & Hong, C. (2020). A Study on the Modern Chinese Character Mediated Design Based on McLuhan's Media Cool and Hot Theory. *Collection of Academic Presentation by the Korean Society of Fundamental Formulas, 2020(2),* 127-130.
- Kim, M. (2017). An Environmental Philosophical Study on Changes in human perception method by Environment Created by Modern Media Technology-Focus on Understanding Media: The Extensions of Man by Marshall McLuhan. *Environmental Philosophy, 23(0),* 5-35.
- Roncallo-Dow, S., & Scolari, C. A. (2016). Marshall McLuhan: The possibility of re-reading his notion of medium. *Philosophies, 1(2),* 141-152.
- Griffin, E. A., Ledbetter, A., & Sparks, G. G. (2019). *A first look at communication theory (10th ed.).* New York: McGraw-Hill.
- McLuhan, M. (1969). *The playboy interview: Marshall McLuhan*. Playboy Magazine.
- Sun, T., & Zhong, B. (2020). Multitasking as multisensory behavior: Revisiting media multitasking in the perspective of media ecology theory. *Computers in Human Behavior, 104,* 106151.
- Casetti, F., & Somaini, A. (2013). The conflict between high definition and low definition in contemporary cinema. *Convergence, 19(4),* 415-422.
- Headings, L. (1966). The Publishing Year in Review: McLuhan and Others. *Business Horizons, 9(1),* 109–128.
- McLuhan, M., & Fiore, Q. (2001). *The Medium is the Massage: An Inventory of Effects.* Ginko Press: Corte Madera, CA, USA.
- Suh. Y. (2017). Media Review in the Context of Perception and Culture - Critical Reading of Marshall McLuhan's Sense, Speech, and Writing Concepts. *German Language Literature, 77(0),* 249-271.
- Goggin, G. (2017). Disability and haptic mobile media. *New Media & Society, 19(10),* 1563-1580.