Another Time, Another Space: Virtual Worlds, Myths and Imagination[1]

By Maria Beatrice Bittarello, Independent Researcher

Abstract

In her article "Another Time, Another Space: Virtual Worlds, Myths and Imagination" Beatrice Bittarello performs a reappraisal of the issue of Virtual Worlds using an interdisciplinary approach. She argues that Virtual Worlds existed before the introduction of the Internet. To back up her argument she outlines a history of literary and visual pre-Internet Virtual Worlds, all of which represent an alternative, mythical, and (often) religious space. She goes on to argue that finding a way of "reaching" Virtual Worlds is the key to the re-conception of (online) Virtual Worlds today. Many elements of literary Virtual Worlds can thus also be linked to contemporary examples of Virtual Worlds on the Internet. She stresses the importance of visual aspects, even though the imagination and the mythopoeic activity of the players play a key (and integral) role in Virtual Worlds on the Internet.

Keywords: virtual worlds, cyberspace, myths, imagination

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Another Time, Another Space: Virtual Worlds, Myths and Imagination

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Technology experts define "virtual worlds" as digitally constructed environments where peer-to-peer interaction can take place. This means that virtual worlds have been created only after the introduction of computers, Computer-Aided Design, and the internet. Other scholars give the expression "virtual worlds" a different meaning, and argue that virtual worlds have always existed in literature, religion, and art. (Wertheim 1999; Ward 2000) According to the first interpretation, the most important aspects of a virtual world are visual; according to the second, the use of imagination is prominent. Both interpretations reflect and are based upon different readings of philosophical problems pertaining to the definition of what is actual and what is virtual, of what is original and what is a copy (simulacrum). Such discussions are rooted in Plato's distinction between the actual world of simulacra and the Empyrean world of "Ideas."

This paper reappraises the issue of virtual worlds by using an interdisciplinary approach which draws upon methodologies and theoretical elaborations from the fields of classical studies, cultural studies, and religious studies. The first part of the paper points out how literary and visual aspects have always co-existed by examining virtual worlds in ancient and medieval religious texts, and in fictional literature (especially utopian thinking, science fiction and fantasy). Then, I examine virtual worlds in cinema (and cinema itself as virtual world), noting that the visual aspects of virtual worlds have become dominant with the introduction of this medium. The second part of the paper highlights how virtual worlds, whether portrayed in religious or fictional texts, have the features of mythic spaces. The "mythic" overtones found in descriptions of the internet emerge from a comparison between cyberspace and pre-internet virtual worlds. The conclusion is that re-creation of myths and imagination play a key role in the online virtual world.

Virtual Worlds in Ancient and Medieval Religious Texts and Art

There is a long tradition of describing and representing virtual worlds in ancient literatures—particularly in myths (sacred stories) and religious texts. In this regard, the story of the journeys of the hero Gilgamesh is exemplar. According to the texts reconstructed by archaeologists and philologists from cuneiform tablets, Gilgamesh sets out to reach the immortal Utnapishtim, who lives in the land of Dilmun, in the garden of the sun. Dilmun is located far away, and it takes a long time for Gilgamesh to reach that place. Also, Dilmun presents features of "paradise" in Mesopotamian mythologies.

Another famous example is in the *Bible*, where the "Garden of Eden" is described in detail. According to the *Genesis* book, the garden is located in the east. Beautiful and prodigious trees grow there, providing edible fruits (including the dangerous fruit that gives the knowledge of good and evil), and there is a river which is the source of all the rivers in the world. (Genesis 2:8) Like Dilmun, this place is connected to the promise of immortality; once Adam and Eve have been exiled, cherubs will guard the road that leads to the Garden and to the tree of life. (3.24) The *Bible* also describes the New Jerusalem, a utopian place, where the lion and the lamb

live peacefully together. Not too different are Greek and Roman descriptions of the Golden Age, when "men" lived as gods, knowing no misery, pain, death.[2]

In the ancient Greek literature, the *Odyssey* is the most ancient example of a poem describing virtual worlds. The hero, Odysseus, accesses several (virtual) worlds such as the remote island of the nymph Calypso,[3] or the country inhabited by the sorceress Circe.[4] He also visits the exceedingly fertile island of the Cyclopes, one-eyed giants; that governed by Aeolus, lord of the winds; the land of the Lotus-eaters, who have neither memory nor pain or anxiety;and the "other world" *par excellence*, the Land of the Dead.[5] (Homer, trans. 1995) In the *Aeneid*, the Trojan hero Aeneas also reaches the Otherworld by entering a deep chasm near the place where the Sybilla of Cuma lives. (Virgil, trans. 1915, p. 237-269).

There are several representations of virtual worlds in ancient art. Greek temples host representations of wars fought by heroes and gods against the Amazons, the Giants, or the Centaurs,[6] as well as images of other fantastic creatures located in far away places.[7] What is particularly interesting is that such representations were not confined to religious sacred spaces (temples, sanctuaries, and statues located in public spaces; i.e. state/society-controlled spaces), but are also found on Greek vases, (i.e. on objects used at home, in everyday life). Ceramists painted representations of mythical stories and portrayed gods, heroes, and fantastic (often monstrous) creatures.[8] (Charbonneaux, Martin & Villard 1970/1988a, p. 315-361) Far from being confined to religious spaces, in antiquity gods, satyrs, nymphs, heroes, and monsters formed the "background" of everyday life, though, of course, not all the virtual worlds reached the complexity of the famous *Vase François*, the ancestor of comic books. (607, Fig. 64) Mythological scenes, such as the meeting between Odysseus and the Laestrygonians, are often found on the walls of ancient Roman houses. (Charbonneaux, et al. 1968/1988b, p. 168, Fig. 171-172) Such examples could be easily multiplied and confirm how the imaginary worlds described in myths and visually represented by artists have never been confined to separate spaces, but have always been an important part of everyday life since antiquity.

The Christian tradition re-read the virtual worlds inherited by the classical tradition and imagined several new virtual worlds. Heaven, Purgatory, and Hell were described and represented in detail, both in religious and literary texts. Dante Alighieri's Christian poem, the *Divine Comedy* describes the poet's journey through the tripartite Otherworld; a Renaissance

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[2] Hesiod describes the life of the men (women are not mentioned) of so-called golden race. They never experienced pain or concerns, were always young, free from diseases, had every material good they could desire, and spent their days banqueting, until they died of a death that was as sweet as sleep. See Hesiod (trans. 1914, p. 109-116).

[3] The island, named Ogygie, is the "navel of the Ocean" and is described as an idyllic place.

[4] Aeaea is located in the farthest east of the world (135-545).

[5] The underworld is located in the land of the Cimmerians (14-21). The *Odyssey* describes several other imaginary worlds inhabited by mythic creatures: the fabulous palace of Alcinous (86-132) in the blessed island of the Phaeacians, Scheria (262-272); the country of the cannibal Laestrygonians (80-124); the island of the Sirens (39-46), and the island where Helios (the sun) keeps his golden cattle (261-269).

[6] Amazonomachies are common from the seventh century BCE on, particularly in Athens. The fight of the gods and Giants is represented in the Archaic treasury of the Siphians at Delphi and on the Hellenistic altar of Pergamum. See Price & Kerns, Eds. (2003, p. 228). The war between the Lapiths and the Centaurs is shown on the Parthenon (106).

[7] Such as the Gorgons (Virgil, p. 231) and other extraordinary beings, which are sometimes borrowed from other cultures (such as the Sphinx).

[8] From Hercules fighting against the serpentine god Acheloo to Gaia half-emerging from the soil to several winged goddesses in archaic Greek art. (Charbonneaux, Martin & Villard 1988a, 315, 354, n. 361, n. 407; Price & Kerns, 225)

painter, Hieronymus Bosch represents imaginary places that highlight the 'horror' of sin;[9] and imaginary and symbolic landscapes dominate both Medieval and Renaissance paintings, staging realities that never existed in the physical world.

Virtual Worlds in Fiction Literature

The stories examined above were parts of religious traditions and claimed to be true. Since antiquity, however, we find other virtual worlds, which are not described in religious literature. A writer living in the Hellenistic period, Lucian of Samosata, represented the Otherworld in his dialogues, and, in the *True Story*, a number of virtual, fantastic worlds, including the Moon, which is inhabited by rather peculiar creatures.

There is a key difference, however, between heroes such as Gilgamesh, Odysseus, Aeneas, whose stories are myth (i.e. in the ancient world, sacred history), and Lucius, who is an ordinary man, whose story is not intended to be believed.[10] We might say that Lucian of Samosata completes the transition from myths (religious, must be believed) to fiction (untrue, aims at entertaining). In literature, art, and, later, cinema, we find both kinds of imaginary worlds represented. For instance, in the Christian Medieval age the imaginary worlds described in the Arthurian and the Holy Grail cycle are openly fictional, and do not claim to represent religious truths.

Utopian writers have also created a number of imaginary worlds, from the ideal and perfectly regulated cities imagined by Thomas More (*Utopia*), or Tommaso Campanella (*City of the Sun*). Other well-known virtual worlds are those described by the Renaissance writer François Rabelais in *Gargantua and Pantagruel,* by Jonathan Swift in *Gulliver's Travels* – where he portrays imaginary societies such as that of Lilliput or that of wise horses (the Yahoo) – or by Voltaire in *Micromégas* (1752) or *Candide* (1759). Drawing upon these traditions, fantasy writers have later created and described in detail a number of imaginary worlds. The most famous example is Middle-Earth, portrayed in Tolkien's *The Lord of the Rings* and the *Hobbit*. Tolkien's corpus of writings on Middle-Earth has given rise to a fantasy subgenre, which describes, in detail, languages and customs of several different imaginary peoples – their histories, legends, and deeds. In *Silmarillion*, Tolkien describes the cosmogonic phase and the Golden Age of Arda (the Earth), long before the "awakening" of humankind, when elves and other beings ruled and shaped the world. Several fantasy novels also deal with a long forgotten prehistory and with "lost cities", such as the mythical Atlantis originally described by Plato in his dialogues. (Plato 1971, p. 24, 109)

Science fiction writers have often described virtual worlds, which they locate in remote regions of the Earth, (Doyle 1912) or in the unexplored space (i.e. on other planets). (Van Vogt 1951) Sometimes, imaginary worlds are located in a different time, usually in the future, and can be reached by using technological devices.[11] Science fiction novels or short stories portraying realities that temporally coexist are especially interesting,[12] particularly because some

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[9] As in the paintings completed around 1500 CE and portraying the garden of earthly pleasures (now at the Prado Museum in Madrid).

[10] The title *True Story* is ironic and points to the deceptive nature of Lucian's work.

[11] See Wells (1895) (where the main character reaches the Earth of the future, inhabited by Eloi and Morloch, both descending from human beings), Asimov (1955), and a number of TV series (e.g. *Doctor Who*).

[12] As in Leinster (1934) or Brown (1948).

writers postulate that those multiple realities are indeed "intercommunicating," and can be reached by using specific technological devices. (Williamson 1988)

Virtual Worlds and Cinema

The invention of cinema, at the end of the nineteenth century, has added a new dimension to the history of virtual worlds. This section examines two different aspects of the relationship between virtual worlds and cinema. The first refers to the definition of cinema as virtual world, the second to how cinema portrays virtual worlds.

Cinema itself is an example of alternative reality,[13] if we take into account two different aspects that are closely related. The first is that cinema can be considered as an alternative reality, identifiable with special places, around which the media have cast a mythological aura, such as Hollywood or Bollywood. Cinema is "consumed" in a peculiar environment (in the dark of a theater) and at set times. In a movie theater, one comes into contact with worlds that appear to exist on an alternative plane of reality, inaccessible outside the cinema theater.[14] The second aspect relates to the celebrity status acquired by many of those involved in the making of films, especially actors, directors, and musicians. Their lives are purposefully represented by the global media industry as belonging to a particular sphere, normally inaccessible to most people. Luxury houses and cars, plastic surgery, fashionable clothes, travels and "dream" parties – not to mention transgression as way of life. The existence of Hollywood "stars" truly belongs to a plane of reality presented as different from that where everyday life takes place. Therefore, the cinema industry ends up being perceived as a desirable, though dangerous, world, inhabited by fantastic, if not monstrous, creatures.

Cinema also visually represents (i.e. makes visible) "imaginary worlds," and has helped to construct a common visual imaginary all over the world. I will not dwell upon here on the important issue of the imperialistic nature of cinema, which emerges when certain countries and cultures manage to impose their specific imaginary upon other cultures.[15] In the past, paintings and statues have played a similar function, but their influence was usually limited to "educated" elites. The preponderance of visual aspects, particularly in the first phase of the history of cinema, is particularly important in this regard, since it has had an astounding influence on contemporary popular culture.

Rather than focusing on specific virtual worlds represented in specific movies,[16] it is worth examining how different cinema genres follow specific representation rules and thus how each genre can be considered as a virtual world.[17] Science fiction cinema deals with the themes developed by science fiction literature, popularising, adapting, and visually re-shaping for a

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[13] The same interpretative key can be applied to television, television stars, and television series. The latter also represent imaginary worlds in great detail. *Star Trek* is an outstanding example of a contemporary fictional mythology that becomes embodied in real life *via* the phenomenon of conventions.

[14] Analogies could be drawn between the ritualized consumption of films, which takes place in secluded, set-apart spaces and at set moments in time, and religious rituals in both old and new religions.

[15] Neither will I explore here the key role played by the cinema industry in contemporary consumerist society.

[16] Since the examples of virtual worlds presented in films are innumerable, I will just mention here early films such as Lang's *Metropolis* (1927), which staged an imaginary world.

[17] I will not draw upon the innumerable studies on genre cinema and its functions here, since the focus is exclusively on cinema genres as virtual worlds.

mainstream audience specific *topoi* elaborated by science fiction writers. Science fiction films propose alternative realities and imaginary worlds, which express either utopian or dystopian visions, all somewhat opposed to/opposing everyday life. Science fiction cinema is more closely related to fantasy cinema than it is often believed;[18] however, while fantasy worlds are generally set in a mythic, magic past, science fiction films are usually set in the future and the stress is on science (or technology).

The horror genre stages a supernatural reality and plays with the unexplained, with hidden forces and fantastic creatures.[19] It suggests that there is something hidden behind our everyday agreed reality, an alternative reality that coexists and risks creeping into everyday reality. Detective films play with the desire to discover and solve mysteries by using rational means; comedy alters the established meaning of reality by recurring to exaggeration and absurdity.

This very brief survey indicates that virtual worlds are portrayed in both myths and fictional works, can be described or visually represented, and are an important part of human societies' shared knowledge. The next section explores the common features found in imaginary worlds as portrayed in religious texts and in fictional works. Then, the paper argues that cyberspace itself is ascribed today the same features found in pre-internet virtual worlds.

Virtual Worlds as Mythic Spaces

Do fictional virtual worlds--i.e. creations of the imagination that do not pretend to be believed as *true,* such as Lucian's Moon, the kingdom of the Fisherman King, Lilliput, or Middle-Earth--share common features with those virtual worlds described in religious texts and that, therefore, are expected to be considered as truthful representations of reality--such as the Garden of Eden, Hell, or the New Jerusalem?

Scholars studying classical literary texts have outlined the main features of mythic countries and spaces, as described in religious and literary texts. According to such studies, mythic countries present, in ancient Greek and Roman authors, some key features. (Jouan & Deforge, Eds. 1988) In the first place, mythic space is intrinsically different from that of everyday life, because it is either inhabited by monstrous or fantastic creatures or because prodigies happen there, or because people's customs are different. Secondly, it is located far away, often to the farthest limits of the earth, so that it can be reached after a long and usually perilous journey—or by using unusual means (e.g. flying). In sum, mythic space is the opposite or reversal of the real world—it can be portrayed as a utopia (Paradise), or a dystopia (Hell).

Virtual worlds as represented in literary works are constructed in the same way, and present the same features of mythic space. They are located far away, sometimes on a different plane of reality or in a different time. Such places are inhabited by monstrous, divine or prodigious creatures, and where marvellous events take place.

A third key aspect shared by mythic spaces and fictional virtual worlds pertains to *how* virtual worlds can be reached. If we go back to the religious and literary texts examined, we find that there are several different ways to reach virtual worlds. The first mode is dream (i.e. "you"

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[18] As the *Star Wars* saga, located on the borderline between science fiction and fantasy, clearly exemplifies.
[19] One can think of films about vampires, monsters, and evil creatures or forces. Superhero movies stage, instead, a desired reality (superpowers are desirable).

enter a virtual world while dreaming) or vision (i.e. your state of consciousness is different from that of daily life). The second mode is travel. Visitors of imaginary worlds often ride or walk through deserts, forests, or other inhospitable places.[20] Often they use devices such as ships, spaceships, or other means of transport.[21]

There is, however, a third way of reaching a virtual world, through a "gateway" to another world or alternative reality. This can be conceived of as a mirror, (Borges 1970; Williamson) or as some other sort of technological device. (Wells; Asimov) In some cases there are no devices, rather a mysterious, instantaneous transition from a reality to the other,[22] an expedient already used by Dante Alighieri in his *Divina Commedia*. At the beginning of the poem, Dante finds himself ("*mi ritrovai*") in a dark forest, where he meets three dangerous wild beasts. Leaving aside the metaphoric meaning of Dante's description, what emerges is that we are not told *how* he found himself there, nor *how* Virgil guides him to the entrance of Hell.[23] Dante, and with him all his readers, are suddenly projected in the midst of action, which suggests that there has been an instantaneous transition from *this* world to the virtual world (or, rather, that the two occupy the same space).

We can conclude, then, that virtual worlds are conceived of as being located on a different (metaphysical) plane of reality. They are places where the rules are different from those of everyday life, located far away, and, therefore, unreachable without using a specific (often technological) device (a ship, a spaceship, or Elias' chariot).

Cyberspace, Mythic Spaces, and Virtuality

As all those whose personal computer has crashed at least once know very well, cyberspace is not a space that you can access if you do not possess the appropriate hardware and software—i.e. the appropriate technological devices (or transport means). Where is then cyberspace?

As Patrice Flichy has noted, there exist a number of purposefully hyped representations of the internet (an internet *imaginaire*), which tend to represent a technological object for example, as a space, or as the solutions to all the problems of society. (Flichy 2007) Several commentators, scholars, and users have portrayed cyberspace as a new Heaven—as the gateway to a magic, alternative world.[24] In other words, there are often religious overtones in the way cyberspace is represented. Not only has Graham Ward defined cyberspace as "the scientific solution to the death of God," (Ward, p. 247) but in Margaret Wertheim's view:

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[20] In the *Orlando Furioso* Astolfo flies to the Garden of Eden on the hippogriff, a half horse and half griffin creature (34.48-52). He then flies to the Moon, which is imagined as a sort of immense "lost property office," on the prophet Elias' chariot. (Ariosto 1973, p. 34, 48-52, 68-69)

[21] *Doctor Who* used the TARDIS, which looked like a telephone box.

[22] See Leinster or Brown. In some cases, such transition can be explained as an anomaly in the space/time continuum.

[23] The instantaneous transition from a world to the other is a device the poet uses several times in the *Divine Comedy*, where the character(s) is (are) projected into different realities instantaneously. Moreover, a transition from one situation to the other is obtained because Dante—narrator and main character—suddenly faints and wakes up in a different place.

[24] As documented in Graham (2001, p. 71-73)) and Wertheim (151).

the "spiritual" appeal of cyberspace lies in precisely this paradox: it is a repackaging of the old idea of heaven but in a secular, technologically-sanctioned format. The perfect realm awaits for us, we are told, not behind the pearly gates, but beyond the network gateways, behind electronic doors labeled ".com," ".net," and ".edu." (Wertheim, p. 21)

In Wertheim's reconstruction of the history of space in the West, she argues that the reduction of space to *exclusively* physical space has had important repercussions:

The very homogenization of space that is at the heart of modern cosmology's success is also responsible for the banishment from our world picture of any kind of spiritual space. In a *homogeneous* space only *one* kind of reality can be accommodated, arid in the scientific world picture that is the *physical reality* of *matter.* In medieval cosmology, the accommodation of body and soul had been premised on the belief that space was *in homogeneous*. By rendering obsolete the old division between terrestrial and celestial space modern cosmologists forced their own metaphysical band and reduced reality to just one half of the classical body-soul dimorphism. Moreover, once this physical space was itself extended to infinity, there was no "room" left for any kind of spiritual space… once the physical world became infinite, where could any kind of spiritual realm possibly be? By *unbounding* the physical realm, the Christian spiritual realm was thereby squeezed out of the cosmic system. That excision precipitated in the Western world a psychological crisis whose effects we are still wrestling with today.[25] (Wertheim, p. 149-150)

Wertheim's reconstruction is particularly interesting because she argues that:

from the late seventeenth century on, the new physicalist vision has been invoked as a powerful epistemic scythe to hack off *anything* that could not be accommodated into the materialist conception of reality. Increasingly over the past three centuries, reality has come to be seen as the *physical* world alone. Thus as I stated at the start of this work, it is a complete misnomer to call the modern scientific world picture dualistic; it is *monistic,* admitting the reality *only* of physical phenomena.[26] (151)

In sum, Wertheim has convincingly argued that cyberspace represents the return of metaphysical space in Western culture; and one must agree that "cyberspace" can be conceived of as a space that coincides with physical space though it cannot be located in the physical world.[27] It is also true that cyberspace has been constructed by many users and by some scholars as a technological substitute of Heaven, where human beings are "finally" freed from the weight of the body; several examples are in Flichy's book. However, based on the history of virtual

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[25] Emphasis in the original text. Wertheim notes that this "is a specifically Western problem. The reason we *lost* our spiritual space, as it were, is because we had linked it to celestial space. We had "located" it, metaphorically speaking, up there beyond the stars. When celestial space became infinite, our spiritual space was thereby annihilated."

[26] *Ibid*: 151. Emphasis in the original text

[27] While it is possible to locate web-pages, back-up memories and hardware, it is not possible to physically locate "cyberspace" as such.

worlds examined in this paper, a somewhat different interpretation of the way participants construct and play with online virtual worlds could be proposed.

People do not seem to use virtual worlds as a form of escapism, creating a second, vicarious life online. On the contrary, we have an integration of life online and life offline, because both are (obviously) experienced via the body. There does not seem to be a desire to transfer one's life on the Web, but rather to experiment in and with this "other" plane of reality. Therefore, we could talk of osmosis, to use a biological metaphor, rather than of mechanic separation between the two realities (the digital and the physical).

My interpretation is based upon what has emerged from the survey of literary and visual pre-internet virtual worlds, in particular in relation to the interplay between the world of the imagination (a world of possibility) and the "real" world (a world of actuality). My argument draws upon several recent re-conceptualizations of key concepts such as that of virtuality (Doel & Clark 1999), on studies on sociomental bonds (Chayko 2002), on performance of religious identity on the internet (Cowan & Dawson 2005), and of the way we experience cyberspace as embodied beings (De Vall 2002).

We have seen that Wertheim argues that cyberspace brings back an old dualistic conception of space (physical space/metaphysical space). The key point is that the existence of an infinite number of coexisting realities (as theorised by contemporary physicists) implies that people *could* slip from one reality to the other. Such an idea has several consequences. Not only there is not a stable, fixed reality, which is the only "real," "actual" reality—i.e. there is this world and "other" virtual worlds can be imagined, but if multiple realities coexist they are interchangeable. In other words, if one can slip from one reality to another one, how can you tell that one world is real and the other one is virtual?

The situation presented in a film by David Cronenberg, *eXistenZ* (1999), which stages a virtual reality game, illustrates this point well, since the key idea of the movie is that one can shift from one reality to another. The film plays a game of Chinese boxes and seems to suggest that all reality is virtual (or simulation). This is somewhat analogous to the situation presented in Woody Allen's *The Purple Rose of Cairo* (1985); however, while in Allen's film the fictional characters come into "our" physical reality, what is new in *eXistenZ*

> is that it thematizes the increasing interpenetration of reality and simulation, our
> bodily involvement in a variety of virtual worlds and the bewildering sense of
> losing one's grip on what is really happening and what is only faked. (De Vall, p.
> 142)

The virtual world, in this case, can be reached only by using a technological device that guarantees an instantaneous transition from "this" reality to a different one, thus becoming a substitute for travel, dream, or Dante's sudden fainting. The central point is, nonetheless, as Cronenberg points out in his voiceover comment to the DVD version of the film, that the virtual reality is experienced via the body. This is an important point, since, in other literary and

cinematic descriptions of cyberspace, characters access virtual worlds by leaving behind their bodies.[28]

Virtual Worlds on the Internet

This section examines the structural features of digitally created virtual worlds online, and compares these features to pre-internet virtual worlds. I do not examine in detail specific examples of virtual worlds—rather, I focus on the features of virtual worlds online as they emerge from scholarly literature.

Until now, we have seen how people could share common imaginary worlds by reading the same book or observing the same painting or movie. Each medium, (book,[29] visual art, cinema) had its own specific features. I have argued that literature, art, and cinema have represented virtual worlds, that imagination has a central role in all of them, and that they constitute a reality alternative to everyday life—though the two realities are not simply intercommunicating but in an "osmotic" relationship.

Cyberspace shares certain features of literary, visual, and cinematic virtual worlds, while presenting specific traits. Since the 1990s, programmers and scholars have begun to focus their attention on the development of virtual worlds online. Richard Bartle, one of the creators of MUD1 (Multi User Domain/Dungeon), describes the key features of a virtual world as follows: underlying rules (or physics), user representation (i.e. graphical representations, called avatars, of each participant), real time interaction (by using interactive chat tools such as a writing pad window), a shared world, and world persistence. (Cf. Bartle 2004) In sum, they present fully-fledged alternative realities; the only, new key element is interactivity.

The use of avatars (cartoon-like figures) in digital environments is particularly interesting because the term "avatar" has been borrowed from Hindu mythology, where it indicated the incarnation/manifestation of a god (or goddess). The avatar was independent from the god/goddess, but also constantly participating in his/her real (divine) nature; this is somewhat analogous to the relationship between the embodied player, who is in an actual place, controls his/her avatar, and *watches it* while it moves in a digital "space"—separated from, though connected to, the person it represents.

The 2D or 3D digital environment is a later development, since virtual worlds were originally text-based. They have soon begun to be used as social meeting places, where several activities take place. They have attracted early the attention of social scientists and other scholars, such as economists (Castranova 2001), psychologists, education experts,[30] and students of religion. Social scientists have begun to track human behaviours in virtual worlds, using them as environments to study human interactions and even to solve social problems. As an early study has noted, users preferred to design their own culture in virtual worlds (Morningstar & Farmer 1991, p. 273-302); in other words, what is taking place in virtual worlds is mythopoeic activity – for example, the creation of imaginary cultures that do not exist outside the virtual world.

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[28] As in *Neuromancer* (1982), or in the *Matrix* (1999).
[29] It is worth noting that radio is the medium that first brought back storytelling in contemporary world.
[30] See, for instance, Dickey (2005, p. 439-451) on Active Worlds and distance learning activities.

Studies on religion in virtual worlds started at the end of the 1990s. One of the first studies on virtual environments used for religious activity focused on the behaviour of the participants who both tried to adapt rituals *and* to find new ways to perform rituals online (Schroeder, Heather & Lee 1998).[31] Once again, the creativity of online interaction emerged as one of the key components of virtual worlds. Also, in their description of virtual worlds Schroeder, Heather, and Lee highlight a key element, the presence of both visual aspects ("three dimensional space with buildings and landscapes") and written words ("users can interact with each other via text windows"). Cyberspace, then, brings together texts and images, in a way which is analogous to that of medieval manuscripts. Other more recent examples are that of the "Church of Fools," whose experience has been self-reflexively described by Simon Jenkins, one of the organizers of the virtual church, and analysed by scholars using a range of approaches. The Church of Fools offered a basilica designed in a 3D environment, where people could attend collective (and ecumenical) Christian services. The key element that emerges from Jenkins' account, and from Kluver and Chen's analysis is that, in the end, the most important (and lasting) aspect for those who participated was "the experience" and the relationships formed online (Jenkins 2008, p. 95-115; Kluver & Chen 2008, p. 116, 138); in others words, the key element in this particular Virtual Church was the experience gained (and I include in this definition the relationships established, the performance of identity, the wider knowledge acquired). Other websites, such as the Virtual Church and the Virtual (Hindu) Temple examined by Stephen Jacobs offer either synchronous or a-synchronous forms of online practice in 2D environments. (Jacobs 2007, p. 1103-21) Websites reconstructing sacred places that so not exist anymore, or offering virtual access to sacred spaces and events otherwise inaccessible to those who do not belong to a specific religion can also be considered as religious virtual worlds (examples in Helland 2007, p. 12). A number of religious places have been set up in *Second Life* by people belonging to several different religions. *Second Life*'s Jewish, Christian, Muslim, Wiccan, Hindu, and Buddhist clusters are places for the practice of religion that do not exist in the physical world, but can be reached in that 3D environment. (Radde-Antweiler 2008, p. 174-211).

All such examples suggest that virtual environments where religious practice is performed by using technological devices may be considered virtual worlds in that they require the participants' active use of imagination to fill in the voids. And the participants testify in online surveys, interviews, and blogs that they felt the experience was meaningful to them. Such experiences, then, could be defined as a form of "serious play," in the sense that participants "played," but at the same time they demonstrated a remarkable level of religious commitment.

Conclusions: What Are Virtual Worlds for?

The paper has examined how a number of different "virtual worlds" have been created before the internet, arguing that cyberspace itself is conceived of as a virtual world. Virtual environments designated as "virtual worlds" on the internet have also been examined. The final question to address is what are virtual worlds for? What has emerged from the analysis of realities as different as ancient literary and religious texts, genre literature, cinema, and cyberspace?

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[31] An earlier study of online rituals in text-based virtual environments by O'Leary (1998, p. 781-807) has now become a classic text on the topic.

First, we have established that virtual worlds, i.e. spaces that are intrinsically different from the actual reality we experience everyday, are unreachable without the help of a device. This device can be a dream, the guided use of imagination (through techniques such as visualization, that help to shift from an everyday state of consciousness to another), or a technological device, such as a ship or a computer. Second, we have begun to see that, in pre-internet virtual worlds, characters experience such places without leaving behind their body, whether they visit the land of the dead (as Odysseus, Aeneas or Dante), or other worlds.

Third, a virtual world is a space for freedom, as Cronenberg's comments on the "promise of freedom" made by Allegra Geller to Pikul in *eXistenZ* underline. Some authors writing on cyberspace, such Howard Rheingold, also stress this aspect. However, it is important to define more precisely what "space for freedom" means. Experience made in mythic spaces is useful because it becomes a sort of training that will be helpful in everyday life. Experiencing a virtual world, therefore, can be life-changing for participants; even if they cannot bring anything back from there, the experience of a virtual world has *real* effects on players. In other words, you cannot bring an apple from a virtual world into the "real world," but what you experience there becomes part of you and, thus, has real effects in the physical world.

The fourth key element is particularly important. What do players do in a virtual world in cyberspace? One may be surprised to learn that they perform very ordinary actions: they walk, they sit down and stand up, they talk and chat, they pray and kneel, they eat, they have discussions and flirt. If we consider what heroes and travelers do in *their* virtual worlds we find that they travel (navigate a ship, ride a horse or walk), have conversations, eat, sleep, pray, fall in love and have sex, participate in races, discuss, kill animals (to procure food), and, in some cases, fight. These are *not* extraordinary actions, but, rather, *ordinary actions in an extraordinary context*. Therefore, characters in a virtual world ride, but not a horse: a hippogriff; they "have a chat," but with nymphs, gods, aliens, and they fight against giants and monsters.

This situation presents a surprising analogy with the activities taking place in online virtual worlds. As sociologists have begun to show, the new virtual space is used as a place where surfers experiment with possibilities and perform different identities—they do ordinary things in a "virtual" space. We can consider how users shaped one of the first virtual worlds, such as Habitat, which was an entertainment-oriented environment and provided the participants with the opportunity to experiment real life roles (wife/husband; man/woman; adherent to a new religion; businessman), and several identities. (Cf. Morningstar & Farmer, p. 273-302)

Virtual worlds, whether literary, visual or technological, are learning places—even when we watch a film it is natural to think, "What would I do in that situation?" Cyberspace offers precisely this possibility: to explore possibilities and mythopoeically re-creating one's reality, by integrating into one's (everyday, actual) experience what is experienced in the virtual world.

In other words, criticism of virtual worlds such as that expressed by Haywood, who is rightly concerned about the potentially exclusive and disengaged nature of cyberspace (Cf. 1998, p. 29-30),[32] does not take into account precisely the aspects pointed out above. The point is not that "we will have forgotten how [the real world] works," (50) as Haywood forecasted; on the

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[32] "Remote means remote, and while occasional remoteness may corrupt, absolute remoteness will corrupt absolutely…to be effective for all citizens, including those left outside the electronic club, [networking] has to be followed up by action in the real space which they inhabit."

contrary, virtual worlds have always been an attempt to engage with reality (mythopoeically): they can be read as a sort of "training place."

The new element is, paradoxically, that the stress on embodied experience is today even stronger than it has ever been. In saying this, I argue against several scholars who define cyberspace as a disembodied, often alienating experience. We could rather usefully adopt the analogy of the gym. Hours spent at the gym are not set aside, but rather integrated in daily life. In this I follow Doel & Clarke, who have argued that reality is (actuality-virtuality)—thus cyberspace is not a simulacrum, a false copy of reality. It is, rather, "something else," something that, as we have seen through the examples examined in this paper, has always existed and has been expressed through different media (story-telling, literature, art, cinema). Also, there is not, for most users, a temptation to leave behind the body, and not only because we can never leave behind our bodies when "going to cyberspace." I substantially agree with De Vall's thesis:

> I suggest that the phenomenological characteristics of cyberspace are not only determined by the technological possibilities of existing hardware and software to create virtual worlds but also by the conditions of the reception of these worlds. Rather than speaking of virtual as opposed to real spaces, I would speak of a plurality of spaces that are all in different degrees partly real and partly virtual. (De Vall, p. 147)

The survey of pre-internet virtual worlds confirms this interpenetration of spaces and realities, in which the human body-mind is located. The ability to interact with others, to establish with unknown people what Mary Chayko calls "sociomental bonds," is a faculty that is not new. When we feel moved by what happens to someone we never met, or write a letter to a pen pal, we show that we have established a bond with either completely imaginary beings or with someone we might never meet. (Chayko, p. 1-5, 127, 148)

Freedom, exploration, experimentation, visual representation, yes—but *integrated* into daily life. Unfortunately, a masculinist way of constructing and presenting cyberspace, virtual worlds on the internet and virtual reality technologies aimed at widening the supposed independence of mind and body, reflecting a deep suspicion of the body that has often conditioned studies on cyberspace (and virtual worlds). Besides Flichy's work on the internet *imaginaire*, other studies have acknowledged the existence of such rhetorical attitude. (Graham, p. 71-73; Bingham 1999, p. 250) As Hindmarsch notes:

> This rhetoric seems to have been adopted almost uncritically within many sociological accounts of "virtual" technologies. If we focus on accounts of VR for example, sociologists have argued that a major appeal is the ability to "park" the flawed human body, to transcend the limits of the flesh, to create and explore new identities, to be free the body from social and physical constraint and so on and so forth. (2006, p. 797, emphasis added)

It is worth reminding that imagination is not disembodied, but it is rooted in our overall (physical) experience of the world. We can create myths (religious or not) that are the reversal, or enhancement, of the reality we experience. Such myths give meaning, re-inscribe, and re-orient that reality. Virtual worlds have always proposed alternative realities, which were always

qualitatively different from the actual world, i.e. not copies of that world.[33]   And this is the reason why the two coexist, i.e. because, as Doel and Clark have argued, reality is the interplay of virtuality and actuality:

> reality is not the actualisation of a set of possibilities in a given time and space, an actualisation that would unfold a serial exhaustion of the world's possibilities - reality equals actuality, or, if you prefer, a given reality is only one of the world's stock of possibilities… Reality is the immanent twofold of actuality-virtuality. Such a twofold is never given in advance, like the matrix of possibility is supposed to be; it always has to be created and worked over *in situ*. (Doel & Clark, p. 279).

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[33] *Ibid*: 797: "Research has been driven by a commitment to build environments and interfaces through a complex array of technologies which aim to provide the illusion of, simulate, or are even indistinguishable from the physical world. Although such rhetoric has more recently been downplayed amongst the VR community, there persists an overriding concern with the factors that influence the sense of "presence" in virtual worlds." The authors also noted that "Indeed similar statements of intent regarding the pursuit of graphical realism foreshadowed the proliferation of television, film and photography" (815, n 1).

Bibliography

Alighieri, D. (1988). *La Divina Commedia*. a cura di Giuseppe Vandelli. Milan: Hoepli.

Allen, W. (Director). (1985). *The Purple Rose of Cairo.* (Motion Picture). USA.

Ariosto, L. (1973). *Orlando Furioso*. Milan: Hoepli.

Asimov, I. (1955). *The End of Eternity*. London: Hamilton, 1959.

Bartle, R. (2004). *Designing Virtual Worlds*. Indianapolis, IN: New Riders Publishing.

Bingham, N. (1999). Unthinkable Complexity? Cyberspace Otherwise. In Mike Crang, Phil Crang & Jon May (Eds.) *Virtual Geographies: Bodies, Space & Relations* (London: Routledge, p. 244-260).

Borges, J. L. (1940). Tlön, Uqbar, Orbis Tertius. In Donald A. Yates & James E. Irby (Eds.), *Labyrinths: Selected Stories and Other Writings*. (Harmondsworth: Penguin, 1970).

Brown, F. (1948). *What Mad Universe*. London: T.V. Boardman, 1951.

Castronova, E. (2001). Virtual worlds: A first-hand account of market and society on the cyberian frontier. *CESifo Working Paper 618*. Retrieved on December 21, 2006, from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=294828.

Charbonneaux, J.; Martin, R. & Villard, F. (1988a). *La Grecia arcaica (620-480 a.C)*. (Marcello Lenzini, Trans.). (3rd ed.). Milan: Rizzoli (Original work published 1970).

Charbonneaux, J. ; Martin, R. & Villard, F. (1988b). *La Grecia ellenistica.* Trans. (Marcello Lenzini & Libero Sosio, Trans.). (3rd ed.). Milan: Rizzoli (Original work published 1968).

Chayko, M. (2002). *Connecting: How We Form Social Bonds and Communities in the Internet Age.* Albany, NY: SUNY Press.

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

Cronenberg, D. (Director). (1999). *eXistenZ*. (Motion Picture). Canada/UK/France.

de Vall, R. (2002). Immersion and Distance in Virtual Spaces. *Thamyris/Intersecting 9*, p. 141–154.

Dickey, M. D. (2005). Three-Dimensional Virtual Worlds and Distance Learning: Two Case Studies of Active Worlds as a Medium for Distance Education. *British Journal of Educational Technology 36*, p. 439–451.

Doel, M. A. & Clarke, D. (1999). Simulations, SuppSiletion, S(e)duction and Simulacra. In Mike Crang, Phil Crang & John May (Eds.). *Virtual Geographies: Bodies, Space, and Relations*. (London: Routledge), p. 261-180.

Doyle, A. (1912). *The Lost World*. London: Longman, 1980.

Epic of Gilgamesh, The. (1972). (Nancy Sandars, Ed.). London: Penguin.

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

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

Graham, E. (2001). "Nietzsche Gets a Modem": Transhumanism and the Technological Sublime. *Literature & Theology 16*, p. 65-80.

Haywood, T. (1998). Global Networks and the Myth of Equality: Trickle Down or Trickle Away? In Brian Loader (Ed.). *Cyberspace Divide: Equality, Agency, and Policy in the Information Society*. London: Routledge, p. 19-34.

Helland, C. (2007). Diaspora on the electronic frontier: Developing virtual connections with sacred homelands. Journal of Computer-Mediated Communication, 12(3), article 10.

Hesiod. *The Homeric Hymns and Homerica*. (1914). (Hugh G. Evelyn-White, Trans.). Cambridge, MA: Harvard University Press.

Hindmarsh, J.; Heath, C. & Fraser, M. (2006). (Im)materiality, Virtual Reality and Interaction: Grounding the "Virtual" in Studies of Technology in Action." *The Sociological Review 54*, p. 795-817.

Homer (1995). *The Odyssey*. (A. T. Murray, Trans.). Cambridge, MA: Harvard University Press.

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

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

Jouan, F. & Deforge, B. (Eds.). (1988). *Peuples et pays mythiques : actes du Ve Colloque du Centre de recherches mythologiques de l'Université de Paris X, Chantilly, 18-20 septembre 1986*. Paris: Belles Lettres.

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

Lang, F. (Director). (1927). *Metropolis*. (Motion picture). Germany.

Leinster, M. (1934). *Sidewise in Time and Other Scientific Adventures*. Chicago: Shasta Publishers, 1950.

Lucian (1913). *True Story by Lucian of Samosata*. (A.M. Harmon, Trans.). New York: G.P. Putnam's Sons, p. 247-357.

Morningstar, C., & Farmer, F. R. (1991). *The Lessons of Lucasfilm's Habitat.* In M. Benedikt (Ed.), *Cyberspace: First steps*. (Cambridge, MA: MIT Press), p. 273-302.

O'Leary, S. D. (1996). .Cyberspace as Sacred Space: Communicating Religion on Computer Networks. *Journal of the American Academy of Religion 64,* p. 781-807. reprinted in Lorne L. Dawson & Douglas E. Cowan (Eds.), *Religion Online. Finding Faith on the Internet* (New York-London: Routledge, 2004), p. 37-58.

Plato. (1971). *Timaeus*; *Critias*. (H. D. P. Lee, Trans.). Harmondsworth: Penguin, 1971.

Price, S. & Kerns, E. (Eds.). (2003): *Oxford Dictionary of Classical Myth and Religion.* Oxford: Oxford University Press.

Rabelais, F. (1992) *The complete Works of François Rabelais*. (Donald M. Frame, Trans.). Berkeley: University of California Press.

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 14 April, 2008, from http://www.ub.uni-heidelberg.de/archiv/8294

Schroeder, R.; Heather, N. & Lee, M. (1998). The Sacred and the Virtual: Religion in Multi-User Virtual Reality. *Journal of Computer-Mediated Communication 2*. Retrieved 17 December, 2006, from http://www.ascusc.org/jcmc/vol4/issue2/schroeder.html.

Swift, J. (2002). *Gulliver's travels: based on the 1726 text*. (Albert J. Rivero, Ed.). New York: Norton.

Tolkien, J. R.R. (1977). *The Silmarillion*. London: George Allen & Unwin Ltd.

----------. (2002). *The Lord of the Rings*. London: HarperCollins.

Van Vogt, A. (1951). *Voyage of the Space Beagle*. London: Grayson.

Virgil. (1915). *The Aeneid*. (J.W. MacKail, Trans.). London: Macmillan.

Voltaire. (1994). *Candido; Zadig; Micromega; L'ingenuo*. (Maria Moneti, Trans.). Milan: Garzanti.

Ward, G. (2000). *Cities of God*. London: Routledge.

Wells, H. G. (1895). *The Time Machine: An Invention*. Melbourne: W. Heinemann, 1949.

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

Williamson, J. (1932). *Wolves of Darkness*. Isaac Asimov, Martin H. Greenberg & Charles G. Waugh (Eds.). *The Mammoth Book of Classic Science Fiction*. New York: Robinson, 1988.