

# Myth, digitalism and technological convergence: hegemonic discourses and political economics

## NÚRIA ALMIRON

Lecturer at the Faculty of Communication of Universitat Pompeu Fabra

nuria.almiron@upf.edu

### Abstract

*This article goes over the findings of an analysis of the structure, function and narrative of the dominant pro-digital discourse to date, that which takes technological change as an unequivocal and irreversible driving force of social change and offers a future full of promises of global progress. By means of this analysis, the conclusion drawn is that the profound "mythagogic" nature of this discourse, a character that actually and paradoxically impedes progress in constructing the society promised by its own narrative.*

### Key words

*Myth, digitalism, technological convergence.*

## JOSEP MANUEL JARQUE

Professor of Journalism at the Faculty of Communication Sciences of the Universitat Autònoma de Barcelona

josemanuel.jarque@uab.cat

### Resum

*En aquest article s'exposen els resultats de l'anàlisi de l'estructura, la funció i la narrativa del discurs digitalista dominant fins avui, aquell que pren el canvi tecnològic com a motor inequívoc i irreversible de canvi social i ofereix un futur ple de promeses de progrés global. A través d'aquesta anàlisi la conclusió que se'n desprèn és la del profund caràcter mitagògic d'aquest discurs, caràcter que impedeix, de fet, i paradoxalment, avançar en la construcció de la societat promesa per la seva pròpia narrativa.*

### Paraules clau

*Mite, digitalisme, convergència tecnològica*

## Myth, digitalism and technological convergences: hegemonic discourses and political economics

As described by Siegfried Jäger (2003), social discourses are a flow of knowledge, of all the knowledge accumulated in the history of a society, which changes constantly and influences the way the conditions of its members are formed and the structure of their organisations and institutions. Far from being homogeneous, social discourses are formed on the basis of texts that are woven together and become, at the same time, affluent narratives with increased social impact. Accordingly, their formation is the product of complex interactions between different subjects or groups of individuals in which some naturally retain more power in their production, broadcast or control than others.

The hegemonic discourse that has surrounded digital technologies up to now, as well as the discourse on their impacts, obeys this logic as well. This article goes over the findings of an analysis of the structure, function and narrative of the dominant pro-digital discourse to date, that which takes technological change as an unequivocal and irreversible driving force of social change and offers a future full of promises of global progress. By means of this analysis, the conclusion drawn is that the profound "mythagogic" nature of this discourse, a character that actually and paradoxically impedes progress in constructing the society promised by its own narrative. To justify this assertion, we shall consider the historical roots and

*topoi* or current propositions this discourse draw strength from, after the inevitable clarification of terminology,

## 1. On myth and the mythagogic

A discussion of the concept of myth encompasses a number of different perspectives that range from the aesthetic, poetic and philosophical, including the psychoanalytic, to the socio-logical-anthropological and ritualistic-co-religious, to name a few. One of the features these narratives have in common is that they can be qualified as mythological<sup>1</sup> in their *totalising* aspiration, i.e., the intention to provide and embrace an explanation for and solution to all areas of life. One good example is the hegemonic discourse on digital communication technologies (DCTs).

In a remarkable effort of synthesis, several classic authors in the field, such as Kirk (1985), contend that a mythological discourse is one that is public, has a typical, iterative structure, develops different functions, is useful in relation to its transmitters' and receivers' needs, power or status and has different social meanings. Another characteristic of myth, which may be a determinant, is its an-historic condition – wherein it eliminates linear time and the possible changes it involves (Paramio 1971) - or static condition, in the words of Lévi-Strauss, since it is "identical to itself" and constitutes a closed system in which a finite number of elements are combined in

different “opportunities for explanation” (Lévi-Strauss 1987).

In other words, “Myths do not, so to speak, get us anywhere. While there are myths about progress, myths do not themselves ‘progress’” (Harpur 2006: 133).

Hence, the function of mythological discourse is not to scientifically attest to reality - if this were indeed possible - even though many narratives that obey this logic consider what is presented as a certified tale of what society seems to be or what takes place in it. In this sense, Roland Barthes considers myth to be a remnant of reality, since it conceals nothing: “Its function is to deform, not to obliterate” (Barthes 2000: 213). According to the French semiologist, mythologisation proceeds to a naturalisation or objectification of reality whereby it is presented as a part of an action foreign to human intervention.

These attitudes can be described as *mythical* or *mythagogic* (Paramio 1971), since they forge a muddled relationship between a myth’s content and the contrasting versions of reality, as if we were facing the version of an observer who, despite looking through a keyhole, insists he is taking in the whole room, instead of just a part. Those with a *mythagogic attitude* insist on touting this deformation or partial remnant as a logical model for interpreting reality. This way of thinking or attitude admits no divergent interpretations that may call into question its approach to certain social processes or issues and that, moreover, stands as a totalising discourse in an ideology with a dominating, hegemonic vocation that hampers and hinders a complex contact with the reality it informs.

In Mesopotamian mythology, the world was born from an *Apsus* or “primordial waters”. In our opinion, the discourse on digital technologies and the splash they have made in areas such as journalism are just one among many tributaries in a hegemonic torrent of mythagogic discourse that also encompasses *digital democracy* or the e-economy, to cite other discursive sources that emanate from the same source. In addition to sharing the same narrative structure, the former also spring from the *Apsus* of *digital myth*, which is the favourite cosmogony for defining the Information Society.

## 2. The background

However, this mythagogic attitude toward the innovation or change digital technologies provide is not a coincidence, quite the contrary; a not-disinterested impulse can be detected behind it.

An analysis of the historical roots of the pro-digital narrative that has prevailed until now shows that it has been the product of discursive interaction and iteration primarily among four categories of stakeholders: academics, economists, politicians and the mass media (the last of which have economic and political dimensions as well).

The first stakeholders - scientific and cultural elites - soon reveal themselves to be “the ideologists of the Internet revolution and epigones of politicians and industrialists” (Wolton

2000: 51). Some of the authors who drive the most promethean narrative around DCTs in these circles are not even alive today, but have been reinvented by their disciples or followers, e.g., Pierre Teilhard de Chardin (1881-1955) and his *noosphere*, or virtual sphere of thought that he added to the geosphere and biosphere, which denotes the materialisation of the result of the fusion between information and energy. The fascination that this Jesuit priest, palaeontologist and philosopher’s work has aroused in the techno-utopians of the late twentieth century has led to the recent reissue of his original or commentated works and his rebirth as a cyber-prophet (Teilhard and King 1999; Teilhard 2001, 2004; King, U. 1998; King, T. M. 2005; Fabel and St. John 2003; Savary 2007). In *Techgnosis. Myth, Magic, and Mysticism in the Age of Information* (1998), Eric Davis has attested to how Teilhard’s religious imagery continues to fuel most pro-digital utopias.

More recent, but also foreign to the digital explosion in the late twentieth century was Marshall McLuhan (1911-1980), whose relentless technological determinism (“The medium is the message”) would be used to update Teilhard’s ideas. McLuhan would very successfully mix Teilhard’s concepts with his own (e.g., the Gutenberg Galaxy and the global village) and use them to attempt to explain how technologies determine society, while systematically omitting any politico-economic dimension in his analysis. This would not prevent McLuhan from continuing to be the object of debate as a cyber-visionary or his books from being recommended at many universities (McLuhan 1964, 1969, 1967, 1998) through other contemporary authors, such as his disciple Derrick de Kerckhove (1995, 1997).

All in all, the most cumbersome work related to digital evangelism from the academic world corresponds to Nicholas Negroponte (1943-), the great apostle of the total rupture “with the world of atoms”. Co-founder of two major media mouthpieces for digital change - *Wired* magazine and the MediaLab at MIT - Negroponte would blend the classic promethean discourse with neo-liberal logic (and reap generous funds from it for his laboratory - probably the world’s most significant techno-utopia factory - something that cannot be overlooked). Negroponte’s an-historical, a-political and an-economic analysis highlights the impossibility of halting change, the inevitability of this change and the dispensability of the State and public policies in an environment managed by digital convergence. Rereading his best-seller *Being Digital* (1995) today requires as great a leap of faith as it did when it was published.

The second major evangelisers of the digital myth, who extracted a number of ideas from the above, are the corporate ideologues spearheaded by Toffler and Bill Gates and followed by a long list of bestselling authors supported by major private foundations, above all in the US. Whereas Alvin and Heidi Toffler (Toffler 1970, 1980) were the great creators of scenarios of expectation through which the general public would familiarise itself with techno-informational rhetoric (always an

annihilator of the nation-state in Toffler's case, which would be fêted by many of the conservative think-tanks that feed off his ideas (the World Futures Society, the Institute for the Future, the Hudson Institute, etc.), Bill Gates (1995, 1999) is responsible for the myth's utmost popularisation (understood as mass divulgation to a non-intellectual public). The simplification of the mythagogic pro-digital discourse by Microsoft's founder enabled it to permeate each and every corner of the planet. Gates' words contain nothing new: all the old stereotypes (rupture with the past, an-historical character, negation of external reality, inevitability of change) are reiterated to justifying market capitalism in the end. However, the clamour for a cyber-utopia in a neoliberal scenario has an especially ironic background here, considering the person proposing it: Gates is the planet's first multibillionaire thanks to a market monopoly (nothing less than 90% of all PCs in the world use his software) that today is still far from a scenario of perfect competition, of the "capitalism without friction" evangelised by Gates in his particular utopia.

To conclude, among all the evangelists of mythagogic digital discourses from the private sphere we must also mention the Progress and Freedom Foundation,<sup>2</sup> a think tank headquartered in Washington that openly proclaims as its mission the study of the "digital revolution" and its consequences on public policies, without dissimulating its goal of educating opinion-makers, leaders of public opinion and the public in general about the need to limit government, expand the market and guarantee individual sovereignty in the digital age now more than ever.

In the arena of politics, the mythagogic attitude has also been present in the wide-ranging series of reports and plans for the Information Society that have been launched since the early 1970s, although the triumph of what Mattelart calls "the mystique of the number" (Mattelart 2000, 2002) is one that particularly stands out. According to this author, the embryo of the notion of a society governed by information can be found in an irrational ennobling of the *figure*, of the *datum*, which would grow as of the Enlightenment. From thereon in, the consideration of reason as the font and foundation of authority would have – impossible not to highlight this – enormous positive consequences for humanity when embarking upon (but not yet reaching the end of) the road to snuffing out the tyranny of the few over the many and organising society on the basis of fairer and more solidarity-based criteria (which also still faces a long haul). Yet, perverse consequences would also emanate from this historical turning point, such as quantification used as the measure of all things. The birth of statistics in seventeenth-century Germany was a harbinger of this later absurdity. The *Staatskunde* or *Staatswissenschaft*, i.e., political science, would now equate datum with authority on the basis of its very name. From that time on, anything that was not a datum, i.e., measurable, would not be information, i.e., would not be relevant.

This obsession for quantification as a way of endowing

authority to what is being quantified has thoroughly impregnated all public policies since Fritz Machlup's attempts to measure the weight of information in countries' gross national product in the 1960s (Machlup 1962). The informational plans by practically all the world's major nations would be governed by this mythagogic vision: a totalising vision of the reach of digital phenomenon that we can only expect to obtain by its quantification in figures. From NASA's first request to Nixon (1970), the JACUDI Plan in Japan (1971) and the famous Porat (1977) or Nora-Minc reports (1978) to the narrative of the information highways in the 1990s by politicians in the US (spearheaded by Al Gore) and Jacques Delors' White Book (1994) or the Bangemann Reports (1995, 1997) in Europe and the subsequent national policies they would drive in European countries, the mantra is always the same. Determinism guarantees technology's ability to solve modern societies' political and economic problems; to a lesser or greater degree, utopia would incorporate mystical or salvific ingredients (e.g., the renaissance of the theological synergism between man and God advocated by Jonehi Masuda in Japan, 1980); information would be conceived as instrumental and restricted (information is eminently that which can emanate from computers and be transferred by telecommunications); the obsession to constitute a useful countable matrix for politicians would be ubiquitous (which would establish an economic-based view of the Internet in society that prioritises market goals before goals related to its protection as a means of social communication); and all of this in addition to the universal demand for the economic privatisation of the sectors involved as the only way to ensure the maximum development of DCT's potential.

Little need be added about the mass media, since they function essentially as a-critical repeaters of all promethean messages, no matter how farfetched. In this sense, we recall the outlandish comparison of Windows proffered by a Catalan newspaper when it at last worked: the newspaper asserted that it was the greatest invention in history, surpassing any other earlier technology. A more recent example of technological exaltation can be found in the analysis made by Internet fans of the US presidential elections of November 2008, when they went so far as to christen the new US president Obama 2.0. For disseminators of the cyber-promethean myth, the most characteristic feature of Obama's campaign was the history-making use made of new technologies, which – they contend – explain his widespread social support. However, they fail to notice that the use of the Internet was just another tool in a pre-existing movement of social support and that the candidate based his strategy primarily on a strong, active presence in the street and on traditional door-to-door campaigning by legions of collaborating supporters.

Certainly, historical references must be made to appraise this dominant narrative, but not with the amnesia that has been characterising the media and the overwhelming majority of contemporary intellectuals until today.

The most paradoxical aspect of the mythagoric discourse on DCTs is not precisely its disruptive character, as we are led to believe, but rather its enormous similarities to earlier mythagoric discourses. One need not delve very deeply to notice that recent and contemporary discourses are full of ideological propositions that not only are not new ideas, but have also been shared by all earlier techno-utopian narratives. Vincent Mosco has brilliantly summarised this contemporary historical amnesia, which fails to recall that before digitalism's exaltation, the world had already exalted the telegraph, electricity, the telephone, radio and television in a similar, if not identical manner (all the following quotations have been borrowed from Mosco 2004: 117-140).

On library shelves (and still in some bookshops) and Internet websites we can still find texts that speak of "the universal brotherhood of mankind", "the annihilation of space and time in the transmission of intelligence" or the overcoming of the social and economic divide and the social harmony and cohesion the telegraph would bring. Among many options, we will choose the words of only one journalist: thanks to the new telegraph lines being laid across the oceans, the telegraph would make "humanity's magnificent heart beat like a sun causing wars to finish and a reign of peace to be established in the world".

Similar, if not more exaggerated claims were made about electricity, with the addition that the gradual illumination of city streets would endow them with a magical aura that would turn towns into spectacles of lights and shadows described in words that directly evoke the "hallucination" William Gibson entertained in his description of cyberspace in his mythical novel *Neuromancer* (1984).

Things went beyond that with the telephone. The advent of this technology was considered synonymous with the arrival of a new, unprecedented era. The information available to everyone in the same way would stimulate democracy, because "the telephone makes us all equal". Advertises for the first telephones portrayed them as harbingers of a new social order, a tool that could "save the nation".

Many, if not all, the promises made about the telegraph, electricity and telephone were made about radio. This new tool would allow citizens to get closer to the sources of power, improve the quality of political oratory, outpace the printed word as an educational resource and change lives, especially for the youngest generations, who were best positioned to understand the new technology. The president of General Electric and owner of RCA described it as "a means to achieve lasting peace all over the world", which Marconi affirmed, and many of the first radio commentators highlighted how politics would improve, since the authorities' speeches would be broadcast live.

The exaltation of television passed through two major stages - its birth and the appearance of cable television - yet in both cases, television transformed the education system and was touted as a revolutionary tool for educating the youngest stu-

dents. Cable, moreover, would be the first technology to deserve to be the object of the analogy of the "Information Highway". One of the most famous texts on the promises of the medium's future, *The Future of Television* (Dunlap 1942), was equally convinced that it was the tool that would manage to bring about the cherished desire to achieve long-lasting "peace and freedom for all".

Revolutionary democratic transformations, an irreversible and unstoppable rupture with the past and redemptive promises, i.e., morally liberating social justice. Peace in the world, social harmony and a humanity interconnected by global communication. The resolution of conflicts, inequalities, wars and ignorance. In short, a long list of repeatedly broken promises that have reached our times intact in what Mattelart describes as "the ideology of redemption through networks" (Mattelart 2000).

### 3. *Topoi* or current propositions

The mythagoric discourse concerning digital technologies and their impact on society therefore has a number of far-reaching historical roots and is a product of a narration with fractal growth fuelled by several recursive and iterative discourses with a similar structure that together form the global narrative on the Information Society or Age.

This is a chaotic order in which, as previously mentioned, stakeholders and epistemological perspectives converge from disperse social areas, yet with the sufficient material means to be capable of projecting their discourses in the public arena. Thus, we find public institutions that adopt these discourses as a programme for social development, economic institutions that offer a new production system, academic institutions devoted to digital bounties and the communicative revolutions sparked by DCTs, which includes courses on them in the study plans of new universities and finally, communication professionals who submissively accept them as a radical rupture in the ways they do their jobs. Diverse voices for one single discourse, one single structure and one message. A by no means new cacophony, as we have seen, that is also being reproduced in the heart of the different social areas in which it is propagated.

The academic world is a paradigmatic example. Most theoretical contributions by authors in mainland Spain are little more than variations in an uncritical spirit (López López, Orihuela, Parra and Álvarez, Merayo, to cite a few) - except for honourable exceptions (Díaz Noci and Salaverria, among others) - on landmark texts by their colleagues (e.g., Gillmor, Deuze, Landow, Nielsen, Oostendorp and Nimwegen,). At the same time, these contributions are characterised by constituting an ever-narrowing handful of authors who quote each other.

This narrative coincidence is even more evident when the discourse fragments into *topoi* or ideological propositions that the different contemporary narratives on the digital myth have in common.

**Table 1. Synthesis of the *topoi* or propositions on the digital myth**

- The conception of history as progress.
- The consideration of the current situation as the advent of a “new age”.
- Scientific and technical progress as the driver of social change.
- Hegemony of instrumental reason.
- Technologicalisation as an improvement in the quality of life.
- Belief in a rational society.
- Knowledge-based meritocracy.

Source: Almiron and Jarque, 2008

Each and every one of these proposals is shared by the pre-digital techno-utopias that surfaced during the course of the twentieth century. The digital myth only limits itself to updating or reviving propositions in which:

a) *History is progress*, the product of linear, cumulative advancement, of improvement of stages and civilising improvements in which its continuity, discontinuity or semi-discontinuity are omitted, that take us back to outmoded conjectures in theory or imply substantial ruptures. A depiction of our societies since the Enlightenment as systems oriented towards a future open to the infinite with progressive content. Thus, progress becomes an acceleration of the times of social development and a reduction of historical periods that are surpassed.

b) *Each new stage is described as the advent of a “new age”* of rupture or revolution: “We have gone from the Gutenberg galaxy to the Internet galaxy” (Castells 2001). A necessary rupture with the past to justify a theory of the ends, the death of politics and the ideologies or history that prevents any type of learning from the fonts of the past.

c) *Scientific and technical progress is a historical driver of change and the future*. Society advances when there is technological innovation, which permeates all social realms with political, social, economic and cultural improvements, etc.. A mechanically positive, a-critical reading of science and scientific-based discourse.

d) *The triumph of instrumental reason is accepted or celebrated*, for which digital scientific progress offers a better and greater domination of nature, with the consequent social improvements.

e) *A lifestyle in which technologicalisation prevails as a means of improving all spheres is adulated*. Optimum job conditions, in their habitat, or the implementation of intellectual skills, all areas in which technology is presented as a *sine qua non* condition. Furthermore, technology involves an unflinching change in training and knowledge priorities to

acquire social value, most with a more technical profile or command of the tools meant to stimulate social change.

f) *The belief in a rational society is widespread* when the media incorporates the possibility of disseminating and sharing collective knowledge. Democratic depth is reduced to the fiction of a mythified, social sphere in which each person can express and break with the monopoly of institutional mediators. In itself and without further material supports, the exchange of knowledge is viewed as a regulator of life in society that improves the living conditions of individuals by making them freer and more critical, among other questions.

g) *A system of social promotion based on a meritocracy regulated by knowledge is assumed*. A salary hierarchy based on intellectual skills is defended and rising social status is linked to the degree of training. The mythagogic prodigital discourse exalts knowledge and information as the linchpins for articulating new societies and their social, political and economic relationships.

Because of their multiple contradictions, all these propositions are precariously supported by the political economics of a digital myth, whose narrative is not only profoundly fundamentalist as regards technology, but also very conservative in its political, social and economic aspects.

#### 4. Conclusions

The above-mentioned propositions are unfulfilled promises, in the same way that systematically occurred with the proposals presented in earlier periods by successive revolutions in communications.

Furthermore, they all move along a broad spectrum that spans ideological postures that encompass a naïve or superficial analysis of contemporary reality and social history to propagandistic seekers of new markets. They are easily formulated lemmas or watchwords, yet dubious anchors to reality that function because they are simple explanations in which above all, any reference to the material conditions individuals suffer or discussions on how power is distributed in our societies is negated.

One paradigmatic example is the enthusiastic welcome given to concepts so empty of content such as the “digital crack” or “technological literacy” by political parties, which has led to considering universal access to the Internet a priority, or in DCTs as an element of social justice that nevertheless shuns any criticism of the education system, its faults or its underfunding.

True advancement is thus impossible as long as the past and potential alternative futures are only conceived as uninteresting spectres. If the promises of the future do not imbibe from the

man of memory and rigorous observation of the present, today, like yesterday, they will be little more than fables that serve concrete interests. The analysis of the discourses, function and political economics of the myth not only sheds considerable light on these interests, but also on the need to defeat and demythologise them.

## Notes

- 1 Mythological: belonging to mythology or myth.
- 2 <<http://www.pff.org>>
- 3 The quotes in the text are from the first versions of the works in order to comply with the objective of properly situating the evolution of discourses in time; in cases where a translation is available, it is indicated in brackets.

## Bibliography<sup>3</sup>

ALMIRON, N.; JARQUE, J. M. *Discursos hegemónicos sobre Internet y periodismo*. Barcelona: Anthropos, 2008.

BARTHES, R. *Mitologías*. Madrid: Siglo XXI de España, 2000.

CASTELLS, M. *The Internet Galaxy: Reflections on the Internet, Business, and Society*. Oxford: Oxford University Press, 2001 (*La Galaxia Internet*, Barcelona: Plaza y Janés, 2001).

DAVIS, E. *Techgnosis: Myth, Magic, and Mysticism in the Age of Information*. New York: Harmony Books, 1998.

DUNLAP, O. E. *The Future of Television*. New York: Harper Brothers, 1942.

FABEL, A.; ST. JOHN, D. P. (ed.). *Teilhard in the 21st Century: The Emerging Spirit of Earth*. New York: Orbis Books, 2003.

GATES, B. *The Road Ahead*, New York: Penguin Books, 1995 (*Camino al futuro*. Madrid: McGraw Hill, 1997).

GATES, B. *Business @ the Speed of Thought*. New York: Warner Books, 1999 (*Los negocios en la era digital*. Barcelona: Plaza y Janés, 1999).

HARPUR, P. *El Fuego secreto de los filósofos: una historia de la imaginación*. Girona: Atlanta, 2006.

JÄGER, S. S. "Discurso y conocimiento: aspectos teóricos y metodológicos de la crítica del discurso y del análisis de dispositivos". In: WODAK, R.; MEYER, M. (comp.). *Métodos de análisis crítico del discurso*. Barcelona: Gedisa, 2003.

KERKHOVE, D. DE. *The Skin of Culture*. Toronto: Sommerville, 1995.

KERKHOVE, D. DE. *Connected Intelligence. The Arrival of the Web Society*. Toronto: Sommerville, 1997.

KING, T. M. *Teilhard's Mass: Approaches to "The Mass on the World"*. New York: Paulist Press, 2005.

KING, U. *Spirit of Fire: The Life and Vision of Teilhard De Chardin*. New York: Orbis Books, 1998.

KIRK, G. S. *El Mito: su significado y funciones en la Antigüedad y otras culturas*. Barcelona: Paidós, 1985.

LÉVI-STRAUSS, C. *Mito y significado*. Madrid: Alianza, 1987.

MATTELART, A. "The mythology of progress: Communication breeds democracy". In: *Le Monde Diplomatique*, December 2000.

MATTELART, A. *Historia de la sociedad de la información*. Barcelona: Paidós, 2002.

MCLUHAN, M. *The Gutenberg Galaxy; the making of typographic man*. Toronto: University of Toronto Press, 1962 (*La galaxia Gutenberg: génesis del homo typographicus*. Barcelona: Círculo de Lectores, 1998).

MCLUHAN, M. *Understanding media; the extensions of man*. New York: McGraw-Hill, 1964 (*Comprender los medios de comunicación: las extensiones del ser humano*. Barcelona: Paidós, 1996).

MCLUHAN, M.; FIORE, Q. *The Medium is the message*. New York: Bantam Books, 1967.

MCLUHAN, M. [en línea]. "The Playboy Interview: Marshall McLuhan". A: *Playboy Magazine*, March 1969. <<http://www.mcluhanmedia.com/mmclpb01.html>>

MACHLUP, F. *The Production and Distribution of Knowledge in the United States*. Princeton: Princeton University Press, 1962.

MASUDA, Y. *The Information Society as a Post-Industrial Society*. Tokyo: Institute for the Information Society, 1980 (*La sociedad informatizada como sociedad post-industrial*. Madrid: Fundesco/Tecnos, 1984).

MOSCO, V. *The Digital Sublime. Myth, Power, and Cyberspace*. Cambridge, MA: MIT Press, 2004.

PARAMIO, L. *Mito e ideología*. Madrid: Alberto Corazón Edit, 1971.

SAVARY, L. *Teilhard de Chardin. The Divine Milieu Explained: A Spirituality for the 21st Century*. New York: Paulist Press, 2007.

TEILHARD DE CHARDIN, P.; KING, U. *Pierre Teilhard de Chardin: Writings (Modern Spiritual Masters Series)*. New York: Orbis Books, 1999.

TEILHARD DE CHARDIN, P. *The Divine Milieu*, New York: Perennial, 2001.

TEILHARD DE CHARDIN, P. *The Future of Man*, New York: Doubleday, 2004.

TOFFLER, A. *Future Shock*, New York: Random House, 1970 (*El "shock" del futuro*. Barcelona: Plaza y Janés, 1999).

TOFFLER, A. *The Third Wave*. New York: Bantam Books, 1980 (*La tercera ola*. Barcelona: Plaza y Janés, 1992).

WOLTON, D. *Internet. Petit Manuel de survie*. Paris: Flammarion, 2000 (*Sobrevivir a Internet*. Barcelona: Gedisa, 2000).