

Technology and Magick

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Introduction

To define magic is not an easy task. A conservative approach depicts magic as the exercise of supernatural powers invoked from gods and spirits. Magic, however, has always been restated in the language of its time. The ontological discourse of reality is no longer occupied solely by religious doctrine and appeals to supernatural forces. Theories of quantum physics developed during the last century encroach on this space and seek to explain how reality functions. Magic has become increasingly dependant on such theories to justify how its rituals cause changes in reality. The common theme running through contemporary magical principles is that the human mind is capable of directly influencing the state of reality, whereas conservative views of magic hold that such action is only performed through manipulation of spirits or occult forces.

Magic is a highly adaptive aspect of human culture, readily reinventing its technologies in accordance with progress. Thus, it should come as little surprise that magic has appropriated the computer. The result is the creation of a novel magical paradigm founded on the intersection of quantum theory and cyber-culture's doctrine of virtual worlds, which demonstrates that a reality, albeit virtual, can be recoded, manipulated and changed in accordance with human will. After all, magic shares a commonality with hacking in that both use technologies to cause change to an environment through manipulation of that environment's cohesive powers. In the instance of hacking, it is the underlying code that must be altered to exert a change; for magic, it is the manipulation of forces underpinning the state of existence that brings about change.

This paper reports on contemporary quantum-based magical theories that approach reality as a myriad of possibilities that can be determined by magical participation. A salient parallel exists with MUDs: participants engage within the construct of a read-only world; only the wizards may reorganize the state of (virtual) reality in accordance with their desires. Quantum-based magical theory views the reality in which we live as coextensive with the malleable virtual reality. Thus, the computer provides an excellent locus for magical experimentation in this paradigm. Whilst this paper does not presume a belief in magic on the part of the reader, it does, however, require acknowledgement of the practices by those who do.

Chaos Magic

Just as technologies such as computers have evolved from warehouse-sized machines capable only of basic calculations to multitasking desktop PCs, magic has also evolved from grandiose ritual flair and embraced post-modernism. Chaos magic is a system introduced in the early 1980s through Peter Carroll's "Magickal Pact of the Illuminates of Thanateros". Chaos magic builds on the writings of Austin Osman Spare and in opposition to ritual dogma emphasizes that "nothing is true, everything is permitted". Unlike other, more culturally prominent magical practices such as Wicca or neo-paganism, chaos magic does not advocate any kind of religious belief, but merely provides magical technologies. Belief systems are considered as technologies, and as a result any kind of symbolism may be used as long as belief can be invested into it. As a system of pure techniques, the emphasis of chaos magic is placed in the embrace of all technologies.

Chaos magic explains itself through the language of quantum theory and perceives reality as a field of superimposed probability waves. Events have been observed in the subatomic quantum domain that belie concepts such as time and cause and effect. Carroll argues that quantum theory provides an endearing basis for a magical paradigm (Carroll, 1990). In 1927 Werner Heisenberg challenged understandings of reality established by Newtonian physics. Opposing simple causality, Heisenberg's uncertainty principle declares that it is impossible to simultaneously measure the position and momentum of a

quantum particle, as knowledge of one precludes knowledge of the other. Implicit in the uncertainty principle is the proposition that an observer's consciousness participates in the quantum system. In choosing to observe one possible state of a quantum particle, the observer defines it as such. This is called the collapse of the wave probability function. Despite the discourse surrounding quantum consciousness, the physical nature of the processes that link consciousness with the quantum events has not been precisely identified. The uncertainty principle implies the existence of an undiscovered means of transferring information from the observer's consciousness into the quantum realm.

This notion is supported by the paradox of non-locality or particle-entanglement theory, in which two particles such as photons become connected so that changes to one instantaneously occur in the other regardless of distance. Two possible theories exist to explain this paradox: photons can communicate faster than the speed of light, or they somehow remain connected parts of an indivisible system. The first is incompatible with Einstein's theory of relativity (that nothing can move faster than light) whilst the second suggests that at the quantum level reality is non-local and interconnected. Thus, information that causes change can be exchanged regardless of distance. Although most scientists would be reticent in suggesting that the principles operating at the quantum level apply to the macroscopic level at which we exist, chaos magic has appropriated these theories and principles to construct a belief paradigm in which magic exists. Importantly, chaos magic theory promotes the notion that magic exists as a byproduct of being human rather than placing any belief in occult forces. Chaos magic theory proposes that magic plucks a specific reality out of a myriad of possibilities. In other words, magic is the practice of defining a state of reality through the transmission of information.

Inevitably, chaos magic turned its attention to incorporating computers into magical ritual. The potential for computers to host virtual worlds capable of being recoded according to desired parameters is extremely amenable to a magical paradigm grounded in quantum theory. Two respective experimenters and innovators in this field are Ramsey Dukes and Charles Brewster. *Johnstone's Paradox* is a computer-inspired magical concept discussed by Ramsey Dukes (1988, 1992 & 1998). Dukes assumes that we live in an entirely material world where there are no unexplained phenomena because everything will eventually be reducible to scientific reasoning. He continues to approach virtual reality and artificial intelligence technologies. Following "Moore's law", Dukes projects that with computer processing power exponentially increasing it will not be long before we are able to host artificial worlds, populated by an artificial bio-system with all inhabitants possessed of artificial intelligence. Dukes argues that if we live in a material world then computer generated artificial worlds are a possibility because every condition of existence will accord to precise scientific principles as they are discovered. The theory continues with the assumption that the creators of the virtual world will not be able to restrain themselves from tampering with (or hacking) conditions in small ways to monitor the results. Dukes questions what the probability is that our world is the original world, his conclusion being that the probability is very small. He then questions the probability of living in a virtual world based entirely upon established scientific principles. Again, he argues that the probability is small. Dukes concludes that in all likelihood ours is a world where magic is possible. The essence of *Johnstone's Paradox* has been explored in films such as *The Matrix* (1999), *Total Recall* (1990) and *The 13th Floor* (1999).

Charles Brewster's concept of cybermorphic information (Brewster, 1991) is simpler to discuss than the *Johnstone Paradox*. Brewster's theory is rooted in the principles of computer programming, which categorises information as either data or instructions. Object oriented programming refers to these as objects and processes. Brewster argues for a third categorisation, which he calls *cybermorphs* (Frater M, 1999). The principal difference between the different categories of information is that data and instructions always relate directly to a material reality whereas cybermorphs relate to the abstract framework in which data and instructions have validity.

If both theories are combined with principles drawn from quantum mechanics, then data represents the material concept of particles and instructions correspond with wave functions. In *Johnstone's Paradox* both particles and waves are simply modelled as information inside a hypothetical computer in another universe, there might well be information that fails to relate to either particle or wave functions in this universe. This information would be cybermorphic with the function of structuring and processing data and instructions. The combination of these theories has been encapsulated in a software application called Cybermorph Hardware And Operating System – Human-interface Exchange (*CHAOSHEX*). The program

is designed for individuals working in a belief paradigm that supports *Johnstone's Paradox* and the concept of cybermorphs. Frater M explains:

If we are artificial intelligence programs, living in a virtual reality, then we should be capable of evolving a program feature that allows us to hack into the system control computer and reprogram things to our own benefit. A successful piece of hacking would be undetected by the system and would remain uncorrected. Sometimes an error caused by hacking may be corrected, but not before the ripples of its effect have caused the world to head in a subtly different direction. This is exactly how most magicians argue magic works. (Frater M, 1999)

CHAOSHEX is designed as a three-way cybermorphic interface between the user, a computer and the meta-computer that hosts our world. Users must login to the system using a command line interface that changes the normal DOS prompt to the CHAOSHEX prompt. There are a number of commands available within the program for hacking into the world. When a ritual is performed the screen is bombarded with an array of random words and colours designed to trigger a state of *gnosis*. This causes the command entered to change some aspect of reality at the root level of code. Lawrence Lessig (1999) has highlighted the relationship between code and cyberspace activity arguing that the virtual is defined by underlying structures of protocols and coding. Similarly, magic is regarded as the function of speaking to the universe in a language it cannot fail to ignore. CHAOSHEX updates this to a notion of speaking in a language that the operating system cannot ignore.

CHAOSHEX is the result of hybridisation between computer-culture and modern magical principles. Just as the GUI was introduced to make human-computer interaction more accessible to those unacquainted with the command-line interface, CHAOSHEX seeks to democratise the practice of magic. Its creator, Frater M (Anton Channing), states that no magical background is necessary. The very act of logging into the program is sufficient to shift the user's perception. As computers proliferate in our culture, our responses have been conditioned from hours of accessing computers and the Internet (1999). The claimed effectiveness of CHAOSHEX can be qualified by Phil Hine's argument that "[a]ny belief system can be used as a basis for magick, so long as you can invest belief into it" (1995:36). A belief system may be considered a matrix of information into which emotion energy can be focused. With Hine's argument as an encompassing principle of magic, it sustains the concept of the CHAOSHEX system working on the paradigms promoted by Dukes and Brewster.

Thought-forms

Related to Hine's definition of a belief system is the concept of thought-forms - artificial discarnate entities. Also known as *tulpas* or servitors, thought-forms are understood as being the resultant creations of the unconscious. Genesis P. Orridge suggests that "when enough people believe in something, it becomes a deity" (Farber, 1998). Similarly, Carroll (1987) and Hine (1988) claim that techniques of evocation are capable of creating new deities or thought-forms. One such experiment was the evocation of Goflowolfog, a deity charged with the duty of ensuring free traffic flows, created during the course of a workshop in London. Provocatively, Genesis P. Orridge also proposes that in the instance of cyberspace, "we're building a god, but we're building a god with the flaws and the gifts" of all Web contributors and users (Farber, 1998). The collectively created thought-form of cyberspace has been dubbed the *Psychosphere*. Genesis' proclamation sounds like a concept from a cyberpunk novel, reminiscent of the Loas of the Net from William Gibson's 1984 *Neuromancer* trilogy, yet is lent some substance by the creator of the World Wide Web. Tim Berners-Lee, in an issue of *USA Weekend* magazine, was quoted as saying he considered the Web to be a developing artificial intelligence (Farber, 1998).

Philip Farber argues that the Psychosphere is the resultant creation of the conscious and unconscious actions of every Internet user. His theory proposes that every online experience changes the individual and the effects of those changes ripple through cyberspace indefinitely. The responses to powerful impressions, such as those that influence or explain are obvious. Lesser impressions, however, are responsible for much more subtle changes, but changes nonetheless. If you are in a chat room and an irrelevant or offensive message appears, Farber argues that you are changed by whatever action is taken. Ignoring the message, waiting for it to scroll past or leaving the room causes change. Users communicate unconsciously by

switching rooms or changing the subject. Individuals' bodies may retain muscular tension as the result of provocative postings. This tension may then manifest itself as further provocation. Essentially, Farber advocates a cause and effect principle that ripples through cyberspace indefinitely, no matter how diluted. This notion is similar to the 'butterfly principle' of chaos theory. Central to Farber's theory is the postulation that the memory of the Psychosphere is held in the nervous systems and bodies of all Web surfers as well as the memory of the computers that facilitate the Internet: "If you are upset by something online, the Psychosphere will remember that upset for the time that you are experiencing, no matter how long, and ripples will extend from that point and be 'remembered' in the consciousness/physicality of those who encounter the ripples" (1998). If the Psychosphere then, is the sum of the collective experience in cyberspace, Farber claims that it is possible to invoke the qualities to be discovered therein.

The suggestion that deities can be created through the investment of belief is an interesting prospect that could be facilitated by technology. Software could be created for interaction with preset and customisable godhead figures. Stelarc's "Prosthetic Head" installation project would provide an excellent framework with which to work:

As you walk into the darkened space, you'll see a computer-generated image of Stelarc's head projected large scale onto a wall. There's a plinth holding the keyboard and sensors that detect your entry into the space. The head will look towards you, greet you and invite you to initiate dialogue. You key in a remark, a question or a comment and the head responds from a substantial database vocabulary. (Gallasch, 2003)

Potentially, Stelarc's project could represent the user interface for an updated version of CHAOSHEX, redefining the role of computer-based avatars. Stelarc aims to augment the autonomous capacity of the avatar through expansion of the vocabulary database and the addition of a visual recognition system. The culmination of magical principles and technological developments could ultimately result in interaction with the prosthetic head in a manner akin to Phillip K. Dick's godhead figure Mercer (Dick, 1999). Although such a proposal may be regarded as the product of science fiction, it must be remembered that the magical community has been ardent in its appropriation of new technologies.

Conclusion

Has the intersection of magic and cyber-culture created a new belief paradigm distinct from existing modes of working? The blend of *Johnstone's Paradox* and cybermorphic information certainly provides a novel way of understanding and interacting with reality. The addition of the Psychosphere has opened the prospective belief in computer-based discarnate entities or cyber-spirits. Although the pragmatic effect of magic is typically considered to be specious, its historical persistence and adaptability suggests a deep human need to understand and bind the universe. Whilst the methods and theories proposed here are certainly novel and have brought magic as a practice into the 21st century, the motivations remain the same. Magic is conducted through the utilisation of technologies, whether those technologies are computers or ancient pantheons. The traditional perception promotes magic as fanciful resurgence of a bygone, mythical age associated with supernatural powers. The developing notion of computer-based magic - accompanied by a discourse relative to quantum physics - may ultimately prove to augment its credibility in modern society. It certainly represents an attempt to substantiate the practice of magic based on scientific theories that were supposed to disprove its existence. In doing so, magic has appropriated the computer, the embodiment of technological progress, and turned it into a magical tool.

References

Brewster, Charles (1991) *Liber Cyber*, London: BM Dazzle.

Carroll, Peter J. (1987) *Liber Null & Psychonaut*, Maine: Samuel Weiser.

Carroll, Peter J. (1990) "The Magician As Rebel Physicist", http://www.philhine.org.uk/writings/ess_rebelphy.html last accessed 25th June 2004

David-Neel, Alexandra (1977) *Magic & Mystery in Tibet*, London: Abacus.

Dick, Phillip K. (1999) *Do Androids Dream of Electric Sheep?*, London: Millennium.

Dukes, Ramsey (1988) *Words Made Flesh*, England: The Mouse That Spins

Dukes, Ramsey (1992) *BLAST Your Way to Megabuck\$ With My SECRET Sex-Power Forumla*, England: Revelation 23 Press.

Dukes, Ramsey (1998) *What I Did In My Holidays*, England: The Mouse That Spins

Farber, Philip H. (1998) "Introduction to CyberMagick", <http://users.bestweb.net/~kali93/oc98/cyber.htm> last accessed 16th March 2004

Frater M, (1999) "Magick and Technology", http://www.uwec.edu/greider/indigenous//RFs%20tech%20and%20trad%20indig%20spirits/index_pageC1.htm last accessed 16th March 2004.

Gallasch, Keith (2003) "Nexus of Parallel Universes", in *Real Time + Onscreen*, no.58, December 2003

Hine, Phil (1988) "Aspects of Evocation", www.kaaos.org/chaos/docs/aspects_of_evocation.pdf last accessed 1st April 2004

Hine, Phil (1991) *Chaos Servitors: A User Guide*, England: Chaos International

Hine, Phil (1992) *Condensed Chaos*, England: Chaos International

Lessig, Lawrence (1999) *Code and Other Laws of Cyberspace*, New York: Basic Books

Stelarc, "Prosthetic Head", <http://www.stelarc.va.com.au/prosthetichead/> last accessed 20th March 2004.

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