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## TRANSCENDING TECHNOLOGY: UBIQUITOUS COMPUTING OR TECHNOMAGIC?

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### Abstract

How do we transcend technology? How does technology transcend us? Can technology be used as an instrument to expand subjectivity and create another reality? The pervasive use of technology nowadays raises a number of questions and perspectives concerning its relation to spirituality: research has been conducted through interviews and selected literature; different ways to incorporate aspects of spirituality in our interactions with technology are outlined in this paper.

How do we imagine, and eventually design, systems that integrate contemporary technology and traditional forms of spirituality in our everyday life? Technology and spirituality mutually influence and deform each other and the world around us, and the perception of reality is undergoing a constant metamorphosis. Erik Davies, in his book *"TechGnosis"*, investigates how the language and ideas of the information society have shaped and even transformed many aspects of contemporary spirituality. In the chapter *"The alchemical fire"* he introduces the concept of *technological unconscious*, an unconscious that would emanate from the *electromagnetic imaginary*: now that electric current, energy, was transformed into information, "electricity would carry three different aspects of the alchemical imagination into the modern world: the fascination with the vitality of bodies, the desire to spiritualize material form, and the millenarian drive to transmute the energies of earth into the divine realization of human dreams" [1].

If technology, on the one hand, partially realizes some of the dreams of traditional natural magic, such as action-at-a-distance, remote communication, and the possibility to create and manipulate an alternative (virtual) reality where human action can be compared to that of the supernatural, on the other hand it stimulates the development of different devices and applications that can form the structure of a new contemporary spiritual practice. The connection between technology and the supernatural is instinctively present to our mind, but what is spirituality today?



Fig. 1. Kaffe Matthews' Sonic Bed installed in Scotland, 2007.

Since the XIX century tendencies in emerging forms of spirituality combined the appeal of popular magic with mystic thought, European Hermetic tradition with potted Eastern metaphysics, at times mixing and matching the new evolutionary and electromagnetic worldviews of science with the new global politics of universal brotherhood. In more recent years, the West has seen on the one hand an uncanny widespread of Buddhism and the birth of the agnostic new age culture, informed by a sweet, happy and politically correct fusion of spirituality and technology (without any strong ideological orientation in the background), on the other hand the tribal re-appropriation of subjectivity and the right to explore outer worlds and altered states of consciousness have emerged in the context of techno music, postmodern shamanism [2] and other revisited forms of *magic*, where the reinvention of the use of technology aids the creation of that meta-space of experimentation that Capoeira [3] defines *sacred texture*, where game and ritual take place in that specific space expanded by dance and music.

Rohan Gunatillake's Buddify application is an attempt to propose a form of meditation to go, one addressed to hipsters, not hippies, as the author claims: the target, his personae, are users in harmony with the fast civilization that surrounds them, allowing optimization of their time of transition - all those mo-

ments when one is commuting, waiting at the post office or cuing at the ticket counter - filling this specific emptiness with pre-digested easy ways of meditating; meditation becomes, then, a fill-in-the-gap method to keep up with multitasking, and, instead of assuming the form of a dedicated time-space and a learned technique where the person seeks for an alternative to a fast forwarding life style, it fully amalgamates with the modern methodology of productivity, propagating the idea that in some ways time is worth money and it should always be used with a sort of entrepreneurial attitude, obtaining the maximum result with the minimum effort. Kaffe Matthews, the artist and composer author of Sonic Bed, reached a much deeper effect while pursuing a different goal: willing to create a speaker-based bed, in order to develop a system, in the form of an interactive sound art installation, that would offer the possibility to listen to sound as vibration rather than audible perception, suddenly found herself in front of a piece of art that can instantly throw the user in a deep state of meditation. The electronic noise artist Ryan Jordan, in response to the widespread diffusion of dream machines and other expensive flickering devices for the creation of a do-it-yourself nirvana, developed his psychedelic goggles, eventually built of toilette rolls: the paradise is not that far if everyone can make, using cheap available electronic components and a few bits of waste, their own little device for tran-

scending visions and spiritual transformation; a democratization of the right to be shamans in contemporary societies that undermines both the world of cryptic knowledge and that of ethereal engineers, if everyone with a little effort can be taught to build their own... media divination instrument. But this is just the beginning of the story, because, if on the one hand all these very different applications base on the use of music their technologically aided spirituality, on the other hand the issues raised deserve further analysis.

### Calm technology

In computing, calm technology aims to reduce the potential distress of information overload by letting the user select what information is at the center of their attention and what can be peripheral. The term was coined at the end of the 80s by Mark Weiser, chief technologist, and John Seeley Brown, director of Xerox Palo Alto Research Lab, foreseeing the need for design principles and methods that enable users to sense and control what immediately interests them while retaining peripheral awareness of other information possibilities that they can, at any time, choose to focus on. As devices with embedded programming become an all-pervasive part of our environment, the ability to design encalming environments and devices is becoming every day more important.

And this is Ubiquitous computing, a post-desktop model of human-computer interaction in which information processing has been thoroughly integrated in everyday activities and objects. Defined as the third wave in computing, from mainframes to personal computers, with ubiquitous computing, or the age of calm technology, "technology recedes into the background of our lives" [4].

The idea is a sort unfolding world encumbered by intelligent micro-technology that starts reacting and interacting with us at our discretion, that is, when we pay attention to it, or when it decides it's opportune to interact. This sort of *multiverse design*, or design for parallel universes brought to existence by the attention and the presence of the observer may have inherited some of the awareness that the teachings of Werner Heisenberg and the principles of quantum physics have brought about, but ubiquitous computing is even more scary than that, whereas these principles are not developed with the intent to respect the individual, and personal rights are

not violated by an intrusive abuse of technology.

### Spiritual computing

Craig Warren Smith, formerly professor at Harvard University and now HIT-Lab's Senior Advisor, declared in a recent interview [5] that the principles of calm computing, applied in commercial settings, have distorted Wieser's vision of a technological world that dissolves in the undistinguished, undefined ultra-space of the *potentially interactive*, creating a sort of multilayered reality that reminds us of Bergson's multiplicity, the multiplicity of phenomena unified by the uniqueness of consciousness. Trying to answer to Wiener's center/periphery idea of calm technology, he looks at phenomenology with Buddhist eyes and suggests that in spiritual computing the world spiritual mostly refers to the cultivation of information, wisdom, awareness, and a consciousness state where the line dividing thought and technology is getting dimmer by the day. In this spiritual awareness humans and machines may be united into a mutual "*spiritual growth*"; the human consciousness can be enhanced but, at the same time, spirituality, as he recently declared, is endangered by technology: "technology is not intrinsically spiritual, it is a tool for immersive experience, and immersive experience can absorb you and absorption can addict you and addiction is the opposite of spiritual development" [6].

C. W. Smith, for 30 years Buddhist teacher, after defining Spiritual Computing as "the ideas, methods, and practice needed to bring 'spirituality' into the design of next-generation technologies" [7] in 2001, and affirming that technology could finally catch up to spiritual constructs that have taken thousands of years to develop, seems nowadays more cautious towards technology and its effects on human beings.

Involved as a founder in the global movement to close the digital divide, his research addressed the cultural and spiritual impacts of digital technologies in emerging markets. The concept of digital divide refers to any inequalities between groups in terms of access to, and use of, or knowledge of information and communication technologies. On an international scale countries become the units of an analysis that examines the divide between developing and developed countries. Connectivity is in close relation to productivity, and access becomes a necessary condition to overcome the digital divide. Nowadays the transforming of events has accelerated its pace, and the economical global (un)balance is changing as we type.

Another conceptual and historical divide is changing and has changed in modern times: that of the conflict between western mass consumption and eastern spirituality. Aren't developing countries becoming the new workforce of contemporary capitalist feticist pro-

Fig. 2. Ryan Jordan wearing his first psychedelic goggles prototype in his studio in East London, February 2012.



duction of objects and services? And hasn't *eastern spirituality* slowly been eaten away by western anthropophagic tendency to assimilate heterogeneous cultural forms into a unique extended supermarket?

As Buddhist Vidyadaka affirmed, "we are becoming a global consuming economy driven world and spirituality is not strongly associated with the East anymore, and there is a very strong emergence of the spiritual life across the world..." [8].

### Technomagic

Fabi Borges, a Brazilian psychologist who uses rituals which integrate technology in the process of individual and collective therapy, narrates the peculiar history of Brazil, where the practices of open source software and hacking encountered shamanism, giving birth to technomagic [9], a tendency that simultaneously emerged in various parts of the world under a variety of names (technoshamanism, technobedouins, etc).

Technomagic is not another name for augmented reality, nor it identifies any of the illusions that technology can trigger; rather, it is the integration, and the reinvention, of local spiritual practices (ie, Candomble) and ancient rituals (ie, Ayahuasca) with the possibilities for the expansion of subjectivity that technology offers. If technology becomes, in a sense, an adjuvant of personal/individual experience, offering, for example, the possibility to record and amplify sound, in another sense it is the substitute of a form of deprivation: traditional shamanism is in fact strongly connected to the territor and the spirits believed to inhabit it; however, various migration waves and the ubiquity that the Internet and modern technology generates, stimulate a totally new relation with the individual self and the community around it. Moreover, technomagic fills the dichotomy, present in young generations, between contemporary and vanguardist tendencies concerning technology, music and culture, that nowadays are sometimes common to coetaneous generations all over the world, and ancient local traditions. Technomagic is about our present, it doesn't believe in a marvellous future when everything will be better, it doesn't believe in evolution or development, technomagic looks, rather, at the extended texture constituted by the multiplicity and unicity of the simultaneous perception of

the present that passes throughout, and connects, our bodies.

### Conclusion

Reasoning about technology in relation to spirituality, and viceversa, is a difficult and necessary step that needs to be perpetrated in contemporary world. The topic is crucial and particularly dense, and may deserve further development and analysis. Music has been identified as a factor that fosters spiritual development. Technology and spirituality don't seem to be in opposition; they can, rather, be complementary, or alleys, as Fabi Borges suggests [10].

Gary Lachman [11] proposes to look back and be inspired by Greek etymology: whereas *techne* refers to a know how, or a technique, and is generally opposed to *episteme*, that is knowledge in the sense of science, or that which is true, *gnosis*, the common word for knowledge, came to indicate, over the centuries, a form of spiritual knowledge. Technology and spirituality are, in the end, nothing else than the expression of two different forms of knowledge.

### References and Notes

1. Erik Davies, *TechGnosis: Myth, Magic and Mysticism in the Age of Information* (Nevada City, U.S.A.: Harmony Books, 1998).
2. A good reference on this theme is: Daniel Pinchbeck, *Breaking open the head* (New York, U.S.A.: Broadway Books, 2002).
3. Capoeira is a Brazilian martial arts that combines elements of dance and music.
4. Mark Weiser, 1986.  
<http://www.ubiq.com/hypertext/weiser/UbiHome.html>
5. Spiritech: transcending technology. London, 2012.
6. Ibid.
7. Craig Warren Smith, 2001.  
[www.stc.arts.chula.ac.th/.../PPT-files/Craig-SC%20Chula%20pres.ppt](http://www.stc.arts.chula.ac.th/.../PPT-files/Craig-SC%20Chula%20pres.ppt)
8. Spiritech: transcending technology. London, 2012.
9. The first official technomagic meeting will take place in the locality Visconde de Mauá (Itatiaia, Brazil) from the 10th to the 13th of May 2012.  
<http://nuvem.tk/?tecnomagias>
10. Spiritech: transcending technology. London, 2012.
11. Ibid.