

# On Techno-Theology and the Sacred: Exploring Technology and Spirituality

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“Symbols are a language that can help us understand our past. As the saying goes, a picture is worth a thousand words, but which words? Interpret for me please, this symbol (Figure 1), the first thing that comes to mind [design and technology educators should recognize this as the cover to the *First Proclamation of the Weimar Bauhaus* or the Bauhaus Manifesto]<sup>1</sup> ... How do we sift truth from belief? How do we write our own histories, personally or culturally, and thereby define ourselves? How do we penetrate years—centuries—of historical distortions defying original truth? Tonight, this will be our quest.” Pop culture junkies and scholars will recognize these words as the introduction to the “Interpretation of Symbols” talk given by Robert Langton, played by Tom Hanks, in *The Da Vinci Code*. Even though I am a bit funnier than Hanks, especially in *The Da Vinci Code*, I have no intention of unraveling secrets of the Holy Grail and I will not give a talk on the interpretation of symbols. As an aside, we are reminded in *The Da Vinci Code* that Jesus made a good living as a carpenter; he knew how to fish and relax with a glass of water (wink, wink) after a day’s craziness with students.

Nor will I stand before you, as Erich von Däniken did in *Chariots of the Gods*, and ask if God was an astronaut. I will not assert, as Däniken (1970) did, that "the gods of the dim past have left countless traces which we can read and decipher today for the first time because the problem of space travel, so topical today, was not a problem, but a reality, to the men [and women] of thousands of years ago." We received visits, he continued, "from the universe in the remote past, even though I do not yet know who these extraterrestrial intelligences were or from which planet they came" (p. 10). I will not argue, as in a recent



Figure 1. Lionel Feininger's woodcut from the *First Proclamation of the Weimar Bauhaus*, 1919.

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<sup>1</sup> In the *First Proclamation*, Bauhaus Director Walter Gropius wrote: "Let us create a *new guild of craftsmen*, without the class distinctions which raise an arrogant barrier between craftsman and artist. Together let us conceive and create the new building of the future, which will embrace architecture and sculpture and painting in one unity and which will rise one day toward heaven from the hands of a million workers like the crystal symbol of a new faith."

documentary titled *Technologies of the Gods*, that "ancient civilizations utilized high-tech engineering methods equal to, if not superior to our own and that these technologies were being applied on a world-wide level," as if guided by a higher power (Figure 2). And finally, I will not argue that we owe a spiritual debt to ancient technologies given to us by Daedalus, Mercury, Minerva, Pandora and Prometheus (Campbell, 1991) (Figure 3). With that said, I might draw on the paranormal to do some spoon bending... we shall see.

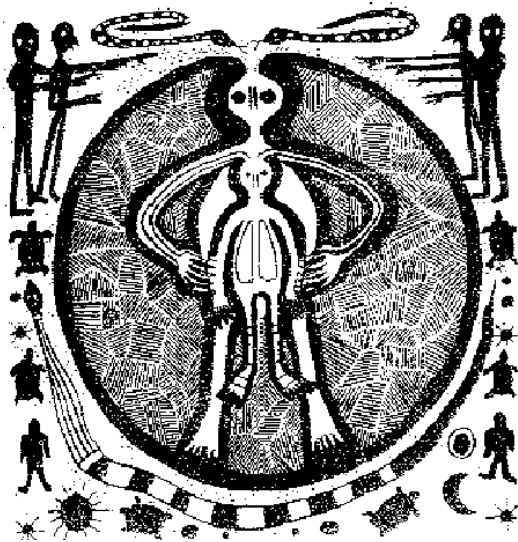


Figure 2. "Ancient Astronaut" hieroglyph.



Figure 3. Daedalus & Icarus

And I will definitely provide an overview of technology and spirituality with the intent of challenging you to recognize existential-spiritual values as part and parcel of technology studies. I begin with the basic premise, or thesis if you will, that technology embodies and generates five sets of values—the existential-spiritual values of technology are as important to recognize as ecological-natural, ethical-personal, socio-political and technical-empirical values (Figure 4). None of these interdependent values can be ignored in education lest we offer a compromised curriculum and literacy of technology. Too often in design and technology education we emphasize and prioritize technical-empirical, or rational values, over equally important existential-spiritual, ecological-natural, ethical-personal and socio-political values. Or, we leave the technical-empirical values unchecked. In effect, we are out of balance.

How do technological values enter into the spiritual? How do spiritual values enter into the technological? I'll provide a conceptual overview of technology and spirituality that challenge us to develop strategies for addressing a wide range of values in technology studies research and practice.

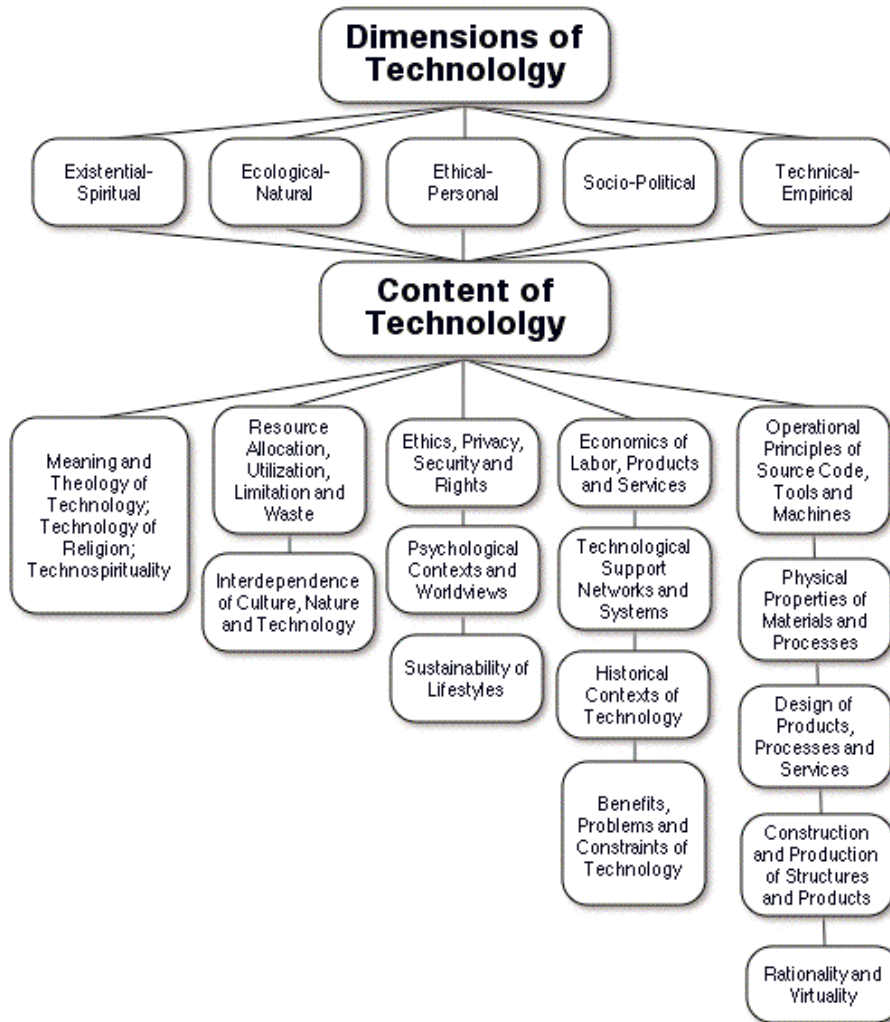


Figure 4. Dimensions and values of technology.

I recognize that I may be preaching to the converted this morning here on the Gold Coast— according to the most recent National Church Life Survey (NCLS) (2001):

- ✓ Two-thirds of Australians claim that a spiritual life is important to them
- ✓ Most Australians believe in God or a spirit, higher power or life-force (74%)
- ✓ 35% believe in a personal God
- ✓ 42% believe Jesus was divine
- ✓ 43% believe that Jesus' resurrection was an actual historical event
- ✓ 53% believe in heaven
- ✓ 33% believe in the devil
- ✓ 32% believe in hell
- ✓ 33% pray or meditate at least weekly.

For the NCLS and our purposes here, spirituality means “any aspect of humanity's connection to something other than itself. This includes deism (natural revelation), and theism (revealed revelation), yet also expands to include even other human relationships. Spirituality in its broadest sense is the evidence of, or attempt to explain, human transcendence.” These percentages will likely increase in this year’s survey. If these data tell us anything, it would appear that Australians, quite similar to Canadians in this case, are quite interested in introducing meaning to life.

### **Technology, Religion, Spirituality and the Sacred**

Indeed, commentators on our times note that we—the masses—are lost, again searching for something. Whether it stems from alienation, disenchantment, secularism or a fear that does not yet have a name, there is restlessness, a thirst for meaning and purpose and turn to spirituality and religion. Salvation in shopping, surfing, and browsing is not entirely satisfying. The material girl—Madonna—has herself turned to Kabbala. But the material (or material girl) is an easy escape and scapegoat. Stripped of any spirituality, the material is of course, vacuous. And the same is said of nature—inspiring but without grace. Neither the corporate nor the corporeal offer up much that is sacred. Inverting the Christian gospel, the flesh is willing but the spirit is weak. Transcendental materialism, rational mysticism and Electric Gaia beckon.

Is technology the fault of our disenchantment or was it that religion displaced the spiritual from an initially enchanted world? Is the world disenchanted, or have we failed to recognize the sacred in our hands and midst, grace under our feet, in the turn of a wheel, in the abundance of creatures, in the eyes of another being?

When Marx said 'religion is the opiate of the masses,' he worried that the world's religions were placating potential proletarians and robbing them of their revolutionary spirit. A few decades later, Max Weber turned this sentiment around, noting that rather than an oppressive force in the new era, religion turned to capitalism and technology to release the spirit from oppression. Religion, specifically Calvinism, had been revived through "the spirit of capitalism." The restoration of technology went hand in hand with the restoration of the gospel (Kohlenbach & Geuss, 2005; Mendieta, 2004; Siebert, 1985; Stahl, 1999). As Elder Joseph Fielding Smith asserted in general conference in 1926, without this restoration and

organization of the Church of Jesus Christ of Latter-Day Saints, there would have been no radio, there would have been no airplane, and there would not have been the wonderful discoveries in medicine, chemistry, electricity, and the many other things wherein the world has benefited by such discoveries.... I do not believe for one moment that these discoveries have come by chance, or that they have come because of superior intelligence possessed by men today over those who lived in ages that are past. They have come and are coming because the time is ripe, because the Lord has willed it, and because he has poured out his spirit on all flesh. (quoted in Erickson, 2001, p. 5)

This is technosectarianism or what David Noble (1997) calls the *Theology of Technology*, and it remains unclear whether the new gospel restored technology or whether it was the other way around, or both (see also Hopper, 1991). Of course, neither the sociologists nor the brethren could anticipate September 11, 2001 and subsequent events signaling the start of the new millennium. Religion itself, perhaps a resurgence of fundamentalist doctrine,

produced a new revolutionary subject, a new crusader, and new terror (Kroker, 2005). Secularism no longer seems tenable.

So, when the virtual Church of Fools opened its door on 11 May 2004 as a social experiment sponsored by the Methodist Church and the *Ship of Fools* online magazine, no one anticipated the results. During the first two days, 60,000 visitors dropped into the simulated cyberchurch, adopted an appropriate avatar and proceeded to preach, pray or disrupt the proceedings. Wardens monitored the interactions, spiting visitors who got out of line and interrupted the worshipers. On the third day, Satan logged in and blasphemed the entire virtual congregation, prompting creators to remove the shout option and tighten up security. From the start, the wardens had their hands full with virtual iconoclasts who made a mess of the proceedings. The open church policy became much more controlled. After four months of this virtual experiment in recruiting Gen Xers to the Methodist faith, the Church of Fools closed its doors (Figures 5-6).



Figures 5-6. Church of Fools

Similar to other aspects of culture with the passage of time, religion responded quite readily to the web and virtual environments. Where browsing, surfing, and online games would have drawn the wrath of the holy a few decades ago, around the adage that the devil was finding employment for idle hands, the world's religions crossed the virtual threshold to embrace new technologies. Religions remade themselves in the form of cyberspace, appearing in cybergarb beyond the normal brick and mortar institutional form. Synchronicity is no longer an issue. If you didn't make it to the cyber-church, mosque or temple today, you have the option of deferring your appointment with God to a more convenient occasion.

The new parables are derived from cyberspace: "Maybe you just fixed a typo," says one Christian site. "Maybe you re-wrote an entire paragraph. Maybe you didn't mean to hit "save" and you just erased six months of research numbers. No matter... The digital understanding of "save" is remarkably congruent with the biblical notion of "being saved," transgressions can be forgiven. At PreachingPlus.com, we find the GIGO analogy used for the sacredness of the body: "One of the first computer adages which I was taught was garbage in, garbage out. It means that what we put into our computers (or lives) determines what we get out. Any of us who have ever downloaded a computer virus know the truth of this axiom — what we downloaded impacted the whole computer. Yet, how many of us

unconsciously download the virus of profanity or pornography or disrespect for others through what we watch or listen to?" FreshMinistry.org notes that there are "over 15,000 web-based prayer circles, the virtual counterpart of physical prayer circles that have popped up on line over the past few years. Even mainline denominations are taking prayer on-line. Churches have begun sending weekly e-mail to their members asking them to pray for fellow members and friends who are ill, unemployed, or grieving."

At the fin de siècle of 1999 to 2000, millennialists zipped messages across the web linking the Y2K programming error to the coming of the end of the world. The end of the world, the programmers countered, would not be due to a programming error, unless through the will of Allah, the Buddha or God. Others, like the Ramtha spiritualists, were more optimistic, arguing that the new millennium would usher in a grand re-awakening of consciousness— science and technology were opening new vistas to point the way. Technopagans, whom *Wired Magazine* cast as a "vital subculture of digital savants who keep one foot in the emerging technosphere and one foot in the wild and woolly world of Paganism," embraced cyberspace for new ceremonial magic. Spiritual AI enthusiasts envisioned cyberspace as an Electric Gaia, a larger than (artificial) life form embodying an autopoietic, immortal, theistic consciousness (Campbell, 2005; Davis, 2004; Herzfeld, 2002; Wertheim, 1999). Ironically, even the Amish and the Mennonites, typically low-technology enthusiasts, were rewarded during the Y2K panic when people rushed orders over the web for technologies that were not dependent on the electrical grid and wired matrix.

We can dismiss this as yet more commercialization of spiritual experience, but we also find a deep and meaningful spiritualization of the void. Re-enchantment is never necessary within aboriginal theology, wherein the natural, spiritual and technological are always already completely integrated if not indistinguishable. Culture and nature are of a single weave, whether within indigenous peoples who speak of "all our relations," or in the ways of the Achuar of the Amazon, who do not maintain closed and opposed worlds within their cosmologies. Even as ancient wisdom appears in cyberspace, technology nonetheless reinforces an appropriation and exploitation of sacred rites and sites of aboriginal theology. With a touch of absurdity, Vision Quest now refers to high tech companies and crystal-gazing twinkies as much as to the Lakota spiritual journey. Eventually exposed as the business of a white software consultant in Ohio, a classic case of technology abetting cultural theft was Blue Snake's Lodge, a "cybernetic equivalent of Native holy ground," as one analyst called it (Martin, 1995, p. 108). Thousands of Indian wannabes flocked to the site where Blue Snake offered up Dreamcatchers, Medicine Wheels and Peace Pipes, and bestowed titles, like Stormcloud Dancer and Darkness Runs From Her. The reality of the virtuality was desecration and fraudulent sacred ground.

The Aboriginal and Amish, seemingly arrested in a romance of crafts, derive connections to a higher spirit or God by working nature by hand. This utopian notion of a humbling craft has always been a tempting romance for the artisan as well— the woodworker, silversmith or weaver. Some technologies more than others, it would seem, interfere with the spiritual connection offered through meditation on craftwork. Although Aboriginals and the Amish have demonstrated that we can undermine the demiurge, or more locally the electronic cottage and digital crafts industry, the artisan's demiurge and the Christian's Creator converge in intelligent design.

Trying to bring grace, the sacred and the act of creation (and hence technology) back down to Earth, intelligent designers are battling the old guard scientific

r/evolutionaries for education and engineering. For example, in the U.S. during 2004-05, seventeen states considered Kansas's lead in enforcing the inclusion of intelligent design in public school science courses as an alternative to evolution. In Florida, an "Academic Freedom" bill is currently in the House to protect post-secondary students' rights to their beliefs in intelligent design. What creationists could not do with Darwinian science in 1925, intelligent designers are doing with technology. If technology is not a result of random natural process, why should nature be? This question has architects, engineers and urban planners dreaming of adaptive design while limiting them to immanent teleology and goal-directedness of systems. Ironically, Divine design takes a secular approach, attributing the invention and design of the universe and world to a supernatural creator that cannot be reduced to a sectarian God. This secular shift has not appeased those who want the Divine hand of creation replaced with corporeality and mortally bound teleotechnology.

Transhumanists, mutationists, and new r/evolutionaries— the biotechnologists, cosmonauts, cosmologists, cryonologists, cybernauts, geneticists, nanotechnologists, plastic surgeons, and radio astronomers— advocate the re/design of a world of imperfect parts into the form of an organic whole. In a reenactment of Marx's material turn on Hegel's Absolute Spirit, transhumanists turn intelligent designers on their heads, opting instead for a mortal, grassroots, from the ground-up creation of a perfect whole, the utilitarian's Divine. Transhumanists are banking on converging technologies, or nano-bio-info-neuro-philo-technologies, to effect this gradual transcendence of the human condition. Offering a new creation story and a new outlook on the afterlife and immortality, they invoke the Californian spirit to counter invocations of a God-given natural order. Like the Futurists a century ago, transhumanists managed to turn traditional spiritual pathologies, such as worship of power, novelty and technology, into a new religion— technosecularism becomes technotheism and transcendental materialism. Who could have predicted that Extropian exuberance, a nose-job, cyborgenic prostheses, and procreative beneficence would be common indicators for the age of spiritual machines (Kurzweil, 1999)? Who would have thought that engines of creation would obviate the need for intelligent design?

Between 1997 and 2005, analysts anticipated and responded to this convergence of technology, religion and spirituality with books such as *The Soul of Cyberspace*, *Cyberchurch*, *Christianity and the Internet*, *Cybergrace*, *God and the Chip*, *The Age of Spiritual Machines*, *The Pearly Gates of Cyberspace*, *In Our Image*, *Give Me That Online Religion*, *Religion on the Internet*, *thelordismyshepoard.com*, *The Internet Church*, *Religion Online*, *The Gospel in Cyberspace*, *God in the Machine*, and *Exploring Religious Community Online*. Hundreds of web sites published and popularized strategies and wisdom for exploring these new convergences, with historical roots found in the origins of religion *and* technology. The perennial longing for something immaterial, or even immortal, runs deep in the cultural fabric of humanity across the world. This convergence of angst, theism, the spirit and technology is not merely limited to cultural appropriation or the world's religions taking advantage of cyberspace, Gen X habits and baby boomer, post-counter-cultural desires.

The questions are: How did we get here? and What do we do now? We begin with a new mapping of technology, religion, spirituality and the sacred (Figure 7) (For earlier mappings, see Ferré, 1990, 1997; Jones & Mathews, 1990; Mitcham & Grote, 1984).

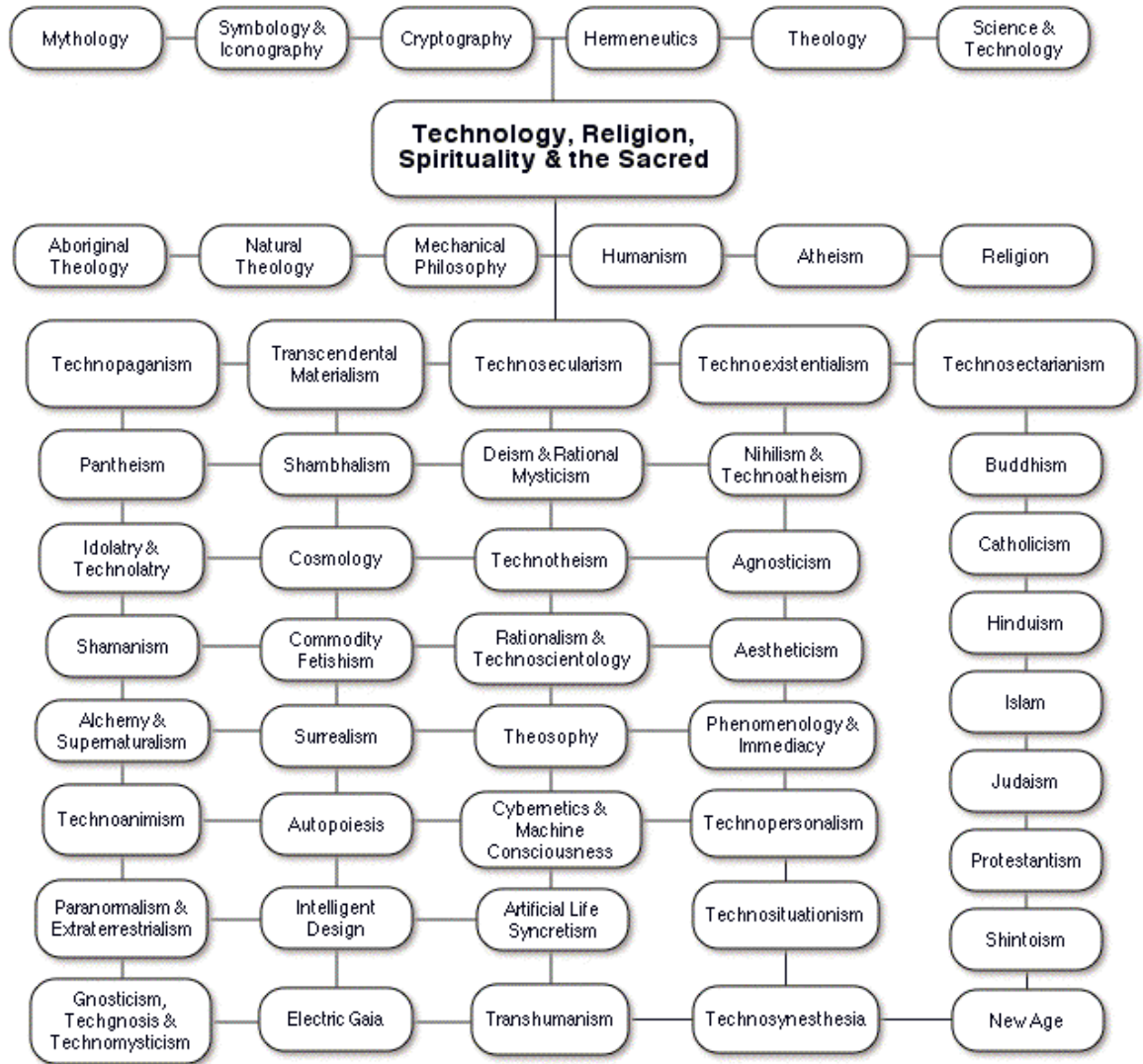


Figure 7. Mapping Technology, Religion, Spirituality and the Sacred.

On a general level, technology, religion, spirituality and the sacred encompass technopaganism, transcendental materialism, technosecularism, technoexistentialism and technosectarianism. There are conceptual as well as historical dimensions to the map, indicating coexistence, continuities and continua rather than binary oppositions. For example, alchemy resurges in technopaganism and Shambhalism returns in the form of Electric Gaia. Rationalism finds new manifestations in machine consciousness and transhumanism, artificial life in technosecularism, and nihilism is revived in technoexistentialism. As indicated, all of the world religions have morphed through technosectarianism. What do these new interconnections and changes mean for technology educators? As Feenberg (1991) has noted, it does not pay to resort to romantic defenses of humanism or oppose spirituality to technology. The more strategic options seem to lie in hybridity and explorations into the interdependencies of technology and spirituality.

What can educators do? For starters, we can drop the pretense that schools are or ever were secular institutions. We can reopen repressed and censored questions of



technology, religion, spirituality and the sacred. This does not mean a reduction to technosectarianism; rather, our mapping of this topic suggests a range of expressions to explore in education. We can also, as Purpel (1989) suggests, orient our curriculum toward the following goals, purposes and existential-spiritual values: 1) The examination and contemplation of the awe, wonder, and mystery of life and the universe; 2) cultivation and nourishment of meaning in life and meaning making; 3) cultivation of the oneness of culture, humanity and nature with a responsibility to harmony, peace and justice; 4) cultivation and development of a cultural mythos that builds on faith in the human capacity to participate in creating a world of care, compassion, justice, love and understanding; 5) cultivation and nourishment of community, democracy and interdependence; and 6) development of attitudes of outrage and responsibility in the face of injustice and oppression (of animals, people and the environment) (see also Hall, 2006; Pavlova, 2002).

What does technological literacy mean in light of new interdependencies among technology, religion, spirituality and the sacred? Once we begin to map and explore these interdependencies, we can also begin to turn our imagination to the task of addressing questions of existential-spiritual values in technology.

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