

Spatial Metaphors describing the Internet and religious Websites: sacred Space and sacred Place¹

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Abstract

The paper examines the spatial metaphors used to describe the Internet and the World Wide Web either as space or place. The paper focuses on the analysis of literary and web-texts, draws on cultural studies and religious studies methodological approaches. Two different and co-existing conceptions of the Internet emerge from the analysis of the metaphors used by participants in online activities, the media, and scholars describing this new medium. The first part of the paper examines how in the media as well as in common speech the Internet is conceived of, and represented as, space; the second part focuses on how this medium is specifically constructed as place by religious groups.

The conclusion is that contemporary constructions of the Internet reinforce the postmodern stress on space, both real and metaphorical. Jameson's classic reading of the dominance of categories of space as expression of cultural dominance, is confirmed by the dominance of categories of space to define communication tools and virtuality.

Prologue

The paper examines how describing the Internet as space² and mythicising such space is connected to the identification of sacred place and religious identity on the World Wide Web. First, the paper focuses on a linguistic analysis of the metaphors commonly used to describe the Internet as a space. Secondly, the paper examines web-texts and websites by focusing on issues or representation (and self-representation), and shows how, by defining the Internet as space, it also becomes possible to conceptualize the Internet initially as 'sacred space', and later as a 'new space' for practising religion. However, this final passage becomes possible only once 'places'--some of which presented as 'sacred places'--are built up on the generic (sacred) space of the Internet.

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² Campbell (2005) explores four dominant conceptions of the Internet, such as information space, a common mental geography, an identity workshop and a social space. As Flichy (2007) has illustrated, varying conceptions result from the varying uses of the Internet, and have been elaborated in time.

Metaphorically speaking: Internet as space

By describing the Internet as space we use a metaphor, as we do not physically move to, or in(to) cyberspace. In his study on virtual space, Taekke (2002) highlights one key difference between physical space, in which we physically move in space, and cyberspace, where space "moves towards" the surfer, by virtue of the surfer's semantic competence. Nonetheless, spatial metaphors have been constantly used to describe the Internet and the World Wide Web. There are several studies on the metaphors used to describe the Internet; I focus here on spatial metaphors, drawing on the contributions by, among others, Coblenz (1996), Palmquist (1996), and Ratzan (2000). As Berners-Lee (2000) notes, "Internet" is an abbreviation of *Inter-networking*, that is, "working in network", of million of *wired* computers physically located all around the world, thanks to a special communication protocol called "tcp/ip" which enables computers running different software to exchange information in real time. Therefore, the physical reality of the Internet would be the "hardware", the machines located in houses, laboratories, universities and offices.

Even if the World Wide Web is often used as the equivalent of the Internet in common speech, the former designates the communication technology and the second the information content. A third term, cyberspace, has also become common to indicate the Internet and/or the World Wide Web in common speech. Indeed, the *Oxford English Dictionary* uses both the term 'environment' (to indicate the 'somewhere' within whose boundaries digital communications take place), and the term 'space' in its definitions of cyberspace³. Internet, World Wide Web, and cyberspace all have an implicit or an explicit spatial connotation; the second half of Inter-net, reminds one of a fisher's net⁴, (World wide) Web brings to mind a "spider's web". As for cyberspace, a term coined by the science-fiction writer William Gibson in his novel *Neuromancer* (1984), it is formed by the union of 'cyber' (in Greek the steersman of a boat), and space.

Ratzan (2000) mentions several spatial metaphors used to define the Internet, such as "information superhighway"⁵, "wild west", or frontier. Other spatial metaphors involve the concept of travel; these include descriptions of the Internet as 'wide endless road' (Ratzan 2000), or expressions such as "*travels* in cyberspace", or "net-*surfing*". As Wertheim (1999,24) notes, in the expression "*surfing* the Net", the Internet is likened to the Ocean, suggesting that it is a space where there are neither boundaries nor

³ "cyberspace, n." *Oxford English Dictionary Additions Series*. 1997. OED Online. Oxford University Press. Retrieved 27 December, 2006 from: <http://dictionary.oed.com/cgi/entry/00297271>.

⁴ Coblenz (1996) notes that net is a metaphor enabling users of the Internet to see themselves as 'active', whereas web casts them as passive (as taken into a spider's web).

⁵ Ratzan (2000) shows that women were more likely to use the highway and frontier metaphors, possibly because these are not gendered metaphors.

stability. The image of the Internet as Ocean is also suggested by the terms used in other languages to indicate the "net-*surfing*": in Italian, for instance, the favourite expression is "navigare" (to navigate a ship). And, one of the first browsers was called '*Navigator*' (i.e. steerman). Superhighway, wild west, frontier, or cyberspace all allude to a 'physical' space, which is defined in generic terms, and presented as open to exploration (or conquest)⁶.

Other metaphors point to a representation of the Internet, or of its 'components' as a static, fixed, and well delimited space. For instance, on the Internet we find *websites*, and each of them may be formed by *web-pages*. Also, some websites constitute focal points of the Internet structure and are called *nodes*, which is a synonym of knots. The term "web-*site*" suggests the idea of localised space, of *web-place*; *web-page* suggests that such spaces are nothing else than the pages of a book; *node* could be connected to the 'spider-web' metaphor, as links connect in nodes. A further spatial metaphor indicating a well-delimited space is '*home-page*', the expression used to indicate the initial page of a website. All pages have a *top* and a *bottom*, thus indicating precise spatial coordinates (high/low). Of course, there are *chat-rooms* on the Internet, and surfers can open or close *windows*, and *jump* from a page to the next.

Some metaphors hint to a representation of the Internet as a 'space beyond', or as an 'other dimension': on the Internet we find *portals*, and *gateways* through which we can access other websites (i.e. further 'spaces'). These metaphors point to the definition of the Internet as space for access and communication, but also as structured and complex space. Metaphors such as *firewall*, instead, suggest that communication can be controlled and 'physically' blocked; a metaphor such as *blogosphere* alludes to a specific, well-rounded space, distinct from other spaces devoted to different activities.

Ratzan (2000) notes that users have also described the Internet as *bookstore* or *library*, and, as Rollason (2004) has pointed out, some commentators have indeed represented the Internet as the incarnation of the *Babel Library* originally described by Jorge Louis Borges in 1941. Borges (1970, 78) describes the Babel Library as a "*universe*" and as a sort of labyrinth of 'galleries', whose number could even be infinite. As Dawson & Henneby report (2004, 152), the Internet has indeed been described as a labyrinth of "electronic tunnels" in an article by the *New York Times*. The metaphor of the labyrinth is particularly interesting, because, just like Borges's Library, the Web (as well as the digital databases it hosts) has been conceived as the *space* where human knowledge is physically stored (*library*), and even as the *summa* of the human knowledge to date (cf. Colombo 1986).

In describing cyberspace, Gibson (1984, 67-68) uses primarily the metaphor of the *matrix*, but also other metaphors that accumulate images of natural and artificial (i.e. human-built) spaces, such as *forest*, *ferns*,

⁶ According to Nunes (1995, 316), the idea of the Internet as virtual space for travel fulfils the modern aspiration "to master the world", in order to control, by classifying it, the chaotic nature of reality and to eliminate time and space barriers. Palmquist (1996) pointed out that there are many metaphors connected to travel or exploration, such as "road signs," "road kill," "toll booths," "mapping," "pathways," and "pot-holes."

clusters, spyral, constellations, stepped pyramid. Metaphors adopted by Internet users, and reported by Palmquist (2000), such as those describing the Internet as *town hall, village, or marketplace* point to a representation of the Internet as urban setting, where human beings live, and human activities take place. The term *forum* hints to another well-delimited public space, where exchanges can take place--forum comes from a Latin word indicating a public place that hosted several political and productive activities. Leigh (2000) notes that the Internet can be described as global and virtual *city*. All the metaphors used by Gibson, as well as the labyrinth and city metaphor present the Internet as a complex, well-articulated space, which needs to be interpreted (labyrinth), and mapped (city), because it is formed by a number of different places (such as a ferns, a forest, and clusters), which could even possess an esoteric meaning (pyramid, constellation, and labyrinth).

If cyberspace is a space, it can be 'mapped'. Dodge and Kotchin (2001, 3) have significantly entitled their interesting book *Atlas of Cyberspace*, even if, as the authors make clear, cyberspace is not a space, but a variety of media, which can be programmed to "adopt the formal qualities of *geographic* (Euclidean) space".

Internet as mythical sacred space

Once the immaterial reality of the Internet is conceptualised as space, this space can also be presented as a mythical sacred space, even in academic analyses. As Graham (2002, 65-80) has highlighted, in the late 1990s some scholars have metaphorically spoken of the Internet as a new kind of sacred space (Davis), a "place of salvation and transcendence" (Robins), a "heavenly city of Revelation" (Benedikt); others have defined it a "charmed site" (Kroker Wenstein), or a "portal to another world" (Lieb). Childress (1999) has noted that the Internet can be compared to the Celtic 'otherworld'--i.e. as a world completely detached from the dimension where real life takes place. As Davis (1995) and Hume (1998) have documented, Technopagans have sometimes conceptualized the Internet as a magical plane that gives access to other realities.

In conclusion, several scholars and commentators have often ascribed to the Internet, in the 1990s, the features of a mythical sacred space (heaven, otherworld, or magical plane). This is an especially interesting aspect because, as Ratzan (2000) notes, 'expert' users tend to adopt spatial metaphors with a metaphysical content, metaphors that connect the Internet to transcendence, such as, for example, 'new *dimension*', or '*world* that does not exist in physical space, but 'in consciousness'. Nonetheless, whereas some academics such as Brasher (2001) appear to (implicitly) support such conceptualizations of the

Internet, other scholars, such as, for example, Cowan (2005, 54ff) and Flichy (2007) have pointed out how this is a rhetoric heavily pushed by the industry, and one that serves precise economic and political interests. This aspect deserves attention, because it is consistent with Jameson's argument that the postmodern stress on space is the expression of a specific cultural imperialism.

There is a further conception of the Internet that seems to be closely connected to its conceptualization as 'mythical sacred space'. This is the representation of the Internet as "technological sublime". Bingham(1999) has taken into account several studies on the technological sublime, its connections with the Romantic movement, and its adoption to describe a number of new media, especially in the early stages of their introduction. As Bingham (1999) points out, such representation has an ideological connection with the Western, masculinist concepts of transcendence and of a monolithic Self, who can observe the world from an external, privileged and detached position—the position of the surfer, who travels in the new space.

In sum, the "new space" (cyberspace) has been, and still is, conceptualised as a mythicised, alternative space where the transcendent can be experienced, an "heavenly place", where surfers experience a bodiless exaltation. As Wertheim (1999) has illustrated, the Internet is therefore the latest in a series of mythical/mythicised spaces for "experiencing the sublime" constructed by Western culture. The spatial metaphors examined so far are listed in Table 1.

Table 1: Internet as space: metaphors

Internet as space	
Generic / Undefined / physical space open to exploration	Frontier, cyberspace, wild west 'Ocean' (<i>web-surfing</i>)
Travel	Navigation / Surfing / jumping
Access to space beyond or to communication / Gateway space	Portal, gateway firewall
Delimited / Localized space	web-site, web-page, node, home-page Chat- <i>room</i> window bookstore, marketplace blogo- <i>sphere</i> forum
Intricate space / to be decoded	labyrinth, library, city cyberspace as formed by elements such as forest, ferns, clusters, pyramids, constellations (Gibson) nodes net web Atlas, map architecture (of the Internet, of cyberspace) matrix (Gibson)

 Other Dimension / Other World

 Heaven, Heavenly city, New Jerusalem, magical plane, Celtic
 otherworld, 'charmed site'

However, there seems to be a more subtle, and possibly more recent, representation of the Internet as a 'space' where *specific* sacred 'places' can be built up. I am positing here a difference between the Internet as space (described as new, generic, undefined, but also sacred, different, charged with religious overtones alluding to a transcendent reality—expressed by terms such as heaven, otherworld, or 'charmed site'), and place (presented as connected to specific religious traditions, where specific beliefs are discussed, and people from a specific religious group can meet). In other words, the Internet can be constructed and perceived, to borrow an expression used by Campbell (2005) as 'sacramental space'—i.e. the Internet is seen by religious users as a "place" where they can present their beliefs and practices. However, this happens only once users start constructing specific sacred places on the generic space of the Internet. Such places are not an undefined, transcendent 'sacred space'; rather, they bear names and have functions proper to specific traditions. On the Internet, contemporary Pagans use terms such as *aedes*, a term meaning 'temple' (on a website presented a temple devoted to the Roman goddess Concordia)⁷; Wiccan practitioners form 'sacred circles' on websites (Hume 1998); Hindu practitioners set up temples (Jacobs 2007); Christians have cyber-churches (Jacobs 2007), Jews have synagogues (Crabtree 2007), and a Muslim group has set up a virtual Makkah City on *Second Life*, a city which hosts various mosques⁸.

In the generic (and, in some representations, 'sublime') 'sacred space' of the Internet, one can experience the transcendent, repeating an 'egotistic' move typical of the Western idea of a Self observing, experiencing, judging, and controlling the world. In the specific, well-defined 'sacred place', instead, one can meet others who share a common symbolic universe, and practice specific activities. In other words, there is a huge difference between considering the Internet as 'heaven' or 'magical plane', and defining a website as 'Athena's shrine', or 'Jerusalem Temple'. Table 2 summarizes the difference between a conception of the Internet as 'space' and a (coexisting) representation of the Internet as a constellation of sacred places.

⁷ Retrieved December 18, 2006 from: <http://geocities.yahoo.com.br/lafaustus/aedes/aedes.html> [in Portuguese].

⁸ In the Virtual Makkah city in Second Life visitors can perform a virtual pilgrimage, circle the Kaaba, and even kiss the Black stone. The history of the island of Makkah is illustrated on the website IslamOnline.net. Retrieved October 16, 2008 from: <http://www.islamonline.net>.

Table 2: Internet as sacred space/ Internet as constellation of sacred places

Internet as space	generic / transcendence / huge <u>or</u> global / disembodied self
Sacred places on the Internet	defined and limited / localized / small / communal (open to participation)

Even if the meeting with a community is not fully realized—e.g. if the practitioner/believer remains a lurker, and does not actively participates in the activities taking place in a 'sacred place'--s/he will see his/her own religious identity confirmed by the existence of a sacred place online. Thus, naming an undefined space as *aedes*, temple, church, synagogue is one of the strategies that transform the generic 'sacred' space into place, by recalling to the mind of the surfers a complex universe of (shared) meanings. There are, of course, other strategies, such as, for example, that of using images, language, and architectural structures that translate the features of real space sacred places in the online environment, as illustrated by Jacobs (2007) .

Making a place sacred on the Web (for example by setting up a website devoted to a Pagan goddess, an open church such as the Church of Fools, or a Jerusalem temple recreated on Second Life), seems to be a performance of identity (I am a Pagan, I am a Muslim, or an Evangelical Christian and this is the religious imaginary I refer to), and a way to propose a dialogue to the website's visitors. The Faith Blogs connected, for example, through *Belief.net*, offer a number of examples of how performance of identity, desire to establish a dialogue, and re-affirmation of one's religious identity are all intertwined.

Sacred Place and religious Community: Religious place as community

In examining early examples of online pilgrimages, Campbell (2001) noted that pilgrims can of course "view" a sacred space on the Internet, but they can also establish a connection and communicate ("interact") with the sacred space and with other participants. Campbell (2001) defines as "commonality" the "sense of connection" (to the sacred place, the event and even to God) that online pilgrims manage to articulate through such interactions. This commonality is permitted by the shifting from the representation of digital environments as a generic sacred space to the construction of '(sacred) places' on the Web, so that the Internet can be represented as both a generic sacred space and as a constellation of sacred places. Ward (2000, 253) has noted that both representations are rooted in the conception of the new Internet medium as an environment for religious discourses and activities or practices. As Helland (2002) and others (Karaflogka 2002; Arthur 2002) have shown, this is an ideologically shaped representation, that leads to the possibility to 'practice' "religion on the Internet" ("online religion"), an expression opposed to

"religion online", which, in Helland's formulation (2002) indicates websites structured as tools to proselytize. As Cowan (2005, 18) has recently pointed out, in the case of contemporary Pagans, at least, the "edge" of the two kinds of websites tends to be blurred. In sum, the Internet can be presented either as tool (a medium for messages) or a space. The first conception (internet as tool) tends to minimise the differences between the Internet and other less recent media, denying the revolutionary character of the "digital era". The second conception (Internet as space), on the contrary, exalts the revolutionary character of the Internet communication, which is capable to reshape ways of thinking and relating.

We can thus take the analysis a step further, by arguing that by setting up and frequenting sacred places online, practitioners try to enact a (metaphorical) identification of community (in the broad sense of group sharing a universe of symbolic meanings, and possibly values) and (metaphorical) 'sacred place'. 'Being in' a religious place on the Internet comes to be presented, and perceived by participants, as 'being part of' a specific community of practitioners⁹. This should be read as a translation of offline practices—for instance Makkah is the place that embodies Muslim identity, for many Pagans Stonehenge embodies modern Pagan identity, Jerusalem, or Rome play analogous functions for other religions. All such places are symbolically charged with a web a stratified meanings that they can be presented as embodying a specific tradition. Sacred place is also a temple, church, or shrine, as long as it is characterized as such, set up according to certain (unwritten) rules, as Jacobs (2007) as shown.

This section of the paper examines the shifting from a conception of the Internet as generic, undefined, open space for the 'sacred', to a diffused perception, among users, of the Internet as place for the fulfilment of specific religious needs, within a community group. The shifting from a conception of the Internet as transcendent sacred space, to the representation of the World Wide Web as punctuated by 'sacred places' significant for specific traditions allows practitioners to use the Internet as 'sacramental space'--to adopt Campbell's (2005) expression. Personal web-pages, 'virtual temples' on the Internet, blogs, and virtual worlds' sacred places present virtual sacred places and community as intertwined and even (metaphorically) identical, for practitioners belonging to different religions (Christianity, contemporary Paganism, Judaism). The focus here is on the shared meaning that unites members of a specific religious group as it emerges from digital documents and environments. Rather than the practitioner's construction of identity, however, what is at stake here is the symbolic universe within which those who frequent sacred places online move. The formula "Ave Maria" may not signify much for a Buddhist; instead it will be meaningful for a Roman Catholic. The expression 'Blessed Be' may be truly have a certain meaning for anyone familiar with Goddess Religion, Wicca or radical feminism, and a very

⁹ A recent study by Coco (2008) shows how Pagans use online groups and discussion lists as tools to construct and foster their communities.

different meaning for other groups. As Jacobs (2007) has noted, members of different religious groups are able to immediately identify their 'own place', by reading the 'context', i.e. signals that webmasters have purposefully set up to make their website identifiable. Surfers 'feel home' in a certain place, constructed according canons that translate the canonical construction of sacred places in a specific tradition, because they make reference to universe of symbolic meanings shared by all the members of that tradition. For example, Jacobs (2007) shows that, in spite of several qualifications, people attending a virtual puja, or a virtual Christian service, felt that their attendance re-confirmed their belonging to a specific group. Therefore, the key element in their experience was not their being on the Web, but rather being in a specific place set up according to well defined, though unwritten, rules.

Some examples taken from websites expression of various religious traditions may help to clarify my point. The first example is a website presented as a virtual temple devoted to the Egyptian goddess Sekhmet. By clicking on an image showing a boat (found on the homepage), visitors access a series of images of the various rooms of the temple¹⁰. The website links to the website of the Kemetic order¹¹. The organization website hosts a 'virtual abdu', where several icons of small ancient Egyptian jars (with names, surnames, or nicknames), set up in memory of people who have passed away. Another website inspired by the Celtic religious imaginary and focusing on the Goddess Brigid, offers instructions to visitors, in order to help them to prepare for initiations¹². Animated graphics and pictures portraying woods, trees and springs, refer to a specific (reconstructed) imaginary: the Celtic world as described in medieval texts and in Irish popular tales.

The spatial metaphors used in the three websites appear to be connected to the specific religious imaginary of each religious tradition: the Sekhmet website uses the metaphor of the journey, and refers to the ancient Egyptians idea that Egypt was the mirror image of heaven and man; the Virtual *abdu* makes a reference to the features of the Egyptian space by using the metaphors or the letters written in the sand; on the homepage of the shrine of Brigid, there are references to Holy Wells and the metaphor of the life journey is used.

Several more examples of websites represented (i.e. self-styled and described as) 'sacred places' online can be found in recently published works; for example, Young (2004) has analysed the 'Stations of the Cross' online, Helland (2002; 2007) has looked at various religious websites; Jacobs (2007) has analysed a Christian Virtual Church, and an Hindu virtual temple¹³; Jenkins (2008) and Kluver and Chen (2008) have

¹⁰ Ancient Egyptian Virtual Temple ©. Retrieved October 10, 2008 from: <http://showcase.netins.net/web/ankh>.

¹¹ Kemet.org. The Kemetic Orthodox Faith. Retrieved October 10, 2008 from: <http://www.kemet.org>.

¹² Virtual Shrine of the Goddess Brigid. Retrieved November 11, 2008 from: <http://www.celticheritage.co.uk/virtualshrine/>.

¹³ The Hindu Virtual Temple, set up by students at the University of Illinois, features music (a mantra), images, and animated graphics concur to recreate a Hindu mandir online. The Hindu Virtual Temple. Retrieved October 10, 2008 from: http://www2.uic.edu/stud_orgs/religion/hindu/page5.html.

examined the famous *Church of Fools*; and Radde-Antweiler (2008) has surveyed and assessed several sacred places in *Second Life*.

Conclusion

The provisional conclusion of this paper is that the representation of the Internet as space and place seems to reinforce the postmodern stress on space--as F. Jameson argued in a famous essay, postmodernism is characterized by the dominance of categories of space. Jameson's classic reading of the dominance of categories of space as expression of cultural dominance, is confirmed by the dominance of categories of space to define communication tools and virtuality, as well as by the dominant presence of specific countries, languages, and social groups in the new places of the new space.

Also, factors such as the preventive selection of participants to online community should not be undervalued. First, not all can afford the costs of the Internet connection, software and hardware, especially, but not solely, in so called Third World countries. Second, in order to fully participate in the active construction of online community, participants must be aware of social interaction rules, which vary according to country, culture and class. And, third, if virtual pilgrimages show how 'visiting' a sacred place on the Web can help strengthen one's religious identity or commitment, such practice may also be, in some cases, just be an exploration of a different religion, as in the case of Christians visiting Makkah on the Internet. The risk of commodification of the experience is also high, as shown, among others, by Helland (2007), though the existence of prayer circles set up together by members of different religious groups shows that the situation is far more complex than this quick survey could highlight.

References

- Arthur, S. (2002). Technophilia and Nature Religion: the Growth of a Paradox. *Religion*, 33(4), 303-314.
- Berners-Lee, T. with M. Fischetti. (2000). *Weaving the Web: The Past, Present and Future of the World Wide Web*. London: Texere.
- Bingham, N. (1999). Unthinkable complexity? Cyberspace otherwise. In M. Crang, P. Crang, & J. May (eds), *Virtual Geographies: Bodies, Space & Relations* (pp. 244-260). London: Routledge.
- Borges, J. L. (1970 [1941]). The Library of Babel. In D. A. Yates, & J.E. Irby (eds), *Labyrinths: selected stories and other writings* (pp. 78-86). Harmondsworth: Penguin.
- Brasher, B.E. (2001). *Give Me that Online Religion*. San Francisco, CA: Jossey-Bass.

Campbell, H. (2001). A new Forum for Religion: spiritual Pilgrimage online, *The Bible in TransMission*, (summer 2001). Retrieved October 30, 2009 from: http://www.biblesociety.org.uk/products/227/49/the_church_and_cultural_engagement_summer_2001_a_new_forum_for_religion_spiritual_pilgrimage_online

Campbell, H. (2005). Considering spiritual dimensions within computer-mediated communication studies. *New Media & Society*, 7(1), 110-134.

Campbell, H. (2007). Who's got the power? Religious authority and the Internet. *Journal of Computer-Mediated Communication*, 12(3), 1043-1062.

Childress, C. A. (1999). Archetypal Conceptualization of Cyberspace as the Celtic Otherworld. *Cyberpsychology and Behavior*, 2, 261-265.

Coblentz, C. (1996). Metaphorically Interactive: The Rhetorical Examination of World Wide Web. Retrieved October 30, 2009 from: <http://www.regent.edu/acad/schcom/roic/coblentz/coblentz.html>.

Coco, A. (2008). Pagans online and offline: locating community in post-modern times. *Sociological Spectrum*, 28(5), 510-530.

Colombo, F. (1986). *Gli archivi imperfetti. Memoria sociale e cultura elettronica*. Milano: Vita e Pensiero.

Cowan, D. E. (2005). *Cyberhenge: Modern Pagans on the Internet*. New York: Routledge.

Crabtree, S. (2007). Finding Religion in Second Life's Virtual Universe. *Washington Post Religion News Service*, Saturday, June 16, 2007; Page B09.

Davis, E. (1998). *Techgnosis: Myth, Magic and Mysticism in the Age of Information*. New York: Three Rivers Press.

Davis, E. (1995). Technopagans: May the Astral Plane Be Reborn in Cyberspace. *Wired* 3.07, July (no pagination). Condé Nast Publications. Retrieved October 30, 2009 from: <http://www.wired.com/wired/archive/3.07/technopagans>.

Dawson, L. L. & Hennebray, J. (2004). New Religions and the Internet: Recruiting in a New Public Space. In L.L. Dawson & D.E. Cowan (eds), *Religion online. Finding Faith on the Internet* (pp. 151-171). New York: Routledge.

Dodge, M., & Kitchin, R. (2001). *Atlas of cyberspace*. Pearson Education. Retrieved October 30, 2009 from: <http://www.kitchin.org/atlas>

Flichy, P. (2007). *The Internet Imaginaire*. Cambridge, MA: MIT Press.

Gibson, W. (1984). *Neuromancer*. London: Gollancz.

Helland, C. (2002). Surfing for Salvation. *Religion*, 33(4), 293-302.

Helland, C. (2007). Diaspora on the electronic frontier: Developing virtual connections with sacred homelands. *Journal of Computer-Mediated Communication*, 12(3), 956-976.

Hume, L. (1998). Creating Sacred Space: Outer Expressions of Inner Worlds in Modern Wicca. *Journal of Contemporary Religion*, 13(3), 309-319.

Jacobs, S. (2007). Virtually Sacred: The Performance of Asynchronous Cyber-Rituals in Online Spaces. *Journal of Computer-Mediated Communication*, 12(3), 1103-1121.

Jameson, F. (1991). *Postmodernism or, the Cultural Logic of Late Capitalism*, London: Verso.

Jenkins, S. (2008). Rituals and Pixels: Experiments in Online Church. *Online– Heidelberg Journal of Religions on the Internet* 3(1), 95-115. Retrieved April 14, 2008 from: <http://www.ub.uni-heidelberg.de/archiv/8291>.

Karaflogka, A. (2002). Religious Discourse and Cyberspace. *Religion*, 33(4), 279-291.

Kluver, R., Chen, Y. (2008). The Church of Fools: Virtual Ritual and Material Faith. *Online – Heidelberg Journal of Religions on the Internet*, 3(1), 116-143. Retrieved from April 14, 2008 from: <http://www.ub.uni-heidelberg.de/archiv/8292>.

Leigh, J. G. (2000). From Wild West to Global City: Thoughts on the Evolution of the Internet. *Telecommunications Review*, Retrieved January 08, 2005 from: <http://www.mitrotek.org/pubs/telecom/review00/article2.doc>.

MacWilliams, M. W. (2002). Virtual Pilgrimages on the Internet. *Religion*, 33(4), 315-335.

Nunes, M. (1995). Jean Baudrillard in Cyberspace: Internet, Virtuality, and Postmodernity. *Style*, 29(2), 314-327.

Palmquist, R. A. (1996). *The Search for an Internet Metaphor: A Comparison of Literatures*. In *Proceedings of the American Society for Information Science*. (pp. 198-202). Baltimore.

Radde-Antweiler, K. (2008). "Virtual Religion": An Approach to a Religious and Ritual Topography of Second Life. *Online – Heidelberg Journal of Religions on the Internet*, 3(1), 174-211. Retrieved April 14, 2008 from: <http://www.ub.uni-heidelberg.de/archiv/8294>.

Ratzan, L. (2000). "Making sense of the Web: a metaphorical approach". *Information Research*, 6(1). Retrieved October 30, 2009 from: <http://InformationR.net/ir/6-1/paper85.html>.

Rollason, C. (2004). "Borges' 'Library of Babel' and the Internet". *Indian Journal of World Literature and Culture*, 1(1.1), 117-120. Retrieved January 15, 2008 from: http://www.themodernword.com/borges/borges_papers_rollason2.html.

Taekke, J. (2002). Virtual Space: Spatiality in virtual inhabited 3D Worlds. In L. Qvortrup (ed.), *Virtual Space*. (pp. 25-46). London: Springer.

Wertheim, M. (1999). *The Pearly Gates of Cyberspace. A History of Space from Dante to the Internet*. London: Virago Press.

Young, G. (2004). Reading and praying online. The Continuity of Religion Online and Online Religion in Internet Christianity. In L.L. Dawson & D.E. Cowan (eds), *Religion online. Finding Faith on the Internet*. (pp. 93-105). New York: Routledge.