



Article

Acoustic Space, Marshall McLuhan and Links to Medieval Philosophers and Beyond: Center Everywhere and Margin Nowhere

Emma Findlay-White 1 and Robert K. Logan 2,*

- Book and Media Studies, St. Michael's College, University of Toronto, 81 St Mary Street, Toronto, ON M5S 1J4, Canada; emma.findlay.white@mail.utoronto.ca
- Department of Physics, University of Toronto, 60 St. George, Toronto, ON M5S 1A7, Canada
- * Correspondence: logan@physics.utoronto.ca; Tel.: +1-416-361-5928

Academic Editor: Marcin J. Schroeder

Received: 14 June 2016; Accepted: 25 August 2016; Published: 21 September 2016

Abstract: The origin of McLuhan's notion of acoustic space is described. It is shown that his definition of acoustic space as having its center everywhere and its margin nowhere can be traced back to the Christian mystics of the Middle Ages and the early Renaissance dating as far back as the 12th Century.

Keywords: McLuhan; acoustic space; visual space; God; the centre is everywhere; the circumference nowhere

1. Introduction

Marshall McLuhan is widely recognized as a visionary commentator of media and the means by which modern society communicates. The notion of acoustic space is one of the key ideas in Marshall McLuhan's understanding of media. McLuhan used his notion of acoustic space to characterize communication within the oral tradition. He contrasted acoustic space with space that characterized literate communication with writing especially alphabetic writing and then print. He suggested that the notion of "acoustic space" could be used to describe the conveyance of electric information via telegraph, telephone, radio, television, and would certainly have added, and indeed embraced, the digital age that he so presciently foresaw.

What we intend to show is that his notion of acoustic space in which the center is everywhere and margins nowhere, which is so key to his understanding of both the oral tradition and electrically configured information and by extension to digital information is actually rooted in his background as a medieval scholar. While his notion of acoustic space especially used to describe electric and digital information is considered quite modern and forward thinking, its genesis can be found in the medieval understanding of God as an omniscient being that can never be proven to exist, but whose presence is considered indisputable by the faithful. From the sacred trapping of medieval mysticism in the 12th century to the secular world of modern mass media, McLuhan was a conduit to the 21st century where communication technologies have supplanted God(s) as the omniscient entity controlling the world.

2. The Origin of McLuhan's Notion of Acoustic Space

McLuhan defined acoustic space in many equivalent ways throughout his career but the idea of having its centers everywhere and margins nowhere comes from the way by which auditory signals are received from all directions at the same time. By the same token, electrically configured information is received all over the globe virtually simultaneously. This connection between electric and auditory information can be traced as far back as 1957 to his collaboration among his circle of colleagues at the University of Toronto (The Toronto School), and those who participated in the journal Explorations

that McLuhan co-edited with Ted Carpenter. McLuhan developed this notion based on a suggestion from his colleague, Carl Williams, a psychology professor at the University of Toronto and a former student of E. A. Bott. Another of McLuhan's colleagues, Edmund Carpenter (2001), documented this trade off in his memoir,

Carl provided the first breakthrough. He used the phrase 'auditory space' in describing an experiment by E. A. Bott . . . the phrase was electrifying. Marshall changed it to 'acoustic space' and quoted symbolist poetry. Jackie [Tyrwhitt] mentioned the Indian city of Fatehpur Sikri. Tom [Easterbrook] saw parallels in medieval Europe. I talked about Eskimos.

As mentioned above it is in acoustic space that we receive auditory signals from all directions all at once. By the same token it is also true of electric information because we receive electrically-configured signals from all directions from all across the globe more or less simultaneously.

In the article "Art as Survival in the Electric Age", McLuhan (2003) [1] (p. 213) explained that: "One of the peculiarities of the electric age is that we live simultaneously in all the cultures of the past. All of the past is here and all of the future is here."

McLuhan explained the connection between electric and auditory information as far back as 1957 in Volume 7 of the journal *Exploration*,

The manuscript reader went too slowly, traveled too little to develop much time sense. Whatever of the past was discussed was felt as present, just as today the simultaneity and inclusiveness of our historical knowledge makes it all felt as being now. We have arrived once more at the oral via what appears as non-auditory means (McLuhan 1957) [2] (p. 102).

Acoustic space is about the simultaneity of auditory information, which parallels the simultaneity of electric information; and this is why McLuhan proposed that electrically configured information is acoustic in nature.

As related by Carpenter, the idea of auditory space, which McLuhan changed to acoustic space was electrifying. McLuhan applied it to electric information contrasting it with the visual space of writing, especially alphabetic writing and print. The contrast between visual and acoustic space became one of McLuhan's defining characteristics of media ecology.

McLuhan characterized visual space as linear, sequential, one thing at a time, continuous and connected as opposed to the non-linear, simultaneous, discrete and disconnected nature of acoustic space. Acoustic space was not only auditory but also tactile and even visual in the case of television. Acoustic space engages multiple senses whereas visual space only involves the eye (McLuhan Interview in Playboy 1969) [3].

3. Origin of the Phrase Center Everywhere and Circumference Nowhere

The origin of McLuhan's notion that acoustic space has its centers everywhere and its margins nowhere begins with the definitions of God found in *The Book of the 24 Philosophers* (in Latin *Liber XXIV philosophorum*), written sometime in the 12th Century:

It [The Book of the 24 Philosophers] consists of twenty-four 'sentences', 'aphorisms' or 'definitions' of "God", attributed to as many philosophers attending a fictional gathering, each an attempt to answer their only remaining question, 'what is God?' (quid Deus?). The first textual witness is from a 12th-century French manuscript currently at Laon. The definitions where often accompanied by a scholastic commentary in either of two redactions, the "shorter" and the "longer" commentary. Both definitions and commentary echo and weave numerous late ancient and medieval views on the First Cause and the nature of divinity [4].

According to Paolo Lucentini (2001) [5], "The influence of this work on medieval scholarship and literature has revealed traces of its ideas among the works of Jean de Meung, Dante, Meister Eckhart, Nicholas of Cusa, Giordano Bruno, Robert Fludd, Pascal, Leibniz".

The authorship of each of the 24 definitions of God is unknown. It was the second definition that survived into the Renaissance and modern times in Marshall McLuhan's definition of acoustic space. The second definition of God in *The Book of the 24 Philosophers* in Latin is "Deus est sphaera intelligibilis cuius centrum ubique circumferential nusquam", which can be translated into English as "God is the intellectually knowable sphere whose center is everywhere and whose circumference is nowhere". Although this is a definition of God, for our purposes the important part of the translation is the phrase "whose center is everywhere and whose circumference is nowhere" as this is what appears in McLuhan's definition of acoustic space with the substitution of circumference with margin.

164

It is worth noting that in addition to the second definition that definition 18 (XVIII) is similar to definition 2 (II), namely, "Deus est sphaera cuius tot sunt circumferentiae quot puncta" translated as God is a sphere which has as many circumferences as center points.

Although the original author(s) of these definitions is unknown, it is known, however, that Alain de Lille (1128 to 1201/02), the first to make use of definition II. He borrowed it "from this same book, a geometrical definition of God, which would be very successful, especially in the modern epoch (Pascal, Kepler, Voltaire)" [6].

Another reference to Alain de Lille's use of the quote is made by Brendel (1977) [7] (p. 29) who claims that the original quote

... which probably goes back to Alain de Lille, seems to have been the intermediary as well as the most important formulation of all these concepts. The successors of Alain were indeed illustrious: Bonaventure, Thomas Aquinas, Meister Eckhart and Seuse: Cusanus [Nicholas of Cusa], Marsilio Ficino; and finally Rabelais and Pascal.

Bonaventure (1988) [8], who lived from 1217 to 1274 used a formulation of God similar to that of Alain de Lille in his book *The Soul's Journey into God; the Tree of Life and the Life of St. Francis*:

If you are the Cherub, [you contemplate] God's essential attributes, and if you are amazed because the divine Being is both first and last, eternal and most present, utterly simple and the greatest or boundless, totally present everywhere and nowhere contained, most actual and never moved, most perfect and having nothing superfluous or lacking, and yet immense and infinite without bounds, supremely one and yet all-inclusive, containing all things in himself, being all power, all truth, all goodness (Bonaventure 1988, bolding ours) [8].

Meister Eckhart, who lived from 1260 to 1328 in his sermon, Suso and His Spiritual Daughter wrote something similar:

This pure and simple Being is altogether in all things, and altogether outside all things. Hence a certain doctor says: God is a circle, whose centre is everywhere, and His circumference nowhere.

A certain wise theologian says that God, in regard to His Godhead, is like a vast circle, of which the centre is everywhere, and the circumference nowhere (Inge 1904) [9].

In 1440 AD, Nicholas of Cusa, born between 1401 and 1411 and lived to 1464, no doubt influenced by Alain de Lille, Bonaventure and Meister Eckhart wrote in *On Learned Ignorance* the following passage expanding the original definition to include not only God but the universe:

God is boundless. If nature and the form of the universe reflect his reality, then it too is boundless. A boundless region has no center . . . Hence the world machine will have its centre everywhere and its circumference nowhere.

Rabelais, born somewhere between 1483 and 1494 and lived to 1553 makes use of the definition of God by his predecessors in his humorful book *Gargantua and Pantagruel*, the story of two giants,

father and son, and their adventures where one finds the line: "Allez, amis, en protection de ceste sphère intellectuale de laquelle en tous lieux est le centre et n'a en lieu aucune circonférence, que nous appelons dieu." This translates into English as "Go my friends under the protection of this intellectual sphere, the centre of which is at all points and the circumference at none, which we call God."

The next appearance of 'center everywhere and circumference nowhere' is with Blaise Pascal, who lived from 1623 to 1662, in his philosophical work Pensee (Trotter 2015, Section II, Paragraph 72) [10]:

The whole visible world is only an imperceptible atom in the ample bosom of nature. No idea approaches it. We may enlarge our conceptions beyond all imaginable space; we only produce atoms in comparison with the reality of things. It is an infinite sphere, the center of which is everywhere, the circumference nowhere. In short, it is the greatest sensible mark of the almighty power of God that imagination loses itself in that thought.

The use of the image of "the center everywhere and the circumference nowhere" makes it into the 20th Century in J. L. Borges's [11] story *The Library of Babel*, in which "the Library is described as 'a sphere whose exact center is anyone of its hexagons and whose circumference is inaccessible'". It is worth noting that the library in this story can also be called the universe, and vice versa.

Giordano Bruno is one more thinker that we can link back to the notion of 'a center everywhere and a circumference nowhere' found in *The Book of the 24 Philosophers and the writings of Alain de Lille and Nicolas of Cusa*.

Bruno's universe had no center. "In the Universe", he wrote, "no center and no circumference exist, but the center is everywhere..." Elaborating upon this point he remarked: "As to us on Earth, the Earth seems to be the center of the Universe, so to inhabitants of the Moon, the Moon will appear as such ... Each world has its center, each its up and down; these differences are to be assigned relatively (Hollister 1975) [12].

In his book *On the Infinite Universe and Worlds* published in 1584 and strongly influenced by Nicholas of Cusa, Bruno wrote: "To a body of infinite size there can be ascribed neither centre nor boundary." But even more radical than this in the same volume he also wrote:

It is then unnecessary to investigate whether there be beyond the heaven Space, Void or Time. For there is a single general space, a single vast immensity which we may freely call Void; in it are innumerable globes like this one on which we live and grow. This space we declare to be infinite, since neither reason, convenience, possibility, sense-perception nor nature assign to it a limit. In it are an infinity of worlds of the same kind as our own.

It was for this radical idea of a universe of universes that Bruno refused to recant that he was condemned by the Inquisition to be burned alive at the stake in the Campo di Fiori in Rome on 19 February 1600, a fate he seemed to anticipate when he wrote, also in his book *On the Infinite Universe and Worlds*, these words: "It is unity that doth enchant me. By her power I am free though thrall, happy in sorrow, rich in poverty, and quick even in death."

4. McLuhan's Definition of Acoustic Space

Does the collection of the definitions of God and the universe that incorporate the phrase "center everywhere and circumference nowhere" sound familiar? Well if you are a student of McLuhan and remember his many definitions of acoustic space it is almost a perfect match. This philosophy of eternal change appears in his writing. McLuhan repeated himself strategically. As Cavell argues, "his words and theories change constantly and are the product of immense thought as well as organic environmental differences" (Cavell 2003, XVII) [13].

Here is a collection a collection of some of McLuhan's definition of acoustic space that demonstrate what a key role that his notion of acoustic space and his definition of it play in his understanding of media. Although this list may seem repetitive it demonstrates that acoustic space and its contrast

with the visual space of the written and printed word was a recurring theme for McLuhan in his various treatments of media. It also provides the reader with an understanding of the richness of McLuhan's notion of acoustic space and its connection to tactility, all the senses and the psyche. Finally, it demonstrates that the use of the trope or cliché of "center everywhere and circumference nowhere" became an archetype in McLuhan's world of understanding and analyzing media and their effects. McLuhan's idea that a cliché becomes an archetype applies to his own use of "center everywhere and circumference nowhere" in the following excerpts from his oeuvre:

"The world of acoustic space whose center is everywhere and whose margin is nowhere, like the pun (McLuhan and Wilfred Watson 1970) [14] (p. 39)".

"Acoustic Space has the basic character of a sphere whose focus or center is simultaneously everywhere and whose margin is nowhere . . . Acoustic space is dynamic; it has no fixed boundaries. It is space created by the method or process itself. In contrast, visual space is static and container-like, with a fixed center and margin (McLuhan and Powers 1989) [15] (p. 74)".

When being interviewed by Playboy Magazine McLuhan was asked, "What do you mean by acoustic space?" He responded, "I mean space that has no center and no margin, unlike strictly linear space, which is an extension and intensification of the eye. Acoustic space is organic and integral, perceived through the simultaneous interplay of all the senses; whereas 'rational' or pictorial space is uniform, sequential and continuous and creates a closed world (Playboy Magazine 1969) [3]".

Speech structures the abyss of mental and acoustic space...it is a cosmic, invisible architecture of the human dark ... Until writing was invented, we lived in acoustic space, where the Eskimo now lives: boundless, horizonless, the dark of the mind, the world of emotion, primordial intuition, terror. Speech is a social chart of this dark bog (McLuhan and Parker 1969) [16] (p. 13).

Writing turned a spotlight on the high, dim Sierras of speech; writing was the visualization of acoustic space. It lit up the dark (McLuhan and Parker 1969) [16] (p. 14).

Acoustic space is totally discontinuous, like touch. It is a sphere without centers or margins as Prof. Bott of the University of Toronto explained a generation ago . . . Audio-tactile space is the space of involvement. We "lose touch" without it. Visual space is the space of detachment and the public precautions we call "scientific method" and scholarly or citational erudition (McLuhan 1970) [17] (p. 194).

Until writing was invented, man lived in acoustic space: boundless, directionless, horizonless, in the dark of the mind, in the world of emotion, by primordial intuition, terror (McLuhan and Fiore 1967) [18] (p. 48).

Cubism ('multi-locationalism') is one of the painterly forms of acoustic space (McLuhan 1970) [17] (p. 55).

Medieval and ancient sensibility now dominates our time as acoustic and multisensory awareness displaces the merely visual (McLuhan and McLuhan 1988) [19] (p. 225).

5. From Whom Did McLuhan Derive His Definition of Acoustic Space as Having Its Center Everywhere and Its Margin Nowhere

Clearly many writers might have inspired McLuhan's notion of acoustic space as having its "center everywhere and its margin nowhere". McLuhan as a scholar of the Medieval and Renaissance periods was familiar with all the writers we have cited in the section Origin of the Phrase Center Everywhere and Circumference Nowhere. He referred to each of them in his writings as the following collections of excerpts from his writing reveal. We can begin with McLuhan's (2006) [20] Ph.D. thesis, The Classical Trivium: The Place of Thomas Nashe in the Learning of His Time, in which he discusses Bonaventure, Meister Eckhart, Nicholas of Cusa, and Rabelais.

We have also found two mentions of Alain de Lille in the McLuhan oeuvre. The first dates back to McLuhan's (1970) [21] paper "The Ciceronian Program in Pulpit and in Literary Criticism" where he refers to "Alain de Lille's manual on this method [dialectics]". The second is in Laws of Media McLuhan, M. & E. 1988 [19] (p. 219).

McLuhan (1970) [21] refers to Bonaventure in "The Ciceronian Program in Pulpit and in Literary Criticism", where he quotes Bonaventure:

If, however we consider speech by reason of its end, it exists in order to express, to instruct, and to move. But it never expresses anything except through the mediation of a form, never teaches except through the mediation of the light of conviction, never moves except through the mediation of virtue or power...

McLuhan (1974) [22] (p. 95) again mentions Bonaventure ("For St. Bonaventure, likewise, 'synchrony' or acoustic and simultaneous structuralism presented no problems.") and quotes from him extensively.

McLuhan had a copy of the establishment of the university of being in the doctrine of Meister Eckhart of Hochheim by Bernard Joseph Muller-Thym in his personal working library.

McLuhan (1962) [23] (p. 144) refers to Nicholas of Cusa in the Gutenberg Galaxy in the following way:

The third of these events was Nicholas of Cusa's enunciation, in 1440, of the first thorough-going doctrines of the relativity of knowledge and of the continuity, through transitions and middle terms, between extremes. This was a fundamental challenge to definitions and ideas that had tangled thought since the time of the ancient Greeks.

McLuhan (1962) [23] mentions Rabelais three times in The Gutenberg Galaxy:

- Rabelais offers a vision of the future of print culture as a consumer's paradise of applied knowledge [23] (p. 167);
- The celebrated earthy tactility of Rabelais is a massive backwash of receding manuscript culture [23] (p. 170); and
- Aretino, like Rabelais and Cervantes, proclaimed the meaning of Typography as Gargantuan, Fantastic, Supra-human [23] (p. 220).

McLuhan (1964) [24] mentions Rabelais three times in Understanding Media:

- From Rabelais and More to Mill and Morris, the typographic explosion extended the minds and voices of men to reconstitute the human dialogue on a world scale that has bridged the ages [24] (p. 190).
- Indirect comment on the effects of the printed book is available in abundance in the work of Rabelais, Cervantes, Montaigne, Swift, Pope, and Joyce. They used typography to create new art forms [24] (p. 192).
- The same community admires the varied tonality and vigor of Aretino, Rabelais, and Nashe, all of whom wrote prose before the print pressure was strong enough to reduce the language gestures to uniform lineality [24] (p. 227).

McLuhan had a copy of Blaise Pascal's Pensee (1965 Paris: Larousse edition) [25] in his personal working library and refers to him 9 times in the Gutenberg Galaxy [23].

We believe that with McLuhan's acquaintance with all the authors that refer to a sphere with center everywhere and margin/circumference nowhere have been accounted for save Giordano Bruno. However, McLuhan was surely acquainted with Bruno through his reading and re-reading of Finnegan's Wake, which was almost an obsession for him. We make this claim because as pointed out by Robert Anton Wilson (1959) [26], "the two philosophers most frequently mentioned in the Wake, Nicholas of Cusa and Bruno of Nola."

6. Conclusions

As a Medieval and Renaissance scholar, it is clear that McLuhan, wittingly or no, incorporated the mantra of center everywhere and margins nowhere from many or all of these authors into his definition of acoustic space. Pinpointing the direct origin to a single author would be difficult and uninteresting. What is interesting, however, is the link that is forged between ancient and modern thinkers. A medieval understanding of the universe is helpful in understanding the universe of universes created in the Internet and Digital Ages. The typographic explosion that McLuhan cites from multiple authors mirrors the electronic and digital explosion felt during the tail-end of the 20th century and continues to be felt in the 21st. What we find interesting is the connection McLuhan made between the scholars of the Medieval Era and the Renaissance and the characterization of the oral tradition and the electrically configured information.

In McLuhan's time, acoustic space was emerging as a retrieval of primitive thought patterns and sensory perceptions. He claimed, in his book written with Eric McLuhan, that with the rise of electric media, "medieval and ancient sensibility now dominates our time as acoustic and multisensory awareness displaces the merely visual" (McLuhan and McLuhan 1988) [19] (p. 225). Decades later, that same medieval sensibility that McLuhan identified continues to hold true, although what McLuhan conceived as infinite in his Age of Electric Mass Media has already been surpassed by such digital technologies as the personal computer, the tablet, the smart phone, the Internet and the Cloud. The Cloud, and not God, is the sphere of unknowable power and dimension for our secular digital age. What this would have done to McLuhan's personal philosophy we will never know but indications are that he could not or would not have imagined a world where the omniscient presence is not divine but digital, and where perhaps there is no longer room for a God-like entity. In this light, technological advances made by humankind each year are really no more than stabs at the dark cloud of uncertainty, and should be attributed more to our collective hubris than to our cultural achievements.

Perhaps it is ironic that McLuhan's use of a medieval definition of God provides such an accurate definition of cyberspace. Some readers no doubt will seize upon the origin of McLuhan's definition of acoustic space in theological writings as proof of the influence of Catholic thought on McLuhan's thinking. As one of the authors (RKL) who had the privilege of working with McLuhan and spending time with him would suggest it probably has as much to do with McLuhan's small c catholic outlook as his capital-C Catholic religious beliefs. Marshall whose mind was abuzz with ideas every waking moment of his life had trouble keeping track of where his information came from. As a result, we will never know what motivated the connection he made between the nature of acoustic space and a 12th Century medieval definition of God that seems to work as a description of 21st Century cyberspace.

Author Contributions: Both Emma Findlay-White and Robert K. Logan researched and wrote the paper. **Conflicts of Interest:** The authors declare no conflict of interest.

References

- 1. McLuhan, M. *Understanding Me: Lectures and Interviews*; McLuhan, M., McLuhan, S., Staines, D., Eds.; McClelland & Stewart: Toronto, ON, Canada, 2003.
- 2. McLuhan, M. Explor. Stud. Cult. Commun. 1957, 7, 102.
- 3. Marshall, M. The Playboy Interview: Marshall McLuhan; Playboy Magazine: Chicago, IL, USA, 1969.
- 4. Book of the 24 Philosophers. Available online: https://en.wikipedia.org/wiki/Book_of_the_24_Philosophers (accessed on 20 February 2016).
- 5. Paolo, L. IL Liber Viginti Quattvor Philosophorum Nei Poemi Medievali. In *Poetry and Philosophy in the Middle Ages: A Festschrift for Peter Dronke*; John, M., Ed.; Brill: Leiden, The Netherlands, 2001.
- 6. ALAIN DE LILLE (Alanus ab Insulis). Available online: http://peenef2.republika.pl/angielski/hasla/a/alaindelille.html (accessed on 20 February 2016).
- 7. Brendel, O.J. *Symbolism of the Sphere: A Contribution to the History of Earlier Greek Philosophy*; E.J. Brill: Leiden, The Netherlands, 1977.

Philosophies **2016**, 1, 162–169

8. Bonaventure, E.H. *The Soul's Journey into God; The Tree of Life and the Life of St. Francis*; Paulist Press: New York, NY, USA, 1988.

- 9. Inge, W.R. Light, Life and Love: Selections from the German Mystics of the Middle Ages. Theologica Germanica, 1904; pp. 78 and 82. Available online: https://archive.org/stream/pdfy-fpw8eQ_iz-Y8YVzE/Light,%20Life%20And%20Love%20[Selections%20From%20The%20German%20Mystics%20Of%20The%20Middle%20Ages]_djvu.txt (accessed on 27 February 2016).
- 10. Trotter, W.F. Translation of Blaise Pascal's Pensee; Aeterna Press: London, UK, 2015; Section II, Paragraph 72.
- 11. Borges, J.L. A Circle with the Center Everywhere. 2008. Available online: https://dialinf.wordpress.com/2008/04/03/a-circle-with-the-center-everywhere (accessed on 8 February 2016).
- 12. Hollister, W. Giordano Bruno and the Infinite Universe. *Griffith Observer*, February 1975. Available online: http://www.theosophy-nw.org/theosnw/world/modeur/ph-holli.htm (accessed on 22 February 2016).
- 13. Cavell, R. McLuhan in Space: A Cultural Geography; University of Toronto Press: Toronto, ON, Canada, 2003.
- 14. McLuhan, M.; Watson, W. From Cliché to Archetype; Viking: New York, NY, USA, 1970.
- 15. McLuhan, M.; Powers, B.R. *The Global Village: Transformations in World Life and Media in the 21st Century;* Oxford University Press: New York, NY, USA, 1989.
- 16. Marshall, M.; Parker, H. Counterblast; Harcourt Brace & World: New York, NY, USA, 1969.
- 17. McLuhan, M. Culture is Our Business; McGraw-Hill: New York, NY, USA, 1970.
- 18. Marshall, M.; Fiore, Q.; Agel, J. *The Medium is the Massage: An Inventory of Effects*; Bantam Books: New York, NY, USA, 1967.
- 19. Marshall, M.; McLuhan, E. *Laws of Media: The New Science*; University of Toronto Press: Toronto, ON, Canada, 1988.
- 20. Marshall, M. *The Classical Trivium: The Place of Thomas Nashe in the Learning of His Time*; W. Terrence Gordon: Corte Madera, CA, USA, 2006.
- 21. McLuhan, M. The Ciceronian Program in Pulpit and in Literary Criticism. Renaiss. Reform. 1970, 7, 3-7.
- 22. Marshall, M. Francis Bacon: Ancient or Modern? Renaiss. Reform. 1974, 10, 93–98.
- 23. McLuhan, M. Gutenberg Galaxy: Making of Typographic Man; University of Toronto Press: Toronto, ON, Canada, 1962.
- 24. McLuhan, M. Understanding Media: Extensions of Man; McGraw-Hill: New York, NY, USA, 1964.
- 25. Pascal, B. Pensee; Larousse: Paris, France, 1965.
- 26. Wilson, R.A. Joyce and Tao. *James Joyce Rev.* **1959**, *3*, 8–16.



© 2016 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (http://creativecommons.org/licenses/by/4.0/).