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Gaia, God, and the Internet – Revisited

The History of Evolution and the Utopia of Community in Media Society[1]

Oliver Krüger

Abstract

The question of religious content in the media has occupied many scholars studying the relationship between media and religion. However, the study of recent religious thought offers a promising perspective for the analysis of the cultural perceptions of various media technologies. After the Internet spread in the middle of the 1990s, a variety of religious or spiritual interpretations of the new medium emerged. The far-reaching ideas see the Internet as the first step of the realisation of a divine entity consisting of the collective human mind. In this vision, the emergence of the Internet is considered to be part of a teleological evolutionary model. Essential for the religious and evolutionary construction of the Internet is an incorporation of Pierre Teilhard de Chardin's model of evolution – especially the idea of the noosphere, and its adoption in media theory by Marshall McLuhan. The connections of these ideas to James Lovelock's Gaia theory illustrate the notion of the Internet as an organic entity. The article outlines the processes of the reception of religious and evolutionary ideas which led to the recent interpretations of the Internet as a divine sphere.

Keywords

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1   Media theory and the study of religion

Religion played a certain role early media theory when the Toronto School of Communication was established. Media as crucial instruments of the human perception of the world were not seen as objective means for observation or communication, but, according to Marshall McLuhan and Harold Innis, they contain within themselves the conditions of a certain perception of reality. Elisabeth Eisenstein in *The Printing Press as an Agent of Change* (1979) and McLuhan in *The Gutenberg Galaxy: The Making of Typographic Man* (1962) demonstrated the impact of the printing press on the emergence of humanism, reformation, and democracy:

> Print is the extreme phase of alphabetic culture that detribalizes and decollectivizes man in the first instance. Print raises the visual features of alphabet to highest intensity of definition. Thus print carries the individuating power of the phonetic alphabet much further than manuscript culture could ever do. Print is the technology of individualism. (McLuhan 2002, 158)

Although these strong claims could be challenged by pointing to divergent uses of the printing press in early modern Europe (hard censorship in Catholic countries, liberal policies in the Netherlands, etc.) this approach gained much attention placing media (and media theory) in the center of analysis of social and cultural change. Here, media were not seen as *objective* means for observation or communication in the hands of autonomous human agents, but they contained within themselves the conditions of a certain perception of reality, and of a certain construction of reality (Innis 1951; McLuhan 1994, Meyrowitz 1985). This early approach, mainly influenced by research on propaganda, dealt with the question of the manipulation of the media consumer – the basic question of media effects: "What are the media doing with their consumers?"

A decade ago media scientist Lynn Schofield Clark for example paradigmatically considered the phenomenon of religion on the Internet as *protestantization* since on the Internet the original protestant values like liberty, pluralism and democracy could now be realized (Schofield Clark 2002:7; Helland 2005:13). Currently, the theory of mediatization of religion and culture in late modern societies initiated by Stig Hjavard postulates fundamental changes of mediatized religion:

> "By the mediatization of society, we understand the process whereby society to an increasing degree is submitted to, or becomes dependent on, the media and their logic" (Hjavard 2008a, 113).

According to Hjavard, media have taken over ritual elements and social functions of religion (Hjavard 2008b:10–13, 18–20; 2013: 84–101). However, the empirical translation of 'the logic of the media' remains diffuse, and surprisingly Hjavard's own analyses of popular movies (*Harry Potter*, *Lord of the Rings*) show only marginal influence of these movies on the viewers' "spiritual

interest" (Hjarvard 2008b: 19–23). This strong mediatization thesis proposed by Hjavard and other scholars lacks an historical and intercultural perspective and is mainly based on the situation in Scandinavian churches (Hjavard 2013; Hjavard/Lövheim 2012). In contrast to Hjavard, Andreas Hepp and Friedrich Krotz point out that mediatization has to be understood as a relational concept, covering the complex dynamics between media, communication, and culture. They analyze the social, spatial, and temporal consequences of new media (Hepp/Krotz 2012, 11).

The sociological tradition in media research pointed early on to the other side of the coin: e.g., " … the question (is) not ‚what do the media do to people?' but, rather, ‚What do people do with the media'" (Katz/Foulkes 1962, 378; Schmidt 2000:76-84). This implies rejecting claims that a certain medium has a determined effect on society or 'religion,' searching rather for different modes of use and reception among social groups (age, gender, education, cultural/religious background), taking into account historical dynamics. Here, media research figures as social science (Ayaß 2012; Keppler 2005; Krüger 2012, 21-31), and it benefits from innovative approaches in media anthropology, which covers media use in the context of social, ritual and corporal practices (Meyer 2009; 2012).

2   The religious reception of media technology

For the study of religion, as well as cultural studies, not only is the question of media content pivotal, but so is the issue of the cultural embedment of a medium in general in attempts to understand the valuation of specific media content by particular groups of recipients. Thus, the history of religion is based exclusively on media artifacts and contemporary research can hardly ignore them. In addition, nearly all religious traditions have developed 'theories' regarding these media artifacts. From a religious perspective the existence of media touches upon epistemological questions of authenticity and truth regarding the mainly visual and auditory experience that media make possible, e.g. the 'true' image and word of god. Media technology is always embedded in certain cultural and social patterns of reception. Media are – apart from their contents – received differently in diverse social, cultural, historical, and religious settings. Media theorist Heidi Campbell is convinced that those religious communities which are basically critical towards technology, must undergo a process of *spiritualisation* of a new media technology – in other words, the assumed secular media technology first has to be contextualized in a religious pattern of interpretation, upon which it becomes usable in accordance with religious purposes and dogma (Campbell 2005:1-8; Campbell 2010, 1–7).

Previous research has focused especially on how mostly homogenous religious groups are dealing with electronic media, particularly when there is a conflict between the use of new technology and religious values. Thus, studies have analyzed such social phenomena as the "domestification" of the telephone by the Amish in the United States, and, more recently, the introduction of the Internet in ultra-orthodox Jewish groups in Israel (Zimmerman-Umble 1992; Barzilai/Barzilai-Nahon 2005).

3   The myths of the Internet

In comparison with research on these apparently homogenous religious communities it is a far more complex undertaking to trace dominant patterns of interpretation which hardly can be attributed to a certain religious or social milieu. Burkhard Gladigow addressed in 2000 both aspects of this issue in his notion of the *iconic turn*: on the one hand is the question of "God in cyberspace" (Gladigow 2005a:287), demonstrated by the presentation of religious content on the Internet, and on the other hand is the question of the „new mythologies" of the medium Internet itself:

> „Es ist auffallend, wie schnell die Internet-Besucher, unabhängig von den Selbstdarstellungen bestimmter religiöser Gruppierungen, das gesamte Netz, Simulation, Virtualität und ständige Metamorphosen, mit religiösen oder göttlichen Prädikaten bedacht haben" (Gladigow 2005a:288).

These multi-faceted research agendas might accentuate partly religious, and partly secular aspects. This article tries to illuminate the diffuse network of the cultural reception of the medium Internet as part of a larger discourse on religion and media philosophy. The expression "diffuse" (from Latin *diffusus*) is understood in the sense of amalgamation, vagueness and reciprocal pervasion of the religious, social, political, economic, philosophical and technological factors of this discourse field (Bühl 1997).

The most far-reaching interpretations of the Internet are characterized by claiming relevance not only for certain types of societies (e.g. post-industrial societies) or specific applications (e.g. education), but for the evolution and general history of humankind or even for the cosmological history of the universe. Ontological patterns of interpretation include to a greater or lesser extent metaphysical assumptions on the nature of the Internet and the common notion of virtual reality. Most prominently and frequently cited is Michael Heim, who introduced the notion of the *metaphysics of cyberspace* in 1993[2] – the neologisms "cyberplatonism" (List 1996), "cybergnosis"

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2   Heim did not write much on the metaphysics of cyberspace – the only relevant passage is an associative *staccato* of metaphors, reaching from the Holy Grail and King Arthur up to Wagner's Parsifal. By these ideas, initiated by the

(Böhme 1996) and "techgnosis" (Davis 1998) reflect the creative reception of this concept in post-modern media philosophy that primarily focuses on overcoming the human body by means of "virtual technologies".[3]

Apart from these assumptions there is an evolutionary discourse, which is not limited to a Gnostic-philosophical interpretation of today's media technology but which promises the dawn of a new age with the prophecy of an actual transformation of humankind. Here, it is noteworthy that a religious interpretation of the history of evolution and an organic / holistic view of the planet earth (*Gaia*) are related to the appearance of computer technology and the Internet. The link between a religious connotation of evolutionary history and media theory is based upon the work of the philosopher and Jesuit Pierre Teilhard de Chardin (1881-1955) and its specific reception by the Canadian media theorist Marshall McLuhan (1911-1980). Both McLuhan's metaphor of the *global village* and Teilhard's concept of the evolutionary revelation of god – beginning with the biosphere, continuing with the noosphere, and finalizing in the divine point Omgea – are prevalently adopted in the current discourse on the Internet. Within the framework of Gaia theory initiated by James Lovelock (*1919), an interpretation of the Internet as an organic part of earth's history enforces the idea of understanding the current technological development as continuing the natural evolution of life on this planet.

In the following, a hermeneutic analysis in the sense of a history of reception (*Rezeptionsgeschichte*) shall present the contour of this partly religious, partly philosophical discourse more precisely. In consideration of this hermeneutic premise, concepts that presume an unchanging semantic structure and rely on conceptual categories, such as "being unrecognized" (*Verkanntwerden*) or "misinterpretation," are not applicable. Rather, this analysis will trace new contextualisations of certain ideas with regard to concrete patterns of selection and interpretation (Jauß 1987; Stausberg 1998:2-4). Thus, some exponents of the community ideal of cyberspace are first presented, followed by a detailed analysis of the central concept of the noosphere in the works of Pierre Teilhard de Chardin and Marshall McLuhan. Finally, a closer treatment of the Gaia theory and its religious reception is provided. In order to uncover the specific processes of reception and selection applied by contemporary cyber-visionaries, it is essential to consider the historical contexts of religious and philosophical interpretations of evolution which coined the dominating patterns of recent reception.

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quote of a lesser known computer scientist, Heim attempts to document the esoteric essence of the Internet. See Heim 1993:123-128.

3   Referring the body discourse in cyberspace see Krüger 2004a.

4   Cyberutopia

When the World Wide Web spread in the mid-1990s into more and more American companies and private households and the various earlier computer networks were substituted or brought together, technological visionaries construed the Internet as harbinger of a new age. One of the most prominent figures in this context was the American computer scientist Mark Pesce, who established the first generally binding standard for the visual presentation of virtual reality (*Virtual Reality Modeling Language*, *VRML*) in 1994. In his numerous publications, presentations at conferences, and media appearances, he not only showcased his technological innovations but he related them to his vivid vision of the future Internet. Thus, in his book *Playful World*, amid the narration of the invention of VRML he introduces the Jesuit Teilhard de Chardin as the most significant but long-forgotten prophet of the Internet: " … no one foresaw the importance and comprehensive impact of the World Wide Web. But, over fifty years ago, one fairly obscure scientist did predict a coming transformation of the human mind, the birth of collective intelligence, and the emergence of a new way of knowing" (Pesce 2000:164).

Along with the idea that all human beings will soon be united spiritually, Pesce adopted Teilhard's concept of the noosphere:

> We can't know for sure if the Web is the same thing as the noosphere, or if the Web represents part of what Teilhard envisioned. But it feels that way ... If Teilhard was right, the Web is part of our evolution, as much an essential element of humanity as our acute eyes, our crafty hands, and our wonderful brains (Pesce 2000: 170).

Equating the Internet with the noosphere, Pesce implied that this technology was no ordinary media innovation, such as radio or television had been at their time. According to Pesce, the outstanding emergence of the Internet refers to a spiritual dimension:

> Meine Arbeit rund um WebEarth hat viel mit Spiritualität zu tun, mit der Idee der Gaia, des Planeten als Lebewesen. Wenn ich diese Arbeit Leuten zum ersten Mal zeige, packt es sie oft richtig; manche weinen … Mit VRML wird die Noosphäre viel greifbarer werden. Die Leute werden sie als echten Ort erkennen, obwohl sie nur aus Daten besteht (Bennahum 1997).

In speaking so, Pesce connects the ideas of Teilhard with Gaia theory, a perspective that has had great significance for New Age thinkers and environmentalists such as Ken Wilber and Terence McKenna. Thus, the Internet is conceptualised as an organic part of the earth, destined to come into existence as part of the natural evolutionary process.

The most comprehensive application of Teilhard's ideas to the area of cyber-discourse can be found in the work of American theologian Jennifer Cobb. In her book, *Cybergrace: The Search for God in the Digital Space* (1998), Cobb – who has been an IT professional for more than 15 years – interprets cyberspace as an unlimited space for the development of the intellectual, spiritual and emotional potentials of humanity. If human beings could understand the true significance of computer technologies, then, according to Cobb, the world can be experienced anew as a divine reality beyond the dualism of mind and matter (Cobb 1998:8-11).

> In the ongoing process of spiritual evolution, cyberspace has a special role to play … In this vision, the spiritual basis of the universe is understood as creative events unfolding in time … Cyberspace can help guide us toward a reconciliation of the major schisms of our time, those between science and spirit, between the organic world and the world that we create (Cobb 1998:43).

Principally, Cobb draws on Teilhard's multi-level evolutionary model with a particular focus on the leap from the biosphere to the noosphere. However, she is of the opinion that Teilhard's ideas can be accurately understood only in the face of the emergence of cyberspace:

> This distinctly non-traditional evolutionary idea may strike us as odd until we consider the phenomenon of cyberspace, that electronically supported layer of human consciousness that now encircles the globe (Cobb 1998:85).

Like many other Protestant theologians in the United States, Cobb seeks an alliance between the sciences and Christian theology and legitimates her religious interpretation of cyberspace as the evolution of divine creativity in the universe (Cobb 1998:12, 51-97).

> Creative process forms the soul of cyberspace. The source of richness and potential in this vast, electronic web of experience is spirit. The divine expresses itself in the digital terrain through the vast, global communication networks that are now beginning to display rudimentary self-organizing properties (Cobb 1998:44).

From Cobb's viewpoint, humankind must recognize the progress of computer technology as a divine plan:

> It is when this knowledge comes fully into our conscious awareness that our deeper journey with cyberspace will truly have begun (Cobb 1998:239)

The physicist and posthumanist thinker Frank Tipler, professor of mathematical physics at New Orleans' Tulane University, goes a step further than Cobb. Together with the English cosmo-

physicist John D. Barrow, Tipler published his chief scientific work, *The Anthropic Cosmological Principle*, in 1986 (Barrow and Tipler 1986), which included a teleological interpretation of the history of the universe. However, Tipler shot to fame with his book *The Physics of Immortality: Modern Cosmology, God and the Resurrection of the Dead*, published in 1994 (Tipler 1995). Here, he advocates the position of the so called natural theology, and he is absolutely convinced that only the sciences – above all mathematics and physics – will enable us to better understand god and the destination of human beings as part of divine creation:

> The only book which does not suffer from these limitations is the Book of Nature, the only book which God wrote with His/Her own hand, without human assistance. The book of nature is not limited by human understanding. The Book of Nature is the only reliable guide to the true Nature of God (Tipler 1995:337).

In his cosmological perspective, Tipler assumes that god has created the universe in order to unfold his own personality entirely through the coming history of the universe. The target, not only of the natural evolution on earth but also of the whole cosmological development, is presented as the point Omega. According to Tipler, humankind takes on the key role in this divine plan, being the only intelligent forms of life in the cosmos: through the emergence of artificially intelligent beings, which are created by men and are supposed to populate all galaxies, the whole universe shall be transformed into a single thinking unit, into a gigantic cosmic computer. The human race is only an intermediate stage in the history of evolution, and will eventually be overcome by posthuman entities.[4] When finally god is realized in the point Omega, then also the history of the universe will have come to an end:

> At the instant the Omega Point is reached, life will have gained control of *all* matter and forces ...; life will have spread into *all* spatial regions in all universes which could logically exist, and we will have stored an infinite amount of information, including all bits of knowledge which is logically possible to know. And this is the end (Barrow and Tipler 1986:677).

Mark Pesce, Jennifer Cobb and Frank Tipler understand the concept of evolution outlined by Teilhard de Chardin in different ways, either as the spiritual evolution of humanity, or as an explicit unfolding of the Christian god. Apart from these differences, they share the assumption that the emergence of the Internet, and of networked information technology in general, is *the* crucial leap in earthly natural evolution, and they all apply a religious perspective in their interpretations of these phenomena.

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4   Concerning Frank Tipler and the general topic of posthumanism see Krüger 2004b:103-400.

5   Teilhard de Chardin and Marshall McLuhan

These examples may have illustrated how the singular ideas of Teilhard de Chardin are perceived in the current cyber discourse – "googling" this topic with adequate keywords[5] will generate links on hundreds of similar academic and popular contributions that idealise Teilhard to be the great mastermind of the Internet. This strong reception within media discourse is remarkable since Teilhard de Chardin – as far as I can see – remained mute about media with the exception of two short notes (see below). In my view, the work of Canadian media theorist Marshall McLuhan, who eclectically picked up Teilhard's ideas, prepared the ground for these ideas in media theory and cultivated so much interest. In the popular discourse, and sometimes even in academic discourse, both thinkers are even considered to be interchangeable. McLuhan is said to "flirt" with Teilhard's ideas, their theories are assumed to be congruent (Hickey 2005:64; Curtis 2005:164-165), and it is generally accepted that, "McLuhan's ‚global village' was nothing other than Teilhard's ‚noosphere'" (Wolfe 2003). Therefore, it is essential in the following section to examine the relation between McLuhan and Teilhard de Chardin, to illuminate the popular and evidently dominating synthesis of McLuhan's idea of the global village and Teilhard's noosphere, a synthesis which anticipates a religious interpretation of the Internet.

After entering the order of the Jesuits, being ordained to the priesterhood, and studying theology, philosophy and the sciences, Teilhard focused his academic interests mainly on palaeontology, in particular on the early history of humankind. Already his first, partly mystic publications,[6] written while serving as a stretcher-bearer in World War I, include suggestions of a divinely-governed evolution of the cosmos. During the next 40 years of his academic and theological work, and especially during his long "exile" in China, he advanced this central idea.

In spite of his many worldly distinctions such as the nomination as *Chevalier de la Legion d'Honneur* (1947) and his membership to the *Institut de France* (1950), the Vatican prohibited the publication of Teilhard's philosophical and theological tracts– the acceptance and development of the Darwinian theory of evolution seemed to be far too progressive for the head of the Jesuit order at that time. Teilhard spent his last years, from 1952 to 1955, occupied with expeditions and lecture tours, as a research fellow at the *Wenner Gren Foundation* in New York.

Although Teilhard was not allowed to publish his thoughts, his ideas were well known in philosophical and scientific circles due to his numerous lectures and unremitting correspondences. Thus, in the year of his death the complete edition of his works in French, English and German was compiled by a board of prominent international scientists (such as Julian Huxley and Arnold

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5   Googling such keywords as "Teilhard", "noosphere" combined with "Internet" or "Cyberspace".
6   E.g. „La vie cosmique" (1916) and „Mon univers" (1924).

Toynbee). Simultaneously, with the Second Vatican Council (1962-1965), widespread reception of Teilhard's work began within and beyond the Catholic church – already by the late 1970s, bibliographies listed more than 10.000 titles of secondary literature on Teilhard.[7]

Stimulated by Henri Bergson's attempt to synthesize the Christian idea of creation and the Darwinian evolutionism in *L'évolution créatrice* (1907), Teilhard called for a fruitful interplay of scientific findings and religious cognition.[8]

According to Teilhard, mind and matter are the two dynamic conditions of the original cosmic entity. Beginning at the starting point *alpha*, god let the universe develop into a system of greater and greater complexity. In his chief work, *The Human Phenomenon* (*Le Phénomène humain*, 1955), Teilhard depicts the evolutionary process as a continuous unfolding of mind, starting with the pre-stage of the emergence of the solar system and the earth (*cosmogénèse*), followed by the formation of life in the biosphere (*biogénèse*), and finally arriving at the spread of the noosphere (*noogénèsis*) with the appearance of the first hominids, who differ from their animal ancestors by their consciousness of self:

> Quand, pour la première fois l'instinct s'est aperçu au miroir de lui-même, c'est le Monde tout entier qui a fait un pas … Juste aussi extensive, mais bien plus cohérente encore, nous le verrons, que toutes les nappes précédentes, c'est vraiment une nappe nouvelle, la „nappe pensante", qui, après avoir germé au Tertiaire finissant, s'étale depuis lors par-dessous le monde des Plantes et des Animaux: hors et au-dessus de la Biosphère, une *Noosphère*.[9]

With the scientific and philosophical dominance of the West since early Christianity, according to Teilhard, the "convergence of thinking" and the "planetisation of the noosphere" began:

> … grâce au prodigieux événement biologique représenté par la découverte des ondes électromagnétiques, chaque individu se trouve désormais (activement et passivement) simultanément présent à la totalité de la mer et des continents, – coextensif à la Terre (Teilhard de Chardin 1955:266-267).

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7 For a biographic and bibliographic overview see Daecke 2000 and Trennert-Helwig 2005.

8 Beside Bergson, the French philosopher and successor on Bergson's chair at the *Collège de France*, Édouard Le Roy (1870-1954), evidently played an important role for the formation of Teilhard's interpretation of evolution. Partly referring to Teilhard's early, unpublished works, Le Roy wrote already in 1928 on the *phénomène humain*, on the biosphere and the process of becoming human (*hominisation*) by the spreading of the noosphere. On the one hand, Le Roy goes back to Bergson's idea of the *élan vital*, but on the other hand he also draws on the evolutionary model of the distinguished Russian geologist Vladimir I. Vernadsky (1863-1945). See Le Roy 1928:1-57; Simon and Pitt 1999; Vernadsky 1997:21-85.

9 Teilhard de Chardin 1955:200-202. This idea has some aspects in common with the *evolutionary humanism* concept of Julian Huxley (1887-1975), who also advocated a multi-stage model of evolution from the cosmic to the post-biological (=human) age. See Huxley 1964:9-52.

As a result of this "collective cerebralisation", scientific advancement, fueled by the additional impulse of the "astonishing capacities of the newest electronic automata," (Teilhard de Chardin 1961:118) and the progress of cybernetics, as Teilhard promises, the perfecting of the human brain will be accelerated, in particular if the methods of eugenics are applied (Teilhard de Chardin 1955:263-323). Teilhard understands this process of evolution as ascension of consciousness and as a process of unification of humanity – only if all peoples and all social classes aim at the same goal the psycho-biological development of a "mega-synthesis" of one humanity can be realized (Teilhard de Chardin 1955:270-272):

> Une collectivité harmonisée des consciences, équivalente à une sorte de super-conscience. La Terre non seulement se couvrant de grains de pensée par myriardes, mais s'enveloppant d'une seule enveloppe pensante, jusqu'à ne plus former fonctionellement qu'en seul vaste Grain de Pensée, à l'échelle sidérale (Teilhard de Chardin 1955:331).

At the "end of the world," the noosphere will finally reach its point of convergence when the total of all individual consciousness flows together and creates a new, super-personal consciousness. This point Omega can be realized according to Teilhard only by the power of universal love. By the appearance of Jesus humankind has been chosen to play this extraordinary role, developing the point Omega, in the history of the cosmos.

> Si le monde est convergent, et si le Christ en occupe le centre, alors la Christogénèse de saint Paul et de saint Jean n'est rien autre chose, ni rien moins, que le prolongement à la fois attendu et inespéré de la Noogénèse en laquelle, pour notre expérience, culmine la Cosmogénèse … Seul, absolument seul sur la Terre moderne, il [le Christianisme: O.K.] se montre capable de synthétiser dans un seul acte vital le Tout et la Personne (Teilhard de Chardin 1955:331).

Even in this brief summary of Teilhard's ideas, the many potential factors for the later reception of his work are visible, ranging from eugenics and Catholic theology, New Age thought and posthumanism, to the above-named cyber utopia. Evidently, it is due to Marshall McLuhan that Teilhard is received so broadly, although media are widely irrelevant for Teilhard, and it is clear that his entire work is mainly focused on biological evolution in an explicitly Christian context.

Marshall McLuhan converted to Roman Catholicism in 1937, was employed at three Catholic universities,[10] attended mass every day, and was in close contact with many Catholic theologians, in particular with some Jesuits. His public commentaries on religious issues were sometimes quite on the fringe, and characterized him as a queer fellow – e.g. he vigorously criticized the decision of the

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10 McLuhan was employed from 1937-1944 at the Jesuit St. Louis University (Missouri), from 1944-1946 at the Assumption College (Windsor, Canada) and since 1946 at St. Michael's College (Toronto).

Second Vatican Council (1961-1965) to abolish Latin as the liturgical language (Eric McLuhan 1999: XXV; Marshall McLuhan 1999a). Hence, it is not surprising that there was a very special relation between McLuhan and Teilhard de Chardin – the crucial link in the chain is the American theologian and Jesuit Walter J. Ong (1912-2003). From 1938 to 1941, Ong studied English literature and philosophy at St. Louis University, where the young McLuhan was teaching English (1937 to 1944); McLuhan also acted as Ong's adviser for his master's thesis on the Victorian Jesuit and poet Gerald Manley Hopkins (1844-1889), whose works deeply influenced Ong's later idea of a theological connection between evolution and the revelation of god. During this time, Ong and McLuhan cultivated a friendly relationship and frequently exchanged letters – Ong even dedicated the second volume of his dissertation to "Herbert Marshall McLuhan who started all this" (Ong 1958). While staying in Paris as a Guggenheim fellow in the early 1950s, Ong lived in the same lodgings as Teilhard de Chardin, where he was given the opportunity to study the manuscript of Teilhard's posthumously published chief work, *Le Phénomène Humain* (1955).

But when Ong was assigned to write a review for McLuhan's first book, *The Mechanical Bride* (McLuhan 1951), he took the opportunity to publish some crucial elements of Teilhard's work (Farrell 2003). Following McLuhan's critique of American culture in his *Mechanical Bride*, Ong raises the question of how Catholic theology can respond in an industrial age, and then he ventures into a discussion of Teilhard's (censored) ideas. Ong introduces the concepts of the cosmosphere and the biosphere, and finally refers to the promise of the noosphere:

> In a third stage, slowly, man, with human intelligence, has made his way over the surface of the earth into all its parts … with the whole world alerted simultaneously every day to goings-on in Washington, Paris, London, Rio de Janeiro, Rome and (with reservations) Moscow – human consciousness has succeeded in enveloping the entire globe in a third and still more perfect kind of sphere, the sphere of intelligence, the 'noosphere,' as it has been styled by Father Pierre Teilhard de Chardin, S.J. (Ong 1952:84).

Ong became Teilhard's most important advocate in the Anglophone world (Ong 1977). Thus, it is evident that McLuhan was familiar with Teilhard's ideas at least from Ong's review in 1952, even before McLuhan began his research in communication and media studies. As far as I can see, there are straight references to Teilhard only in McLuhan's *Gutenberg Galaxy* (1962), probably because of outside critiques and his own increasingly sceptical attitude towards Teilhard's work.[11]

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11 See Marchand 1998:216-218. Media researcher and son of Marshall McLuhan, Eric McLuhan, describes this relation even more skeptical: "I do know that my father did not find anything in Teilhard's thought that he considered of potential use as regards his own work." E-mail by Eric McLuhan to Oliver Krüger, 17.02.2006.

At the opening of his *Gutenberg Galaxy,* McLuhan draws the attention of his readers to Teilhard's work, „the lyrical testimony of a very Romantic biologist" (McLuhan 2002:32), and quotes a description of the global unification process and technological progress from *Le Phénomèn Humain*. Immediately, McLuhan adds that Teilhard's optimistic promises have been fiercely criticized by intellectuals, but then he also introduces Teilhard's notion of the noosphere:

> This externalisation of our senses creates what de Chardin called the 'noosphere' or a technological brain for the world. Instead of tending towards a vast Alexandrian library the world has become a computer, an electronic brain, exactly as in an infantile piece of science fiction (McLuhan 2002:32).

In the decisive passage where McLuhan refers to Teilhard, electronic media become the "cosmic membrane that has been snapped round the globe" (McLuhan 2002:32), and two further passages in *The Gutenberg Galaxy* linking the idea of evolutionism and the progress of media technology refer to Teilhard (McLuhan 2002:46, 174). McLuhan's subsequent commentaries about Teilhard's work became more diverse, or even contradictory. Though McLuhan does not mention the French Jesuit by name in his third book, *Understanding Media: The Extensions of Man* (1964), he does refer to Henri Bergson's *L'évolution créatrice*, and his utopia of a harmonic electronic age is guided by Bergson's idea that language is to blame for the separation of humankind:

> Electricity points the way to an extension of the process of consciousness itself, on a world scale, and without any verbalization whatever. Such a state of collective awareness may have been the preverbal condition of men. Language as the technology of human extension, whose powers of division and separation we know so well, may have been the ‚Tower of Babel' by which men sought to scale the highest heavens. Today computers hold out the promise of a means of instant translation of any code or language into any other code or language. The computer, in short, promises by technology a Pentecostal condition of universal understanding and unity. The next logical step would seem to be, not to translate, but to by-pass languages in favor of a general cosmic consciousness, which might be very like the collective unconscious dreamt of by Bergson. The condition of ‚weightlessness,' that biologists say promises a physical immortality, may be paralleled by the condition of speechlessness that could confer a perpetuity of collective harmony and peace (McLuhan 1994:80).

However, Bergson's book was also the initial point for Teilhard's ideas about a Christian interpretation of evolutionism. McLuhan is even far more enthusiastic than Bergson:

> If the work of the city is the remaking or translating of man into a more suitable form than his nomadic ancestors achieved, then might not our current translation of our entire lives into the spiritual

form of information seem to make of the entire globe, and of the human family, a single consciousness? (McLuhan 1994:61)

In other publications and interviews, McLuhan chooses a more analytical attitude, contending that he himself does not see any inherent religious significance of electronic media but "we would not belittle the merely cultural power of the non-literate and the literate forms of life to shape the perceptions and biases of the entire human community" (McLuhan 2002:68)[12].

When he was asked outright in an interview in 1970 about the parallels of his work and Teilhard's ideas, McLuhan gave a sophisticated answer without mentioning Teilhard: he rejected all potential predictions of the future impact of media technology as mere speculation. However, he considered that the omnipresence produced by media could be an incitement for the religious seeker (McLuhan 1999b:87-88).

McLuhan's explicit critique of religious interpretations of the "electronic age," on the other hand, also reflect his admiration for the new communication technologies:

Electric information environments being utterly ethereal fosters the illusion of the world as a spiritual substance. It is now a reasonable facsimile of the mystical body, a blatant manifestation of the Anti-Christ. After all, the Prince of this World is a very great electric engineer (McLuhan 1999c:70-72).

On other occasions McLuhan disapproved of the idea of a harmonious global community,[13] referring to his concept of *retribalization* – electronic media would support individualism due to the missing hierarchies and social centres, therefore threatening the existence of community life. Indeed, by the end of the 1960s, McLuhan no longer advanced a euphoric opinion on the future impact of electronic media; rather, he declined to make any further evaluations or predictions. The *global village* – a notion inspired by Wyndham Lewis' book *America and Cosmic Man* – became his leading metaphor for the media society.[14] McLuhan's book *War and Peace in the Global Village* (1968) shows that he considered this *global village* also as a place full of conflicts and crises (McLuhan 1968).

McLuhan's differences with Teilhard become apparent in the use of the notion of consciousness. With the exception of a few euphoric predictions in the *Gutenberg Galaxy* and in *Understanding Media*, McLuhan understands the *extension of consciousness* as an augmented

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12　Also see the reception of Mircea Eliade in McLuhan's work, ibid. 67-71.
13　He harshly criticizes the emergence of a new oral society: „Terror is the normal state of any oral society, for in it everything affects everything all the time." McLuhan 2002:32.
14　The well known painter and author Wyndham Lewis (1882-1957) was McLuhan's collegue at Assumption College of Windsor University. Lewis wrote in *America and Cosmic Man*: " … the earth has become one big village, with telephones laid from one end to the other, and air transport both speedy and safe …" Lewis 1948:21.

ability of individual reception and not as *one* common collective consciousness culminating finally in point Omega. The global village is a village and not a town because, metaphorically, everyone knows everything of everyone – but without necessarily sharing the views of our fellow men:

> With such awareness, the subliminal life, private and social, has been hooked up into full view, with the result that we have ‚social consciousness' presented to us as a cause of guilt feelings … In the electric age we wear all mankind as our skin (McLuhan 1994:47).

6   The noosphere, the global village and point Omega

Closer inspection of the relation between Marshall McLuhan and Pierre Teilhard de Chardin might have shown that there are indeed some significant differences in their theoretical concepts. But now, it is even more promising to investigate the concrete processes of reception of Teilhard's work in the recent interpretations of the Internet. Teilhard is no media theorist, the notions of "information" and "communication" are irrelevant in his idea of a cosmic history, and he introduces the term of the noosphere in the context of theological and philosophical considerations of the ascent of human consciousness. Yet, it is evident that McLuhan's presentation of Teilhard's ideas in the *Gutenberg Galaxy* has been authoritative for the later reception of Teilhard in popular and academic media discourse: first, Teilhard is introduced as a "romantic biologist" and in no way as a Catholic theologian in the Jesuit tradition; second, McLuhan makes no mention of the Christian context of Teilhard's evolutionary model; and third, he keeps quiet about the very the centre of Teilhard's theory, the convergence of human consciousness in the future point Omega. Thus, Teilhard's ideas appear as completely non-theological in McLuhan's works (Boehmisch 1998).

Finally, Teilhard's notion of the noosphere is clearly reinterpreted by McLuhan. Paralleling the layer of thought which emerged with the appearance of the first hominids in Teilhard's work, McLuhan determines the noosphere as the "technological brain" – the whole world becomes a computer. In doing so, McLuhan performs three modifications that prepared the notion of the noosphere for its broad reception in cyber discourse: first, the noosphere is contextualised as a term of media technology; second, the emergence of the noosphere is dated to the beginning of the "electrical age" – our present time; and third, the noosphere implies, according to McLuhan an already existing global network.[15] In this manner, McLuhan supports an extraordinary appreciation of our current media developments – what was a slow process of the "planetization" of the

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15 Teilhard separated the emergence of the noosphere thousands of years ago from the future "planetization" and "convergence of thinking". See Teilhard de Chardin 1955:211-235.

noosphere, or a continuous convergence of thinking, becomes suddenly a higher level of evolution initialized by the spread of radio, television and computers in the "electronic age" in McLuhan's works.

For our analysis of the cultural reception of the Internet, there is in addition to the close connection of media and evolution still another important aspect to be considered. From a holistic perspective electronic media and the Internet are received as part of an unfolding organism – initially Marc Pesce referred to the idea that media are vital elements of Gaia, the earth. In this context, it is significant that McLuhan took the first step to "organise" the electronic media: apart from the basic assumption that media are an extension of our physical senses, McLuhan introduces the biological metaphors of the "electronic brain" and the "cosmic membrane", while Teilhard used the metaphor of the "thinking envelope" (*enveloppe pensante*).[16]

7   Gaia

The so called Gaia theory was developed in the late 1960s by the British physician, geophysicist and ecologist James E. Lovelock. Lovelock starts with the idea that the earth, together with all its inhabitants, has to be understood as one holistic organism. With his book *Gaia: A New Look at Life on Earth* (1979), Lovelock greatly influenced the upcoming environmental movement as well as many holistic thinkers of various religious traditions and innovations:

> The result of this more single-minded approach was the development of the hypothesis that the entire range of living matter on Earth, from whales to viruses, and from oaks to algae, could be regarded as constituting a single living entity, capable of manipulating the Earth's atmosphere to suit its overall needs and endowed with faculties and powers far beyond those of its constituent parts (Lovelock 1991:9).

Thus, the earth appears as a threatened planet that has to be preserved and must not be recklessly exploited. Lovelock showed that the earth as a whole reacts to the actions of its inhabitants, in particular to the increasing air pollution caused by humankind (Lovelock 1991:64-123). This crucial idea, that the totality of all living matter on earth constitutes one entity, has been adopted in diverse discourses.[17]

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16 This reference to biological terms is not due to a misinterpretation from French into English since the English text also uses the common notion of the *thinking envelope*. See Teilhard de Chardin 1959:251.

17 The ideas of Lovelock have been adopted in the context of environmentalism primarily by the Brazilian ecologist José Lutzenberger (1926-2002) who initialized the *Gaia Foundation* in 1987. See Lutzenberger 1990:101-108. Lovelock has been surprised by the religious reception of his work: "I was naïve to think that a book about Gaia

Lovelock's choice of the name of the Greek goddess of the earth, Gaia, for a holistic notion of the earth facilitated the broad reception of the Gaia theory within feminist theology. The British theologian Anne Primavesi (*1934) considers the right understanding of Gaia to be the centre of all theology in our time:

> Theology at this level is an earth science. This simply affirms that the systematic organization of human knowledge, in this case knowledge of God, now includes in its remit and discussions the environment in which that knowledge is systemized … Gaia theory shows us that … all living beings on earth are in physical contact at one remove through its water, atmosphere and soils … [18]

Beside explicitly Christian theologians, prominent New Age thinkers such as Peter Russell (*1946),[19] Ken Wilber (*1949)[20] and Fritjof Capra (*1939)[21] adopted elements of the Gaia theory and reconnected them once again with Teilhard's teleological interpretation of evolution.[22] On the other hand Lovelock's approach is often linked in the American context to the more rational work of the philosopher and architect Buckminster Fuller (1895-1983), who was very popular in his time.[23] The current heterogeneous Gaia movement unifies the ideas of well-known thinkers like Teilhard and Lovelock, with diverse ideas and practices from ecology, astrology, Buddhism, Hopi-Indian culture, and neo-shamanism.[24]

The recent reception of the Gaia theory in the discourse about electronic media is mainly due to decisive efforts by James Lovelock himself, aided by McLuhan's advocated relation between evolution and media. The ecologist is deeply convinced that progress of sciences and of cybernetics

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would be taken as science only." See Lovelock 2003:532.

18 Primavesi 2000:20. Even more significantly than Primavesi, the Catholic theologian Rosemary Radford Ruether (*1936) enforces a political perspective of ecofeminism, aiming at a balance of the "male God" and the "female Gaia". See Rosemary Radford Ruether, *Gaia & God. An Ecofeminist Theology of Healing*, San Francisco: Harper 1992, 254-274.

19 Russell links the spiritualized Gaia theory with the emergence of a global brain of higher consciousness which might be based on the "interlinking of humanity" by the Internet. See Russell 2000, 64-69.

20 In his "integral theory," Wilber refers to many elements of Gaia theory as well as to Teilhard's ideas. The notion of biosphere, noosphere and point Omega are essential for his theory, though not in a Christian sense but in the sense of an evolutionary teleology. See Wilber 1995:85-87, 111-113.

21 Capra – as well as other New Age thinkers – combines ecological approaches of the Gaia-Theory with evolutionism and the vision of a spiritual renewal of a unified humanity. See Capra 1982: 284-285.

22 According to Marylin Ferguson, author of the influential New Age book *The Aquarian Conspiracy* (1980), Teilhard de Chardin is actually the most frequently quoted author among New Age believers. See Ferguson 1980:50-51, 93, 420.

23 In the 1930s, Fuller proposed a rational vision of a world community that is able to live in accordance with aesthetics and nature on the "spaceship earth" because of scientific-technological progress. See Fuller 1938:356-360; Fuller and Dil 1983:11-17.

24 See http://www.gaiamind.com; http://www.gaia-net.de. Judith L. Boice depicts her experiences in *Gaian Communities* very colorfully. See Boice 1990. A linguistic analysis of the reception of Gaia seems to be a promising undertaking – the term is used as a name for a Neo-Hindu healer in Munich as well as for a label for rechargeable batteries.

in particular, as part of the natural evolution of humankind, will also lead to a better understanding of Gaia – as long as human beings are still in touch with nature (Lovelock 1991:127-140). Although he is concerned with national resistances, Lovelock shares with Teilhard an optimistic outlook of future life on our planet, since the earth is now conscious of its own existence:

> Still more important is the implication that the evolution of the homo sapiens, with his technological inventiveness and his increasingly subtle communication network, has vastly increased Gaia's range of perception. She is now through us awake and aware of herself (Lovelock 1991:148).

Referring to the analogy of biological brains and networked computers, Lovelock anticipates the later cyber theories:

> Our brains can be likened to medium-size computers which are directly linked to one another and to memory banks, as well as to an almost unlimited array of sensors, peripheral devices, and other machines Lovelock 1991:150.

As demonstrated in our considerations so far, the reception of Teilhard de Chardin in the context of the Internet is obviously a complex, non-linear process which is mainly based, on the one hand, on McLuhan's notion of media and evolution, and on the other hand on Lovelock's organic interpretation of media as a part of Gaia. Teilhard is presented in the figure of an unrecognized prophet; in Mark Pesce's book he appears as a modern and prescient theorist of evolutionism (Pesce 2000:164-171); Jennifer Cobb depicts him as an "obscure Jesuit priest and paleontologist" (Cobb 1995). Pesce completely hides Teilhard's theological background and connects the concept of the noosphere with Gaia and the Internet; Cobb outlines a spiritual vision of cyberspace exceeding the limits of mere Christian theology, and avoids any references to Teilhard's christology. The point Omega as the convergence of human thought is only adopted by the posthumanist thinker Frank Tipler.

Further, the concept of the noosphere in McLuhan's sense is adopted by today's cyber-theorists, but there is an important shift: the emergence of the noosphere is no longer linked to the dim notion of the "electronic age" but concretely to the spread of the Internet. In this manner, an extraordinary significance is attributed to the Internet as the decisive step of evolution. Additionally, the construed relation between a religious, or spiritual, teleology (Pesce) and the idea of a continuous revelation of god through the Internet (Cobb) and through computer technology in general terms (Tipler) – so the chain of Gaia, god and the Internet – bestows upon new media an

absolutely singular significance in the context of the earthly and even of the cosmic evolution of life.[25]

8   Contexts

The reception of the idea of the noosphere and Gaia theory is not a phenomenon to be clinically dissected, settled in a "cultural vacuum," but it is a process embedded in a field of receptive conditions. These dominant patterns of reception may influence the concrete cognition of certain phenomena, and sometimes they illuminate the intercultural differences of the reception of similar ideas – consequently, the close connection of the revelation of god with modern media technology as an aspect of evolution initially emerges as an a mere American idea. A certain complex of ideas in American and European philosophy plays a significant role for the cultural reception of the Internet, which shall be surveyed below. In this context the prevailing pattern of reception is the idea of the advancement of life forms along the history of evolution, which is legitimized as partly religious or metaphysical, or as merely materialistic.

The American historian Arthur Oncken Lovejoy (1873-1962) shed light on the initial cultural reception of modern evolutionism in his splendid *William James Lectures* at Harvard in 1932/33. In his comprehensive work, which begins with Plato and Aristotle, he deals with a crucial philosophical and religious idea of the occident: *the great chain of being*. For many centuries the idea of the connectivity of all beings was underlying the philosophical and theological discourse on the position of humankind as part of the cosmic creation; it has been advocated by numerous thinkers, such as John Locke, Alexander Pope, Edmund Law, Leibniz, Kant, Herder and Diderot in modern times. This chain is defined by the distance to god as the origin of all creatures, and the ranking starts with the lowest organisms and the animals, then human beings and angels, and ends up in god. In the 18th century, English author Soame Jenyns (1704-1787) translated this hierarchy into the order of the human races, and he contrasts the genius of the West, Isaac Newton, with the "wild nature of the Hottentot". Initially, this chain was assumed to be static, consisting of the perfect and complete hierarchy of all beings as god created them in the beginning of the world, and as they will continue to exist until the end of the world (Lovejoy 1961:183-200).

It was the Swiss natural philosopher Charles Bonnet (1720-1793) who named the idea of the Dutch scientist Jan Swammerdam (1637-1680) that all life has developed from a germ, in which future development is already implicit as *evolution* – as unfolding and uncoiling of an already

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25 Of course, in this discursive strategy the agents and "prophets" of the Internet are supposed to be important, too.

existing structure. Arthur McCalla considers this as evidence that the terminological basis of later evolutionism has its roots in the Christian idea of advancement:

> Evolution is here a synonym for the preformationist archetypal pattern of essence and development that purports to be at once scientific and soterological (McCalla 1998:30).

Bonnet, as well as the Swabian pietist and natural philosopher Friedrich Christoph Oetinger (1702-1782), advocated in the context of this biological preformationism the idea of an increase of biological complexity and spiritual capacity of creatures, with god realising himself in the history of evolution as *ens manifestativum sui*, according to Oetinger. Evolution is seen as the augmentation of divine corporeality. In the 18th century, the idea of the *great chain of being* is completely temporalized, the hierarchy of creatures becomes dynamic. It is now a hierarchy that asks for a genealogical ascension because all potentials of being in the universe will seek their realisation, and this can happen only in a temporal progression (Lovejoy 1961:242-287; McCalla 1998:29-31).[26]

Though the thesis of continuous perfection of natural creation has already been expressed by Erasmus Darwin (1731-1802) and Jean-Baptiste Lamarck (1744-1829) (Lovejoy 1961:227-241; Spadafora 1990:234; Staudinger 1986:167-168), it was not until Charles Darwin (1809-1882) that a theory of evolution was drafted on an empirical basis. Principally, Darwin rejected all teleological implications of the history of evolution, but his notion of the emergence of higher and more and more advanced and perfect creatures[27] in the closing words of his chief work *On the Origin of Species* (1859), and in some private letters, has provided a basis for all teleological interpretations of evolution (Benz 1965:81-91, 148-150; Baillie 1950:145-147). In spite of some opposition towards this teleology[28] the idea of a continuous advancement of life was widespread in rational and scientific discourses,[29] as well as in religious discourses. Despite the frequently and strikingly quoted fundamentalist resistance against Darwinism, there were a large number of Protestant theologians and philosophers who were committed to bringing evolutionism in accordance with the Christian salvific history.[30] The temporalization of the *great chain of being* and the acceptance of

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26 Evidently, Tipler receives Lovejoy's work. See Tipler 1995: 216, 385.
27 Darwin's closing words give an optimistic outlook: "And as Natural Selection works solely by and for the good of each being, all corporeal and mental endowments will tend to progress towards perfection." Darwin 1988: 347.
28 Most prominently Heinrich Rickert, Julian Huxley and Richard Dawkins opposed a teleological interpretation of evolution.
29 Most important among these popularizations of Darwinism are the works of the German zoologist and natural philosopher Ernst Haeckel (1834-1919), *Die natürliche Schöpfungsgeschichte* (1868), *Welträthsel* (1899) which have been largely distributed in all major Western languages.
30 Most notably among these theologians are the conservative Biblicist Minot Judson Savage (1841-1918), who considered the problem of theodicy as a kind of *maladjustment* that will be cured in the future evolutionary process, and the Scottish Presbytarian and later Princeton philosopher James McCosh (1811-1894), who opposed an atheistic interpretation in his book *The Religious Aspect of Evolution*. Also, the Christian scientist Henry Drummond (1851-1897) has been very influential with his Lowell Lectures, titled *The Ascent of Man* (1894).

inner-worldly progress in the context of postmillennialism evidently form the background of the modern reception of evolutionism.

Notwithstanding the significance of these theological interpretations, it is evident that the works of the three philosophers Henri Bergson (1859-1941), Samuel Alexander (1859-1938) and Alfred North Whitehead (1861-1947) are of greater importance for Teilhard and the later reception of the noosphere in the media context.

As a thinker in the tradition of the philosophy of life, Bergson opposes a rational-positivistic interpretation of evolution in his chief work *L'évolution créatrice* (1907). The development of life forms cannot be simply reduced to mechanistic laws of action, which always produce the same results under the same conditions. Evolution is much more creative – thus, Bergson disapproves of teleological interpretations as well as mechanistic reductions (Bergson 1909:57-73, 392-399). In fact, the development of life forms is driven by a metaphysical spirit of life, a power of life – the *élan vital* – which is inherent in every creature:

> Nous revenons ainsi, par un long détour, à l'idée d'où nous étion partis, celle d'un *élan originel* de la vie, passant d'une génération de germes à la génération suivante de germes par l'intermédiaire des organismes développés qui forment entre les germes le trait d'union. Cet élan, se conservant sur les lignes d'évolution entre lesquelles il se partage, est la cause profonde des variations, du moins de celles qui se transmettent régulièrement, qui s'additionnent, qui créent des espèces nouvelles (Bergson 1909:95).

This *élan vital* constitutes, according to Bergson, the metaphysical unity of life that generates new forms of life over and over, by the struggle of mind and matter (Bergson 1909:95-106).

Samuel Alexander regards Darwinism, in his book *Space, Time and Deity* (1920), as a mere scientific theory which avoids any evaluations of its object of investigation, but which delivers an essential explanation of how values are formed in human culture and, even more generally, in the history of life. Those creatures which have survived by natural selection or mutation under certain conditions are considered to be good so that the most survivable beings are worshipped as the top of the hierarchy (Alexander 1966:309-310). From a human point of view, the universe bears continuously higher *levels of existence* – matter, life, and mind:

> Within the all-embracing stuff of Space-Time, the universe exhibits an emergence in Time of successive levels of finite existences, each with its characteristic empirical quality. The highest of

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Further protagonists in this debate are the Calvinistic botanist Asa Gray (1808-1888) with his *Darwiniana* (1876) and the geologist and preacher George Frederick Wright (1838-1921). See Benz 1965:157-183. Apart from these Christian interpretations, the English scientist Alfred Russel Wallace (1823-1913) advocated the spiritist idea that the future human being will transcend its corporeality and live as disembodied spirit. See Wallace 1953:291-320.

these empirical qualities known to us is mind or consciousness. Deity is the next higher empirical quality to the highest we know … (Alexander 1966:345).

The highest level of existence which can be experienced by human beings, *mind* or *consciousness*, provides a stepping stone to the next level of cosmic evolvement:

Deity is thus the next higher empirical quality to mind, which the universe is engaged in bringing to birth. (Alexander 1966:347)

Alexander assumes that there is no divine plan for evolution, but the *deity* is a part of the evolutionary process:

Deity is some quality not realised but in process of realisation, is future and not present. (Alexander 1966:379)

For Alexander, god is an endless being within the space-time which is developing along with the history of the universe, and embodies all qualities of the universe which are not yet realized or cognizable (Alexander 1966:341-372):

As actual, God does not possess the quality of deity but is the universe as tending to that quality. This nisus in the universe, though not present to our sense, is yet present to reflection upon experience (Alexander 1966:361).

Thus, the development of the universe driven by the *nisus* does not imply determinism but a strong teleological moment, since new and surviving beings in the history of evolution are always determined as superior (Baillie 1950:146-152; Emmert 1991:109-112).

It remains controversial to what extent the works of Alexander have influenced the ideas of the mathematician and philosopher Alfred North Whitehead. Whitehead also endeavoured to understand the phenomena of the empirical world in accordance with the history of nature and cosmos, and to overcome the boundaries between sciences, humanities and philosophy. Basically, Whitehead drafts the image of a bipolar god who is characterized by a *primordial* and a *consequent* nature. Both natures of god strive to come together to re-establish the unity of god. He concludes that this dynamic god, in process of realizing his actuality, creates continuously new and higher forms of existence (Whitehead 1929:511-544).

There are thus four creative phases in which the universe accomplishes its actuality. There is first the phase of conceptual origination, deficient in actuality, but infinite in its adjustment of valuation. Secondly, there is the temporal phase of physical origination, with its multiplicity of actualities. In this

phase full actuality is attained; but there is deficiency in the solidarity of individuals with each other ... Thirdly, there is the phase of perfected actuality, in which the many are one everlastingly, without the qualification of any loss either of individual identity or of completeness of unity. In everlastingness, immediacy is reconciled with objective immortality … In the fourth phase, the creative action completes itself. … For the kingdom of heaven is with us today. The action of the fourth phase is the love of God for the world (Whitehead 1929:532-533).

This idea of a continuously evolving god had great influence on the formation of the Protestant process theology which began in the 1930s at the Chicago Divinity School (Maaßen 1991:217-219).

Bergson, Alexander and Whitehead, and later Teilhard, created systems of cosmological and evolutionary metaphysics as an extended interpretation of the empirical world depicted by the sciences. These briefly summarized ideas of Bergson, Alexander and Whitehead represent the dominant structure of the religious and philosophical reception of evolutionism in the first half of the 20th century, reconciling the temporalized notion of the *great chain of being* with modern evolutionism. Figuratively, this is the "farmland" on which the ideas of Teilhard de Chardin, Marshall McLuhan, some New Age thinkers, and today's cyber philosophers have flourished, as far as they concern the question of evolution. McLuhan, Tipler, and Cobb explicitly refer to Bergson or Whitehead, and Cobb and Tipler even consider their own approach as a continuation of process theology or natural theology, whereas Pesce presumably receives the ideas of Teilhard more in the context of New Age philosophy. In spite of their differences in appropriating the notion of the noosphere, Pesce, Cobb and Tipler all find the emergence of the Internet and computer technology in our present time to be a sign of a new level of consciousness in the history of evolution that unifies humankind.

9   Enlightenment, the study of religion and the utopia of community

The emergence of the Internet in the 1990s has not been the first occurrence when people attributed community ideals to new communication technology. In his outstanding article *The Rise and Persistence of the Technological Community Ideal* Randy Conolly analyzes the history of technological innovations, demonstrating how the great channel constructions of the 17th and 18th centuries were regarded as a promising means for unifying all peoples and for banishing war and hostility. Later, the telegraph, railway, radio and television – so, the "magic channels" of Marshall McLuhan – were considered means of overcoming social disparity and hierarchies, and thereby supporting the perception of the true equality of all men (Connolly 2001). Here, the pattern of utopian interpretations is determined by a crucial project of the enlightenment: the equality and

community of all human beings. Thence, the religious reception of the Internet corresponds with secular interpretations such as the visions of the French media philosopher Pierre Lévy.[31] In his view, cyberspace is the metaphor of liberated and equal humanity realizing the prospects of enlightenment as a global collective intelligence (Lévy 2001:100). In a similar way, the sociologist Manuel Castells (*1942) envisioned noopolitics as a new type of democracy in a network society (Castells 2001).

Now, it is remarkable that the secular utopia of cyberspace adopts the same impulses that were the significant driving forces of the comparative study of religion in the 19th century. Initially, under the formative influence of philology, the comparison of languages were thought to suffice to illuminate the early history of peoples and finally reveal their common cultural origin. Here, Friedrich Schlegel's treatise *Über die Sprache und Weisheit der Indier* (1808) has been seminal. When, in the second half of 19th century the linguist Friedrich Max Müller (1821-1900) constituted the comparative study of religion (*Religionswissenschaft*), he regarded the new discipline as the completion of all history. The exploration of the cultural origin of men is, according to Müller, equal to the religious origin of men, and consequently the nature of religion would also reveal the nature of men (Gladigow 2005b:44-46):

> But more surprising than the continuity in the growth of language is the continuity in the growth of religion. Of religion, too, as of language, it may be said that in it everything new is old, and everything old is new, and that there has been no entirely new religion since the beginning of the world (Müller 2002:70).

For Müller, the book remained the dominant media paradigm of his time underlying the processes of cognition. The translation and comparison of the "holy scriptures" of humanity promised to uncover the core of all living and past religions. In doing so, Müller received the old, initially theological idea of the accumulation of knowledge (on god) which began with Vincent of Lérin's *Commonitorium* (ca. 434), continued in Francis Bacon's *Advancement of Learning* (1605), and influenced the succeeding doctrines of scientific and religious progress (Newton, Condorcet, Priestley). But Müller did think globally, considering the scriptures of religions as a divinely given network, of which only the total view will disclose the significance of its single elements (Müller 2002:70-79). It is not necessary, here, to explain the reception and continuation of this idea in the Parliament of the World's Religions (1893), the *Religiösen Menschheitsbund* initialized by Rudolf Otto, the works of Mircea Eliade, and many others (Lüddeckens 2002; Obergethmann 1998).

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31 The postmodern media philosopher Pierre Lévy (*1956) holds the research chair for collective intelligence at Ottawa University in Canada. His work is deeply influenced by his mentor Felix Guattari.

In fact, concerning the question of the cultural and religious reception of the Internet, it is of great interest that this medium is received as a secular idea as well as a religious utopia of universal community. Pierre Lévy's conviction that the Internet will develop into a collective intelligence by the advancement of knowledge and reason converges with the religious notions of the noosphere proposed by Jennifer Cobb, Mark Pesce and others. The emergence of the Internet is considered to be the outstanding event in the history of evolution, indicating humanity's course from its divine (or however transcendent) origin to a Christian or more commonly spiritual community of the world. The contextualisation of this religious idea, founded in both Enlightenment and Christian thought, may raise the question whether (and in which way) there might be a religious reception of the Internet in other cultural hemispheres such as Japan, India or China.

According to the communication scientist Armand Mattelart, these post-modern utopias of an egalitarian *global village* have crucial implications for the construction of sense in our contingent societies overflowing with an unmanageable amount of information. They provide the illusion of a rural (*village*) or organic (*Gaia*) – religious or secular – global community, and they oppose the experienced loss of actual communities (Mattelart 1996:85-162, 304). The metaphors of Gaia, god and the Internet reflect some aspects of the current community ideal. To regard the Internet as the (most important) result of the evolutionary process exceeds the previous euphemisms welcoming new technologies in the past. The medium now becomes a part of a superior cosmic process, apparently unfettered by human influences. In an age that lacks one common myth, the medium itself becomes the master narrative – *die Meistererzählung* – of the media society.

However, a consideration of the history of the cultural reception of technological innovations, the recent debate on governmental and commercial spying activities on Internet users, and eventually the simple realisation that probably a third of the world's population never used a telephone,[32] may enable us to keep the necessary analytical distance in the study of religion and media.

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32 In his millenium report, at that time UN General Secretary, Kofi Annan, refers to the metaphor of the global village but he clarifies that most "villagers" never made a phone call and have to fight with mere existential challenges (such as clean water, food, health care, education). See Annan 2000:16.

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