

Technological Modernization, the Internet, and Religion in Singapore

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This study critically examines the ways in which technological modernization and religion co-exist and mutually reinforce one another within the Singaporean context. Interviews with religious leaders of a diverse set of faiths in Singapore about how they understand the role of information technology in religious practice reveal a broad-based acceptance of the Internet and other information technologies and little sense of a danger to religious faith. Contrary to the proposals of secularization theory, these findings suggest that various religious communities have adopted and in some cases embrace the Internet as part of their contemporary religious mission and strategy for growth. The findings further contribute to historical research on the social construction of technology and lend support to emergent research on the spiritual shaping of Internet technology by religious communities seeking to integrate the Internet into their everyday social and religious practices in wired contexts such as Singapore.

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Introduction and Background

As one of Southeast Asia's most economically prosperous and dynamic regions, Singapore presents an interesting and unique case study for the examination of the Internet and religion. As a result of an aggressive campaign by the government to build an infrastructure and to boost personal adoption of the Internet, the nation has one of the highest Internet penetration rates in the world at 74% (IDA, 2004). At the same time, Singapore remains a highly religious society, with 85% of Singaporeans having an affiliation with one of the main religious traditions within the country, which include Buddhism, Taoism, Christianity, Islam, Hinduism, and traditional Chinese religions (Singapore Department of Statistics, 2000). Indeed, one of the most interesting aspects of Singapore's modernization is that the drive for economic and technological modernization has not been accompanied by

a decline in personal religious beliefs and practices (Pereira, 2005). Singaporean citizens and their religious leaders have been enthusiastic supporters of the informatization of society and have sought both to remain faithful to their religious traditions and to incorporate technology into an overall program of religious recruitment, teaching, mobilization, and encouragement. Moreover, they have self-consciously tried to negotiate the ways in which the introduction of technologies might exacerbate the stress points between religions, since religious strife is a key concern of the government, and discourse insulting to other religions is prohibited by law.

This study seeks to investigate and to better understand the ways in which technological modernization and religion co-exist and mutually reinforce one another within the Singaporean context. Particularly, in this article, we examine how Singapore's religious leaders understand the role of information technology in religious practice and the ways in which they seek to use the capacities of information technology to teach religious content, to mobilize religious believers, and to enact religious practices. Our perspective is oriented towards what Campbell (2005b) has called the "spiritual shaping of technology," or the way in which religious communities frame technologies so as to make the technologies religiously acceptable. We argue that in Singapore religious leaders have framed technology in a manner that not only legitimates the technologization of religious practice, but also demands the integration of information technologies into religious practice.

This article is organized as follows: First, we critically review relevant literature concerning the Internet, technological modernization, and the impact of technological and social modernization on religious beliefs. Following that, we report on a series of interviews with leaders of different religious traditions in Singapore to uncover how they envision the interaction among information technology, religious authority and teaching, and technological modernization.

Religion and Modernization

A dominant assumption of many social scientists for a number of decades has been that as the processes of modernization (economic, technological, and social) spread around the world, religious faith would be replaced with an atheistic set of beliefs or, at the very least, that religion would become socially and culturally irrelevant (McGrath, 2004; Norris & Inglehart, 2004; Stark, 1999). This argument, which has come to be known as the "secularization thesis," holds that institutionalized religions will fade into irrelevance in the face of modernization, even if private religious beliefs endure. The secularization of Europe is commonly perceived as an indicator of what would happen to other societies in the face of modernization (Berger, 1999). According to Norris and Inglehart (2004), there were several reasons for the secularization thesis. First, it was believed that as traditional peoples began to understand science and technology, more empirical explanations for natural phenomena would make religious beliefs unnecessary. Second, increasing educational levels would lead to a more skeptical attitude towards religious belief, undermining religiously-oriented

belief systems—which, so the argument goes, were to be seen increasingly as vestigial remnants of a pre-modern society. Finally, as other forms of authority (such as the state, educational leaders, scientists, etc.) began to teach and legislate in the domains of life that had traditionally been dominated by religious authorities, religious leaders would lose the currency that they once had in reinforcing religious doctrines. Note that in all of these arguments, there is an inherent assumption that modernization and religion are inherently incompatible, and that gains in modernization would lead to loss of religion.

These tenets of secularization theory have ramifications beyond the sociology of religion and have become widespread within a number of other disciplines. They have also been used to explain how religious believers might approach communication media. For example, Armfield and Holbert (2003) investigated the relationship between religiosity and Internet use, and argued that their survey data, based on a nation-wide sample of Americans, indicate that “the more religious an individual is, the less likely he or she will use the Internet” (p. 139). Drawing upon a model of secularism as well as uses and gratifications theory, they argued that because the “Internet largely embodies a more secular worldview,” religious persons are less likely to use it (p. 136). Writers such as Armfield and Holbert believe there is an “ethos” of the Internet, and that this ethos will discourage the religiously oriented from appropriating the Internet.

In addition to the threats from modernization and secularization, many have argued that the Internet presents other threats to religious faith. At least three potential threats have been identified. The first of these is that the Internet embodies and brings into play on a global basis values of a specific time and place that are at variance with religious teachings. For example, Bockover (2003) argues that the Internet is “a potentially harmful product” when introduced into Confucian societies, as the technology “reflects and promotes the American love of free expression, desire for financial gain, and belief in equal opportunity,” all of which are foreign to communitarian Confucian values (p. 170). Consequently, far from being “culturally neutral,” the Internet “tells us more about who we are and what we value in America than virtually any other technology” (p. 172), and it thus constitutes a threat to the Confucian traditions that underlay China’s culture. Bockover (2003) is not the first to argue that the Internet embodies a certain value system and will have consequential social impacts. In some ways, her essay serves as a bookend to the “cyber-libertarianism” of a generation of writers such as John Perry Barlow (1996). Adamu (2002) makes a similar argument when he argues that “the Internet itself is an American concept” and that it serves as an “ideological weapon,” presumably for use against the Muslim world (p. 3). Adamu argues, however, that Muslims have been able to use the Internet effectively to defend the Islam faith and answer its critics.

A second potential menace is the threat to traditional religious authority presented by the Internet. For example, Barker (2005) argues that the Internet challenges religious authority by presenting information that can undermine the plausibility structure of a religious system or by allowing critical or schismatic leaders to emerge

who challenge the ability of religious authorities to define legitimate teachings, a theme echoed by Cowan (2004).¹

A number of authors have argued that the move towards the “disembodied” experience of the Internet presents a threat to the cohesive community structures that many associate with religion. This is because many global religions do rely to some extent on the shared rituals of traditions and also on the experience of collective identity and participation that is precluded by the fragmentation of personal experiences of the Internet. Schroeder, Heather, and Lee (1998), for example, argue that although an online experience reproduces some elements of a conventional religious service, the lack of physical proximity precludes the practice of religion as conventionally conceived. Similarly, Dawson (2005) questions “if religion becomes detached from real places, real people, and a real sense of shared time and cultural memory, then how can there ever be a significant measure of collective conscience and collective effervescence?” (p. 19). If religion is enacted online, these authors suggest that it thereby loses something of what “religion” is supposed to be.

Spiritual Shaping of Technology

In contrast to the expectations that technological modernization leads to secularization or that the Internet presents dramatic challenges to religious communities, other researchers have more recently argued that religious communities can and do “spiritualize” the Internet, by conferring a sort of religious legitimacy or *imprimatur* on the technology. Informed by research under the social shaping of technology perspective, in particular the processes of domestication of Internet use by users, Campbell (2005b) argues that religious users often conceptualize and introduce the Internet as suitable for spiritual purposes. She states that “[the spiritual shaping of technology] highlights that technology is embedded in a social process of negotiation between individuals or groups who inevitably shape them [sic] towards their own desire and values” (p. 4). Campbell argues that this differs from the negotiation processes of non-religiously defined groups, because religious groups operate within a spiritually rich worldview with meanings and values that might be absent in non-religiously defined groups. For example, recognizing a clear distinction between the sacred and the profane adds a dimension to adjudicating judgments of social value that is sometimes absent in non-religious communities, and a religious understanding for concepts such as “sin” or “holiness” might not be at work among more secular social groupings.²

Barzilai-Nahon and Barzilai (2005) also stress the nature of “cultured technology” in the context of religious groups that may adopt and continuously shape the Internet in ways that suit their cultural contexts, but they find that within traditional groups, the close linkage of technology with modernity can indeed be problematic. Furthermore, Barns (2005) argues that theological, or religious, voices are actually instrumental in how publics resolve questions of technology. He argues that “theological questions are actually integral to the ongoing development of technology and that there is a need for a public discourse that enables such questions to be

articulated and debated” (p. 179). Barns further argues that religious discourses about technology are, in fact, entirely appropriate for social science, given the demise of the secularist thesis, which we address below.

If, indeed, the appropriation of technology is “spiritually shaped,” how do religious discourses about technology differ from one another? Can we expect that different religious communities will appropriate technology differently? Historical and social factors seem to figure into how religious communities might appropriate technology. Stark (2001) argues that the monotheistic faiths have unique historical consequences, such as a sense of mission, a (not always realized) potential for religious conflict, and religious persistence, and that these characteristics might indeed shape how religious communities approach technology. He further argues that this monotheism helped to bring about scientific inquiry itself, as the “long heritage of rational Christian theology was the basis of the Scientific Revolution and the rise of the West,” lending support to the idea that a religious outlook does not preclude the appropriation of science and technology (p. 17).

This contention is echoed by Huff (2000), who finds that of the three monotheistic faiths, Christianity was most amenable to the incorporation of a scientific outlook, given its generally positive predisposition toward the Greek rational tradition and its relative openness to philosophical speculation.³ The Open Directory Project documented that Christianity was the largest online religion, in that 78% of religious websites were Christian (Helland, 2004, p. 27). This might be due to its theological characteristics, or it could be that the Internet was created and came to maturity in a historically Christian region.

Nonetheless, it is abundantly clear that appropriation of the Internet and other communication technologies occurs among most, if not all, religious traditions, as illustrated in work by Adamu (2002), Bunt (2004), Prebish (2004) and others, all of whom have demonstrated the diverse ways in which religious communities have appropriated information technologies. Moreover, even within religious groups, there are significant cultural and historical factors that underlie the acceptance of technology. Every religious tradition has multiple historical and theological traditions that differ in their understanding and appropriation of technological change. For example, Huff (2001) argues that the experience of Malaysia, with its Muslim majority population and rapid endorsement of technology, stands in stark contrast to Muslim nations in the Middle East, where political sensitivities have impeded the development of information technology.

Along these lines, Goh (2005) argues that the acceptance of information technology in Asian societies is heavily influenced by religious traditions with accompanying historical and political configurations. Specifically, he argues that “Christianity’s ideological and systemic affinities to mercantilist practices and rationalizations also means that Asian nations and cities with a strong Christian tradition and community are likely to much more easily plug into an international culture of Multinational Capitalist processes and flows” (p. 846). Goh’s use of the term “plug into” is intentional. He argues that the Internet is an inherent part of

these global flows, and that the Asian Christian use of the Internet is likely to realign the configuration of power, wealth, and organizations throughout the region.

Secularization: Re-examining Assumptions and Context

Given the strong divergence within the academic literature, ranging from earlier theorists of modernization and secularization to those who assume that religious groups will actively co-opt information technology for their own purposes, it is worth considering a bit more deeply the assumptions and expectations of the secularization literature. In recent years, the assumptions of secularization have come under sustained attack, as empirical evidence indicates that religious belief and the legitimacy of religious authorities continue to play powerful roles in the lives of many people around the world. Most sociologists of religion now concede that it seems that religious belief has not faded into irrelevance, but rather that in much of the world, it has become an even more important part of social life (Jenkins, 2002).

Religious belief has gained currency in numerous societies, including the United States and the rapidly modernizing nations of Asia and Latin America, so much so that secularity now seems a bit of a curiosity. For example, Berger (1999) argues that it is the assumptions of secularization that are in fact the anomaly; sociologists now expect religious belief to be the norm, and atheism as a belief system is the exception. As Berger writes, “modern secularity is a much more puzzling phenomenon than all of these religious explosions—if you will, the University of Chicago is a more interesting topic for the sociology of religion than the Islamic schools of Qom” (p. 12). Even in secularized Europe, interest in spirituality and traditionally religious questions continue to have powerful resonance among a majority of Europeans. Moreover, in formerly communist nations, decades of state suppression and atheistic indoctrination failed to eradicate active, engaged religions, and there has been a strong reappearance of traditional religion.

As noted above, one of the core aspects of the secularization thesis was that scientific and technological progress would inevitably undermine religious belief, as if belief were inherently in conflict with knowledge of and faith in science and technology, a notion derived from Weberian theories of secularization (Hughey, 1979). However, Norris and Inglehart (2004) report that survey findings from around the world rule out the Weberian hypothesis. Rather than being incompatible with a scientific outlook, religious devotion is positively related to what they term “faith in science,” or a conviction that science and technology will produce positive solutions to human problems (p. 67). Surprisingly, Norris and Inglehart’s data indicated that people in more religiously devout nations had more confidence in science and technology than did people in largely secularized Europe. This finding is significant for our argument, in that it casts doubt on the prevailing assumptions that information technology, and the values associated with it, are somehow at variance with religious belief.

Not all social scientists have abandoned the secularization hypothesis completely, however. Norris and Inglehart (2004), for example, propose that secularization is a real

process but that the actual cause has nothing to do with education or technological and scientific literacy but rather with economic security. They argue that religious belief declines as economies become less fragile and the quality of life for people improves, a condition they deem existential security. Secularization, then, is a real process, although it is not nearly as rapid or as thorough as previously suggested. Norris and Inglehart suggest that the secularization of Western Europe remains an enduring exemplar of this social process. As economic security increases, societies should expect greater secularization, or at least privatization, of religious faith.

In contrast, McGrath (2004) argues that atheism is itself historically situated, and its rise and decline can be explained better by reference to political and historical exigencies than by modernization. For example, during the 17th and 18th centuries in Europe, the Christian faith was closely aligned with the power of the state and traditional aristocracies. In order to prompt political reform, it became necessary to undermine religious faith. We would not expect to find this same kind of relationship in other historical circumstances. Notably, McGrath points to the example of South Korea, where Christianity came to be identified as a *modernizing* and democratic social force. In this context, Christian faith became a foundation for, rather than a barrier to, political and social reform. In cases such as this, the assumptions of secularism should flounder.

Hence, the experiences of several modernized states of Asia demonstrate that religious faith can be very much a part of the fabric of modernization, rather than something alien to it (Goh, 2005). While Singapore is definitely a “secular” nation, in that the state maintains strict neutrality towards particular religions, it is definitely not a “secularized” society, in which religious belief is irrelevant or marginalized. In fact, governmental leaders are notoriously sensitive to religious sensibilities and often refer to religious beliefs as important cultural components that should not be undermined in the nation-state (Sinha, 1999). In particular, Pereira’s (2005) analysis of quantitative data from the World Values Survey of Singapore shows that industrialization and economic development in Singapore is not associated with a decline in personal religiosity.

The apparent lack of secularization in Singapore is partially attributable to the state’s role in both directly and indirectly promoting religion via the implementation of the compulsory religious knowledge program in the national education curriculum in the early 1980s. This program was abandoned in the 1990s as it apparently led to an increase in religious fervor, which led to concern among governmental leaders about potentially adverse effects on national security (Hill & Lian, 1995; Tan, 1997). Singapore’s constitution, however, does guarantee the freedom of worship, although the Religious Harmony Act also prohibits any action that might incite ill-feelings between different religious groups (MITA, 1992).

Moreover, within Singapore, there is no “dominant” religion. In fact, the population of approximately four million ascribes to a variety of religious faiths, including Christianity, Islam, Hinduism, Taoism, and Buddhism. Survey data from the latest census in 2000 indicate that Buddhism and Taoism are the numerically stronger faiths, but these faiths have no special advantage over “imported” faiths, and

national holidays reflect each of the religious traditions. This heterogeneity provides an interesting context for the examination of the relationship among religious authority, modernization, and religion online across different religious traditions.

In sum, our research interest does not reside in whether religious beliefs are true, but rather, in the interface of religious beliefs, religious authorities, and the use of the Internet as a form of technological hope. Secularization theory posits a negative relationship between modernization and religiosity, but the propositions of secularization remain highly contested at the macro-level of regulation and state endorsement of religion, as well as at the micro-level of individual beliefs and practices. In addition, the relationship between modernization and religion online has received scant research attention; in particular, comparative research on religion in non-Western contexts is rare.

Thus, in this study, we seek to examine how religious leaders in Singapore approach the modernizing technology of the Internet and what implications are there for religious belief. Specifically, the literature reviewed in this section leads us to several questions regarding how religious leaders view the Internet. First, we are interested in how religious authorities perceive the Internet and the values associated with it. If, indeed, technological modernization is somehow antithetical to traditional religious belief, then it would seem that religious leaders would perceive that threat and act to combat it. Second, we are interested in how and to what extent authorities from a variety of religious traditions see the Internet as a “spiritualized” technology, or one that can offer unique advantages to religious faith.

Methodology

Personal interviews were conducted with religious leaders from each of the major religious traditions in Singapore (Muslim, Christian, Taoist, Buddhist, and Hindu) in December of 2004. We attempted to identify and interview elite leaders from each religious community (although this is a problematic concept for several religious traditions) or at least a senior individual who would be recognized as a leader within the community. We did not interview webmasters or persons whose job required the use of technology when we could avoid it, as we wanted views from religious leaders not professionally committed to technology. The interviewees included four Buddhists, four Protestant Christians, two Taoists, three Hindus, three Catholics, and four Muslims, for a total of 20 leaders. Although we attempted to interview an equal number of representatives who could speak more or less on behalf of the larger religious community, we were unable to do this because of the highly decentralized nature of the Taoist and Buddhist traditions in Singapore. The Buddhist and Taoist communities are organized entirely around local temples; thus, it was difficult to find representatives who could speak on behalf of any larger organizational structure beyond a neighborhood temple.

Each interview followed a standard set of questions and lasted approximately one hour. Although most of the interviews were conducted in English, some were

conducted in Mandarin and Malay when the respondent was more comfortable in speaking that language (all three languages are considered “official languages” in Singapore). The interviews were then transcribed and subjected to thematic analysis using NVivo software version 7.0 for qualitative analysis.

In transcribing the interviews and in presentation quotations from them below, we have reproduced the original language and grammar as closely as possible when the original language was English or the local variant known as “Singlish.” Most of the interviews were in English, but with words, phrases, or sentences in another language. When the interviews were in Chinese or Malay, we have translated them into grammatically correct English. In the quotations that follow, many of the portions will appear to be ungrammatical; in these cases, the interviewees most often used “Singlish,” which is often criticized as being ungrammatical. In fact, Singlish can best be understood as English, Malay, or Chinese (Hokkien) words spoken according to Chinese grammar rules.

Results

Our interviews revealed that Singaporean religious leaders had a largely positive approach to the Internet and sought to employ the technology in multiple ways for both personal and congregational purposes. Rather than seeing modernization and technology as a threat to religious faith, almost all interviewees regarded the Internet as a valuable tool for disseminating information and contributing positively to their religious communities. At a minimum, our sources indicated that the Internet is a positive tool for the religion.

Internet as a Tool for Information and Outreach

Most of our sources indicated that the Internet was valuable for helping people to learn about their religion. Their comments included the following:

The devotees will send emails to the temple and ask. What is Pek Kung? How we pray? ... They ask a lot of questions of what we pray and why we pray and what sorts of prayer items they need. (Taoist priest)

We can complement our worship with education, we can use the Internet, with information we can use the Internet so our bulletins which we publish every week- so parishioners get the latest news of what’s happening in the parish. (Catholic priest)

Religious education as I told earlier, because with one click you can visit the different sites, and there are apart from Ramakrishna’s website, Hinduism has got plenty of websites. Where you can read the scriptures, you can hear the songs. So in that way, Internet is quite useful. (Hindu teacher)

Moreover, all of our interviewees believed that the Internet was something that religious congregations, temples, or organizations should use. For some, it was

a simple matter of convenience, while for others, it was important because the Internet was seen as critical for reaching the younger generation, who are keen Internet users. Interestingly, the one faith community in Singapore that does not currently make extensive use of the Internet is the Taoist community, and to some extent this is a demographic effect, as few young Singaporeans consider themselves Taoists. Thus, for the leaders of that community, the members of their faith were perceived to be “beyond the age” of the Internet. They said:

But I think they [Taoist Masters] are computer illiterate ... Basically, they are Chinese educated. Secondly, I don't know what stopped them from learning this. So for them to pick up this computer or Internet is a bit difficult. (Taoist temple leader)

You can see lots of youngsters riding bikes coming to Loyang Tau Pek Kung (a Taoist temple). So that's why we like to have this kind of attraction for them to come. Because as I understand, in fact some of my friends, maybe ten years, twenty years ago, their parents worship Taoist gods. And slowly, slowly, when they grow up and get married, they will tell their mother, their parents, okay, you want to pray you go to the temple and pray. And slowly, slowly, they take away their idols and all these. So these are some things that really worry us. We must really counter-react this thing. If not, there will come to a time where Taoist believers will become lesser and lesser and lesser ... That's why if our websites is fully in operation, all these things will be online. (Taoist leader)

We will have a lot of new believers and youngsters. You see youngsters like to go on to the Internet. Even my daughter, nine years old, I tell you. When I go home, provided that she's asleep or I can't read my mails. So these are the people who will when they see their mother go to the temple “why mother go to the temple?” So the mother will not tell the children fully right? So definitely if there's a website on Taoists, this small girl or small boy will go in and get the answer for themselves. So that's why I always think that websites will attract a lot of new believers. (Taoist leader)

Some of the interviewees went beyond the idea of the “Internet as a tool” and hinted that the Internet was a gift from God, thereby implying a religious mandate to use the Internet for religious missions. Their comments included:

Honestly speaking, it is back again to our belief that God is not restricted by boundaries and space. If technology can allow us to do that under very special circumstance where maybe physically we cannot be at that place. (Protestant pastor)

Media is very good, fax machines ... when you want to try to communicate with one and another then of course, Islam places a lot of importance on the media. We want to have media that can be unbiased. Something that can be accurate

like the BBC. That's very good you see. As regards to technology, there's no quarrel with the advance of technology and Islam because Islam is always for progress. So I think, among all the countries in the world, Oman is a very good example of an Islamic state because they have the highest and best technology in the world with regards to computer knowledge and all that you know? They have placed importance on education which is how it should be in Islam. (Muslim lecturer)

On the issue of whether or not there were any specific religious teachings that would have relevance for the use of technology, we found that in addition to being a useful tool, Christians tended to express a religious mandate for the use of the technology, specifically for evangelical purposes. For example,

It has always been the emphasis of the Church that we have to move with time and try to make full use of modern technology and the Internet is one of them to relate with people and also to share faith in God. (Protestant pastor)

We have the Bible also on the Internet. For us, the church has always been very clear for evangelization and we see this as another tool, another frontier for evangelization. We put our message to other people. Because the church from its tradition of manuscript, we have always believed in preserving and then to printing and so now it is another medium for mass communication. So whatever medium that comes along, we have always maximized it and used it for promoting our message because again it comes from our own understanding of ourselves as evangelizing. (Catholic priest)

The Internet and Religious Practice

Generally speaking, most of the respondents referred to the Internet primarily as a place to gather information and not as a place for community building. A number of our informants reflected on the potential of the Internet for the practice of rituals and generally agreed that the Internet is ill suited to the practice of certain aspects of religious practice. For example, one Buddhist priest explained that the Internet is "a waste of time" for religious experience as it "can only convey some knowledge but not experience." He believes that "you need a personal touch to convey experience because religious faith is something beyond words."⁴ Other informants listed certain aspects of religious rituals, including prayer, worship, and meditation that were difficult to replicate online:

Of course, there are some things for example if I teach meditation. It is very difficult to say first do this, second you do this, third you do that. You may be following step by step but at the same time you may not be concentrating, you may not be doing your breathing right. So things like that I will not do it on the website. Because they need to come for proper course. See, does not mean that all can be done on the Internet. (Buddhist monk)

And so, we came up with the idea, could we actually webcast our services live? And if you ask me can they have any meaningful religious experiences, I would say yes. But will not be the same as if they would come together as a church. Because in a sense, a church is more than listening to a message, a church is about living lives with other people as well. So the only aspect that you miss is the fellowship aspect, the worshipping of god together as a congregation aspect, but it is better than nothing ... It is a little different you know, when you pray alone and when you pray looking at the screen. It is very different. I think we are humans, we need a personal touch. (Protestant pastor)

Worship, no. For us the interpersonal element is very important... To me, religion is very much a personal thing. And Internet does not really convey the interpersonal element of it. No religion will go on the Internet in a big way. (Catholic parish priest)

I think religion is something you have to do hands-on. To pray online? No. Because in Islam, prayer requires the physical movement. It involves, first you have to cleanse yourself, than it involves facing the Kaaba, it involves standing and doing the *rokok* position. It involves prostration, so you can't do it over the Internet. (Muslim lecturer)

Prayers, or certain form of *ibadah*,⁵ certain form of worship, Hajj for example ... of course we cannot go to Hajj via the Internet, we still have to go physically to Mecca. Or Friday prayers, we cannot perform congregation prayers via Internet, in that aspect. So that certain areas of course we cannot do it the Internet. (Muslim imam)

A few religious leaders further noted how information and experiences available on the Internet may distract their congregational members from "true spirituality" and consequently confuse the members of their religious communities about the value of face-to-face interaction with their fellow believers. They specified that online religious experiences are narrow and limiting and have to be accompanied by real life interaction. Two religious leaders said:

For example, on the Internet you can see how to cook. You can't eat food off the Internet! You can get information on how to cook, what are the ingredients, where to go, what are the spices and all that. But to eat and appease your hunger, Internet cannot be used. You have to go to the restaurant. In the same way, in the Internet you can get information. Internet will give you information, philosophies, teachings, and all that. Internet will not help you how to realize yourself. (Hindu priest)

Where people say "I've worshipped God," if that's a very narrow definition of what worship is, then I think in some sense, the Internet has taken over the place of a real church experience. Is that good or is that bad? I'll say this, religion becomes very privatized. When we privatize religion, again depending, when we

speak of the Christian faith, the church is a community, worship is a community, it is an event where it involves a group of people coming together. That's what we call the body of Christ. We think in terms of face-to-face interaction. We think in terms of interacting with the real people, not with a computer screen. So in that sense, that kind of privatized worship is to me not helpful. (Protestant seminary professor)

A few others, however, believe that it is possible for the Internet to offer authentic spiritual experiences, either through providing the right information at the right time or just by helping to focus religious devotion:

I think anything is possible, if a person is really seeking an intimate relationship with God and wants to deepen the relationship with God, this is just one avenue. When you actually pray, there are two forms of praying—as a community and as an individual. When it comes to the individual aspect, I think that anything can help that person so this virtual chapel, virtual Church can enhance that relationship, I'm sure. (Catholic nun)

In order to explore more fully the issue of religious ritual performed virtually, we specifically asked the Hindu and Buddhist informants about *tantric* practices, a set of rituals found in Hinduism and Buddhism that reportedly provide a powerful spiritual focus and growth and are therefore deemed dangerous by many. These practices provided an ideal point of discussion for determining the ways in which the informants would think about the potential of the Internet for mediating religious experience. Perhaps not unsurprisingly, we found disagreement among the respondents. One Hindu leader argued that there were no restrictions on placing information about *tantra* on the Internet, indicating openness to the Internet as a site of ritualized practice. He said:

No. There's nothing in Hinduism that we say cannot be posted, because it is a free religion. There's no restriction on anything. The true Hindu has no restriction. (Hindu lay leader)

In contrast, another Hindu lay leader and two Buddhist monks argued that in no way should such information be made available on the Internet:

No. We would not allow for that type of thing. If I'm the leader, I will not allow Tantric to be taught at all. It is not allowed. Tantric is an evil thing ... But some still practice it. But it is not advisable. Not to be put on the Internet. Very bad thing. (Hindu lay elder)

We have them but they are not public. If they are publicized on the Internet, and some of these secret teachings are disclosed then it is not right. This is a more secretive form of teaching. Tantric means secretive practice. So for its transmission, it must be master to disciple. In an oral form, one to one. This is one of its important precepts. If you break this precept, and disclose it, they will

go to Hell. But if they are just advertising or introducing it or just making available their contacts, then ...what can I say? But if they disclose the contents or attract people to practice through the net, it is wrong ... it involves faith training and religious experience training. You can't do this on the Internet. (Buddhist monk)

These tantric teachings, especially the explanations and visualizations of the meditation instructions and how to do the meditation. Those are all restricted so they cannot be made public. So it has to be done under certain restriction to protect the students. If they are made public, whoever tries to do it, it becomes harmful to them instead of benefiting them. That's why they do not go on to the Internet. Generally, philosophical teachings on Buddha, these are quite safe and can be put on the Internet. (Buddhist monk)

What these responses reveal is a sense that the spiritual power available through *tantric* practices should not be exposed on the Internet, as that would create a potential for them to be experienced without the guidance and oversight of a spiritual leader. These leaders believe that the information provided on the Internet, outside of an intimate relationship with a spiritual mentor, would actually be disastrous for most worshippers.

The Ethos of the Internet

A second research question of concern to us was the "ethos" of the Internet, and whether our informants perceived the technology to be acceptable for religious practice or whether the Internet was a threat to their faith. We approach this through three themes: the Internet as a danger; the Internet as a foreign imposition on the interviewees' cultures and traditions; and the Internet as acceptable practice, a malleable tool to be shaped by religious communities.

The Internet as a Danger

As mentioned above, some scholars have suggested that in some ways the Internet is a danger to religious practice both because it presents potentially oppositional information or perspectives and because it could undermine or trivialize religious practice. Our respondents tended to view the Internet as a danger in several different ways. First, some saw a danger in the sense that some parents might sense it as a danger because of the accessibility of immoral content, such as pornography.

I think in religious faith, just because there are some things that should not be so easily accessible to too many people then you say "curse the whole thing and say it is harmful"? I don't think so. I think just as gunpowder. Is it good or is it bad? It depends on what you use it for. So basically, it is it is the same with Internet. So does it mean that before the Internet, before the outcome of the Internet, people were purer in that sense? People were not corrupted, people do not go for immoral stuff and all that? It depends on how you interact with the people and all that. (Buddhist monk)

For example you have a lot of porno sites. That is totally *Haram* (prohibited). You know. That is terrible. They have child pornography also, they have animals, you get spammed at everyday. This is totally *Haram*. You don't want to go to these sites. (Muslim lecturer)

Others see in the Internet a danger because of religious conflict, false teachings, or wrong portrayals of their faith. Many of the respondents felt that the Internet does indeed provide a "marketplace" of religious teachings, so it was critical that their own faith be accurately presented on the Internet:

There are cultic groups, there are irreligious groups out there that impersonate themselves as religious groups. There are deviants if you may, try to mislead people. There are sick people out there who are very competent and very adapt to the use of the computer and when they create websites, they create websites of harm. (Protestant seminary professor)

If the material they put on their site, it could be deviant teaching maybe deviant interpretation of Buddhism. Then things they put on their website would be a bit suspect. (Buddhist monk)

Very careful because ... we [have] our *mazhab* ... schools of thought ... is *Syafii*. *Syafii* ... so, when we visit a website, I have the knowledge so I can differentiate between the *mazhab*, the scholars and this is very important because we don't want to confuse, to make society confused, because sometime, when I give an answer, I will get different answer from other *ustazs*. One of the reason is because the *ustaz* themselves sometimes they have their own school of thought, like Hambali.⁶ They use that kind of ... that kind of belief. So for myself, have to see first, and if they are really *mazhab Syafii*, then I take it. (Muslim imam)

For example, the Falungong. They can be considered Buddhist but they aren't really Buddhist. They only use certain aspects of Buddhism to explain Buddha's teachings. Their explanation of Buddhism is totally at odds with mainstream Buddhism. So they often mislead Buddhists. This happens frequently. (Buddhist monk)

The Internet as "Foreign"

Another potentially controversial issue is the extent to which the Internet is a foreign intrusion or whether it has introduced foreign elements into religious content or practice. Contrary to some of the literature reviewed earlier, none of our respondents viewed the Internet as an imposition from outside. In multilingual Singapore, of course many were concerned with language and which language religious content was provided in, but this had to do with establishing the relevance of the content to potential audiences. The Internet in many ways might help to globalize their faiths, by providing content in multiple languages.

Another thing is the language. If mine is a Chinese webpage, and he is English educated, he won't come. He will be influenced by the language differences. This has nothing to do with races. (Buddhist monk)

I think English being the lingua franca in terms of commerce and business today, a person with limited understanding and vocab of English will certainly not be well-informed as someone who perhaps knows the language better. Secondly, I think with the rise of China and with the rise of the Chinese language again, I would say that both English and Chinese would have a wider international appeal. However, for someone who only speaks a particular language, any of the, let's take Asia for example, could be the Japanese language, could be Khmer, Vietnamese, Thai, whatever, then that becomes very localized. And so if these people only know those languages, then their scope of learning and growing will be much hindered. Because that's all that they know and they are limited by their language and the language that they know. (Protestant seminary professor).

We have Islamic sites in English, in Malay, and in Arabic. If let's say, Singapore. Singapore *per se*, if he can understand English and Malay, should not be any problem at all. You can get lots of information using these two mediums of language. (Muslim imam)

The Internet as a Tool

Finally, as discussed above, a counterpoint to the secularization thesis is the perspective that religious communities may be adopting the Internet and shaping it according to their religious beliefs and cultural practices. Interestingly, two informants made specific reference to the Internet being like a knife with the potential to be wielded in multiple ways by its users. They said:

Internet is like any other thing. It is a tool. A knife that you can use to cut is also a tool. People use knife to kill. Like any other tool, we need to have a certain morality on how we use it. (Catholic priest)

Any tool, whether you use it to cut vegetables or do any other thing. If you use it to kill, that's not good. If you use it to help others, that's okay. Allowed. If you use it to harm yourself or others, then it is not allowed. (Buddhist priest)

Several religious leaders stressed that the Internet is not inherently good or evil but should be used appropriately in light of religious beliefs and practices. Their responses evidence the processes behind the spiritual shaping of technology, as the Internet is constructed to serve the needs of the religious community, not to subvert religious authority or religious communities. As one informant explained:

Technology is a tool. It is not God, but it seems that people are worshipping technology as a God! Nothing can take the place of a human person. That is my

bottom line. Does not mean that I do not believe in technology but it does mean that I must know how to use technology to serve me. The technology is a servant, not a master. (Protestant seminary professor)

Another Buddhist priest also noted that the “Internet is a tool. A tool is not inherently bad or good. It depends on the user and how you control that user.” According to him, there is no inherent ethos of the Internet, but it needs to be integrated into religious purposes under the changing conditions of a contemporary society increasingly reliant on technology. He added:

Technology itself is just a tool. It is a condition, just like money. Without money, you surely die, but if there is too much money and if you abuse it, it will harm many others.

Discussion

Our interviews revealed a broad-based acceptance of the Internet and other information technologies and little sense of a danger to religious faith among religious leaders of a diverse set of faiths in Singapore. Contrary to the propositions of secularization theory that predict a decline in religiosity under conditions of modernization, our findings seem to indicate that various religious communities have adopted and in some cases even embraced the Internet as part of their contemporary religious mission and strategy for growth. Several leaders stressed the tool-like nature of the Internet and imputed neutrality to the medium in order to reclaim net-based technologies for their religious practices. Thus, the assumptions that the Internet is part of a package of secular modernity and particularly that religious people are likely to use the Internet less than non-religious people has no grounds, at least in Singapore.

Some qualifications are in order. First, as we conducted interviews with several leaders from a variety of religious traditions, it can be argued that the small numbers of respondents from each tradition would not produce a sufficiently representative sample. It is certainly true that there are a variety of opinions among religious leaders, even within the same faith. However, across a broad spectrum of religious leaders in Singapore, we found striking unity in their approach to information technologies. Second, the views of Singaporean religious leaders can probably not be taken as representative of global religious traditions, even though they are likely not completely out of the mainstream. Religious leaders in Singapore are typically highly educated. They live in a cosmopolitan, vibrant, and sophisticated city, and as noted earlier, there is strong social and governmental pressure towards associating positive values with information technology. It is clear that these interviews reveal no inherent conflict between religion and the widespread adoption of information technology. As a marker of modernization and as a vehicle for it, these interviews reveal that some Singaporean religious leaders fully embrace the Internet, with a broad acceptance of whatever “values” it carries with it.

A number of questions present themselves that warrant further study, both in relation to the context of this study and to a broader social theory about the interaction between religious faith and the Internet. One issue that we have hinted at in this study but not fully explored is the differential response to the use of technology by differing religious traditions. Whether the “spiritual shaping of technology” is guided fundamentally by demographic, educational, or doctrinal issues is a fascinating research question that we are unable to answer fully here.

A second question that merits further attention concerns the actual deployment of the Internet for the purposes articulated earlier. In the responses reported here, leaders indicated a willingness to deploy the Internet for religious purposes, but we did not explore the extent to which they have done so, intend to do so, or what the likely impact of such deployment might be.

Moreover, given that the Internet consists of a wide variety of different yet overlapping technologies, we have been unable to explore which particular technologies seem most capable of facilitating religious confession, exploration, or practice. Is the religious appropriation of email or the World Wide Web, for example, more common or more likely than, say, the provision of webcasts or instant messaging services? As the Internet continues to evolve and thereby change the way in which humans interact with the technology, how flexible will religious communities be in understanding and appropriating these technologies?

In conclusion, this article sought to examine critically the tenets of secularization theory in the “age of information,” accompanied by technological modernization and the increasingly widespread use of newer technologies such as the Internet. The study examined the relationships between technological modernization and religious Internet use—in particular, the ways in which technological modernization and religion co-exist and even mutually reinforce one another. Drawing from in-depth interviews with representatives of each major religious tradition in Singapore, this article illustrated the perceptions of religious leaders toward the role of information technology in religious practice and the ways in which they seek to use the capacities of information technology to disseminate religious content, to mobilize religious believers, and to enact religious practice.

The results contribute to historical research on the social construction of technology, as well as lend support to emergent research on the spiritual shaping of Internet technology (e.g., Barzilai-Nahon & Barzilai, 2005; Campbell, 2005b). The results also highlight the ways in which religious leaders have framed technology in a manner that not only allows newer technologies a place in religious practice, but that also demands, to some extent, the integration of information technologies into their religious practice as it is embedded in increasingly mediated social environments.

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Notes

- 1 [Guest editor's note: On this point, see Campbell, this issue, for an in-depth examination of how far the Internet threatens—and fails to threaten—religious authority.]
- 2 [Guest editor's note: Readers interested in this point are encouraged to see Jacobs' extensive discussion in this issue of the sacred/profane distinction as fundamental to religious frameworks.]
- 3 [Guest editor's note: For more extensive discussion—and reinforcement of this point—see Ess (2004).]
- 4 [Guest editor's note: Compare this with a similar concern regarding “the sublimity of *Jodo Shinshu* [Pure Land] Buddhism” as being incompatible with the Internet in Fukamizu, this issue.]
- 5 “Ibadah” refers to worship or obedience, but could actually refer to a number of spiritual activities, including praying, giving donations in God's name, reading the Qur'an, fasting, going to Mecca, evangelism, listening to religious lectures, or any other act that could be considered spiritual in Islam.
- 6 Hambali is a popular name for Riduan Isamuddin, an Indonesian Islamic cleric who is considered by many to be the spiritual leader of the Jemaiah Islamiya movement, an Al Qaeda offshoot, which envisioned an Islamic caliphate in Southeast Asia. Hambali was arrested in Thailand in 2003 and is reportedly being held by U.S. authorities in Guantanamo Bay. Among Singaporean Muslims, Hambali is often cited as an example of deviation from orthodox Islam.

References

- Adamu, A. (2002). *Islam and the Internet*. Retrieved March 8, 2007 from http://www.kanoonline.com/publications/islam_and_the_internet.htm
- Armfield, G., & Holbert, R. (2003). The relationship between religiosity and Internet use. *Journal of Media and Religion*, 2(3), 129–144.
- Barker, E. (2005). Crossing the boundary: New challenges to religious authority and control as a consequence of access to the Internet. In M. Højsgaard & M. Warburg (Eds.), *Religion and Cyberspace* (pp.67–85). London: Routledge.
- Barlow, J. (1996). *Declaration of independence of cyberspace*. Retrieved March 8, 2007 from <http://homes.eff.org/~barlow/Declaration-Final.html>
- Barns, I. (2005). Debating the theological implications of new technologies. *Theology and Science*, 3(2), 179–192.
- Barzilai-Nahon, K., & Barzilai, G. (2005). Cultured technology: The Internet and religious fundamentalism. *The Information Society*, 21, 25–40.
- Berger, P. (1999). The desecularization of the world: A global overview. In P. Berger (Ed.), *The Desecularization of the World: Resurgent Religion and World Politics* (pp. 1–18). Washington, D.C.: Public Policy Institute/William B. Eerdmans Publishing Company.
- Bockover, M. (2003). Confucian values and the Internet: A potential conflict. *Journal of Chinese Philosophy*, 30(2), 159–175.
- Bunt, G. (2004). Rip. Burn. Pray: Islamic xpression online. In L. Dawson & D. Cowan (Eds.), *Religion Online: Finding Faith on the Internet* (pp. 123–134). London: Routledge.
- Campbell, H. (2005a). *Exploring Religious Community Online: We are One in the Network*. New York: Peter Lang.

- Campbell, H. (2005b). Spiritualizing the Internet: Uncovering discourses and narratives of religious Internet use. *Online-Heidelberg Journal of Religions on the Internet*, **1** (1). Retrieved March 8, 2007 from <http://archiv.ub.uni-heidelberg.de/volltextserver/volltexte/2005/5824/pdf/Campbell4a.pdf>
- Cowan, D. (2004). Contested spaces: Movement, countermovement, and e-space propaganda. In L. Dawson & D. Cowan (Eds.), *Religion Online: Finding Faith on the Internet* (pp. 255–272). London: Routledge.
- Dawson, L. (2005). The mediation of religious experience in cyberspace. In M. Højsgaard & M. Warburg (Eds.), *Religion and Cyberspace* (pp. 15–37). London: Routledge.
- Ess, C. (2004). Critical thinking and the Bible in the age of new media [Introduction]. In C. Ess (Ed.), *Critical Thinking and the Bible in the Age of New Media* (pp. 1–56). Lanham, MD: University Press of America.
- Goh, R. (2005). The Internet and Christianity in Asia: Cultural trends, structures, and transformations. *International Journal of Urban and Regional Research*, **29**(4), 831–848.
- Helland, C. (2000). Online religion/religion online and virtual communitas. In J. Hadden & D. Cowan (Eds.), *Religion on the Internet: Research Prospects and Promises* (pp. 205–224). New York: JAI Press.
- Helland, C. (2004). Popular religion and the World Wide Web. In L. Dawson & D. Cowan (Eds.), *Religion Online: Finding Faith on the Internet* (pp. 23–36). London and New York: Routledge.
- Hill, M., & Lian, K. (1995). *The Politics of Nation Building and Citizenship in Singapore*. New York: Routledge.
- Huff, T. (2000). Science and metaphysics in the three religions of the book. *Intellectual Discourse*, **8**(2), 173–198.
- Huff, T. (2001). Globalization and the Internet: Comparing the Middle Eastern and Malaysian experiences. *The Middle East Journal*, **55**(3), 1–20.
- Hughey, M. W. (1979). The idea of secularization in the works of Max Weber: A theoretical outline. *Qualitative Sociology*, **2**(1), 85–111.
- IDA (Infocomm Development Authority of Singapore). (2004). *Annual survey on infocomm usage in households and by individuals for 2004*. Retrieved March 8, 2007 from http://www.ida.gov.sg/doc/publications/publications_level3/2004_HH_Executive_Summary_230305.pdf
- Jenkins, P. (2002). *The Next Christendom: The Coming of Global Christianity*. Oxford: Oxford University Press.
- Lim, L., & Low, A. (2005, July 16). Nation of believers. *Straits Times*, Singapore. Pp. S2–3.
- McGrath, A. (2004). *The Twilight of Atheism: The Rise and Fall of Disbelief in the Modern World*. London: Rider.
- MITA (Ministry of Information and the Arts). (1992). *The Need for the Maintenance of the Religious Harmony Act*. MITA, Singapore.
- Norris, P., & Inglehart, R. (2004). *Sacred and Secular: Religion and Politics Worldwide*. Cambridge: Cambridge University Press.
- Pereira, A. (2005). Religiosity and economic development in Singapore. *Journal of Contemporary Religion*, **20**(2), 161–177.
- Prebish, C. (2004). The cybersangha: Buddhism on the Internet. In L. Dawson & D. Cowan (Eds.), *Religion Online: Finding faith on the Internet* (pp. 135–150). London: Routledge.
- Schroeder, R., Heather, N., & Lee, R. (1998). The sacred and the virtual: Religion in multi-user virtual reality. *Journal of Computer-Mediated Communication*, **4** (2). Retrieved March 8, 2007 from <http://jcmc.indiana.edu/vol4/issue2/schroeder.html>

- Singapore Department of Statistics. (2000). *Religion. Census of Population 2000*. Statistical Data Release 2: Education, Language, and Religion. Retrieved March 8, 2007 from <http://www.singstat.gov.sg/pdtsvc/pubn/cop2000r2.html>
- Sinha, V. (1999). Constituting and reconstituting the religious domain in the modern nation state of Singapore. In K. Kwok, C. Hwa, L. Wong, & B. Yeoh (Eds.), *Our Place in Time: Exploring Heritage and Memory in Singapore* (pp.76–95). Singapore: Singapore Heritage Society.
- Stark, R. (1999). Secularization, R.I.P. *Sociology of Religion*, *60*(3), 249–73.
- Stark, R. (2001). *One True God: the Historical Consequences of Monotheism*. Princeton: Princeton University Press.
- Tan, J. (1997). The rise and fall of religious knowledge in Singapore secondary schools. *Journal of Curriculum Studies*, *29*(5), 603–624.

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