

Religion and technology: refiguring place, space, identity and community

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This paper reviews the literature on the religion–technology nexus, drawing up a research agenda and offering preliminary empirical insights. First, I stress the need to explore the new politics of space as a consequence of technological development, emphasizing questions about the role of religion in effecting a form of religious (neo)imperialism, and uneven access to techno-religious spaces. Second, I highlight the need to examine the politics of identity and community, since cyberspace is not an isotropic surface. Third, I underscore the need to engage with questions about the poetics of religious community as social relations become mediated by technology. Finally, I focus on questions about the poetics of place, particularly the technological mediation of rituals.

Key words: religion, technology, cyberspace, place, space, community

Modernity, technology and religion

One of the widest refrains in the social sciences in the latter half of the twentieth century must have been the secularization thesis, that modernity has led to the substitution of religious traditions with rationalism, scientism and individualism. Public life, it is argued, has been secularized and that which is religious has been privatized (see, for example, Kurtz 1995). Even while the view of a singular trend towards secularization is debatable, and simultaneous strands of secular forces and religious revivalism compete, in recent years geographers have begun to acknowledge the intersection of the sacred and secular in modernity and have sought an understanding of how geographies of religion have evolved in such contexts (see Kong 2001). Obviously, modernity is too complex to equate with any single development, but clearly technological changes are integral to conditions of modernity, and it is this aspect of modern life that I wish to focus on in relation to 'new' geographies of religion (Kong 2001). This aspect largely has been absent from the literature, which recently has focused on the dialectical relationship between the spatial and social, the

politics and poetics, encompassing the intersection of the sacred and secular (Kong 2001). Yet, the opportunities for exploring technology in the constitution of geographies of religion, and religion in the construction of technologies, are tremendous. The 'blind spot' in the literature deserves separate attention, particularly given the advent of major technological changes in recent years, not least in the form of the Internet and related modes of computer-mediated communication (CMC).

At the same time that a literature has developed on geographies of religion, quite a different literature also has emerged that examines the dialectical relationship between the social and the technological. The retheorized understanding of this dialectic (for example, Bingham 1996; Crang *et al.* 1999) has opened up ways of approaching and understanding the intersections of the religious and the technological. As Crang *et al.* (1999, 2) argue, technologies are not 'self-contained entities that impact on the social' but are 'socialised' — as 'commodities, as property and infrastructure, as the objects of attention for workers and consumers, as tools for economic and regional development, as items of interior decoration, as genres of literature'. As they go on to argue

succinctly, 'just as technology does not come into being outside of the social, so the social does not come into being outside of the technological'; in other words, there is a dialectic in which exists 'the social shaping of technology and the technological building of the social' (Crang *et al.* 1999, 2).

My aim here is to review the limited literature on religion which takes into account technological change, highlighting their arguments and assertions, and foregrounding the shortcomings therein, particularly recalling the emerging literature on the 'techno-social' (Bingham 1996) which has remained largely separate from the literature on geographies of religion. It is also my primary intention to surface new questions for the research agenda. In what follows, I will be guided organizationally by the key questions that have engaged geographers of religion, adopting Kong's (2001) conceptualization of the questions: namely, the politics and poetics of space and place, and the politics and poetics of identity and community.

Politics of space

Increasingly, geographers have explored the politics of religious space, drawing attention particularly to the tensions between sacred and secular use, and among religious groups over (often) urban space (Kong 2001). Within geographies of religion, it has been acknowledged that sacred space is contested space, just as the sacred is a 'contested category' (Needham, cited in Chidester and Linenthal 1995, 15). Characteristic of sacred space are 'hierarchical power relations of domination and subordination, inclusion and exclusion, appropriation and dis-possession' (Chidester and Linenthal 1995, 17), involving 'entrepreneurial, social, political and other "profane" forces' (Chidester and Linenthal 1995, 17). Altogether, they constitute a politics of sacred space, in which power relations define sacredness of space, contrary to the notion of sacred space as hierophanic, that is, inexplicable spiritual irruptions, a concept Eliade (1959) had propounded.

Technological developments have opened up new spaces of religious practice — or 'techno-religious spaces' — and a consequent new politics of space, with refigured dominations and resistances. These new spaces of religious practice facilitated by technology range from that which is basic by turn-of-the-millennium, such as radio and television broadcasts, to more recent revolutionary Internet-based communication. The former has facilitated televangelism,

as well as documentaries about religious tenets and practices, 'chat' shows in which religious gurus offer advice on how to lead religious lives, live telecasts of prayers/services/sermons and so forth. Cassette and video tapes, and more recently, compact discs, video compact discs and digital videos, have also facilitated the distribution of sermons, prayers, religious music and programmes about a host of religious activities. Computer-mediated communication (CMC) has revolutionized communication in the last few years, even though some forms (such as electronic mail) have existed for longer than that, and in this area, too, religious lives have been mediated. Such CMC takes a variety of forms: one-to-one asynchronous communication, e.g. email; many-to-many asynchronous communication, e.g. Usenet, bulletin boards or mailing lists; synchronous communication on a one-to-one, one-to-few and one-to-many basis, e.g. Internet Relay Chat and chat rooms; and synchronous communication where the receiver seeks out information from a provider, e.g. websites, gopher and FTP (see Kitchin 1998, 12–13, for elaboration of these forms). In religion, there are now bulletin boards, mailing lists and chat rooms for discussions of religious matters, and personal and institutional websites which communicate religious orientations and intentions. Religious software programmes are also available: Muslims, for example, have electronic Arabic tutorials, an Islamic law database and an interactive Islamic game, *Journey to Mecca* (see Zaleski 1997, for details of resources available via CMC for various religions).

With these new techno-religious spaces, a 'new' politics of space deserves analysis — an international politics involving the 'centre' and 'periphery' in religious leadership and influence. Such a politics is new insofar as new technologies are involved. Yet it is a politics not dissimilar to that in the days of colonial expansionism which facilitated missionary activity and vice versa. In as much as technology was integral and critical then in the spread of religious influence and imperialism through its facilitation of long distance travel, conditions since then continue to reveal similar patterns: the development of various technologies, enabling the influence of particular religions and religious leaders from the 'centre', and the emergence of local resistances (see Stein 1999, 44, for a parallel argument about how recent advances in computing and telecommunications should not be viewed as historically new but as 'new phases of ongoing processes of change that began at least a century and a half ago with the construction

of telegraph and telephone systems'). In 1991, Stump (1991, 358) made the observation that while local religious broadcasts had become increasingly common outside the US in recent decades, their influence was secondary to that of international broadcasts in most areas. He cited the example of Christian radio, where 'international' broadcasts were principally those emanating from the US. Various research questions need to be pursued here. As technology and globalizing tendencies open up cultural borders, how do states deal with the influence of international religious broadcasts in their countries? If American involvement is strong in international religious broadcasting, what are the implications for a new cultural imperialism via religion, a kind of religious imperialism? Elsewhere, it has been noted that the more radical wing of Asian and African representatives of the world mission conference in Bangkok in 1972/73 had called for a 'missionary moratorium' as part of a postcolonial interpretation of Western missionary activity (Ustorf 1998, 595). The view was that missionary activity, as a model of salvation, was not only targeted at those to be saved, but involved the salvation of those who generated the acts of salvation in the first place. There was an unwillingness on the part of some non-Western church leaders and theologians to be treated as the 'raw material for the spiritual needs of the West' (Ustorf 1998, 595). This politics of missionary work, together with calls for the indigenization of church leadership, represent resistances to Western imperialism, and serve as an example for further interrogation of the question of whether a similar imperialism is re-emerging via technological advancements. At the same time, it is as important to ask whether there exist secular and religious resistances to Western material over cyberspace and the airwaves, and if so, in what forms.

A second dimension in the politics of space that comes with technological developments is the new spaces of competition generated among different religious groups and denominations in their efforts at evangelization, conversion and confirmation of belief. Technology can generate myriad possibilities for furtherance of religious interest and activity, opening up spaces for the communication of religious missives and, in the case of interactive media (such as chat rooms and email), for linking religious adherents.¹ Access to such techno-religious space is, however, uneven and a politics of language, age and class can be expected, inviting research attention. Specifically, since most current Internet

traffic, which is text-based, uses English as the *de facto* language of choice (Kinney 1995, 770), and the technology appeals to and is best negotiated by a younger and economically more advanced and better educated group, techno-religious space is not an isotropic surface. Where religious affiliation coincides with a particular socio-economic profile, as is often the case, the competition for techno-religious space is tipped in favour of particular religious groups while disadvantaging others. Again, this harkens back to parallel situations in late nineteenth- and early twentieth-century European and North American cities. Stein's (1999) work on the telephone in London illustrates how, in Victorian and Edwardian Britain, London's middle-class economic and politics elites were the major participants in shaping the development of the telephone, feeding business interests as well as cultivating their desire for a symbol of modernity. Contemporary developments in and spread of technology, particularly in information and communications technology and, concomitantly, the access of religious groups to these technologies, are also not separate from the socio-economic, institutional and political structures of particular places. The coincidence of middle-class technophiles with particular middle-class religious adherents suggests at least a possibility that techno-religious space displays particular patterns of domination.

Politics of identity and community

Communities are often characterized by various forms of oppression, 'protecting the prevailing value system including its moral code' (Smith 1999, 25; see also Dwyer 1999). There is also an 'intolerance of difference', since the 'ideal of community' relies on a desire for 'the same social wholeness and identification' (Young 1990a, 303 1990b). This is precisely the differentiation within modernity that calls for absoluteness, a certainty that differences mark out what is true/false, legitimate/illegitimate, valued/not valued. Unlike postmodernity, where there is no attempt to claim one tradition alone as valid, this 'intolerance of difference' in modernity has given rise to a politics of identity and community, with struggles between and within 'internally similar' groups for power and resources, thus asserting their 'community' and 'identity'.

In techno-religious space, the politics of identity and community arises precisely because of the struggles between and within groups for the domination

of ideas. The inequalities of access highlighted in the previous section, based on differential access to language, education and resources, are compounded by others. One strand of the struggle is gender based. Men dominate cyberactivity. In newsgroups, for example, it has been found that men dominate the discussion, and tend to be more adversarial (Herring 1996a 1996b). Women, on the other hand, tend to be reluctant to express their views freely in cyberspace. They also face censorship in the form of intimidation and lack of response to their opinions in their newsgroups. When women contribute to more than 30 per cent of the discussion, they are thought to be dominating and are usually told so (Herring 1996b)! Yet, in another sense, there has already been a far greater democratization in cyberworld, given its mass-participatory nature. Such simultaneous inequalities and democratization raise several questions about the politics of identity and community within religious groups in cyberspace. How are religious discourses being shaped in cyberspace by the powerful (whether power is conferred by gender, class, language or some other attribute) and contested by others? How do the influence of different discourses affect the development of religious identities and communities? How are these discourses being taken into everyday lived worlds beyond cyberspace? What is the nature of the intersection between cyberdiscourses and 'real-world' discourses about religion?

Other types of political relations infuse the cyberworld, shaping the meaning of the technological. Especially in those multiracial, multireligious and multicultural societies where religious discussions are regulated in the public sphere, CMC opens up a political space which had hitherto been circumscribed. Warf and Grimes (1997), for example, illustrate how the Internet affords opportunities for counter-hegemonic, anti-establishment discourses, in the same way that Kollock and Smith (1999, 20) point out the potential of the Internet as a tool for the successful coordination of online social protests (see also Pliskin and Romm 1994; Marx and Virnoche 1995; Mele 1999; Wellman and Gulia 1999, 172). In part, this is because the Internet is very 'resistant to statutory regulation' (Newey 1996, 132). As Zaleski (1997, 111) points out, individual webmasters only have power over websites, system operators over bulletin board systems and moderators over Usenet groups, but their influence is local. One outcome of the lack of control of contents is the

practice of flaming, an open and frank expression of views, often in hostile and abusive ways. This may be moderated in some newsgroups where there are volunteer moderators who sift out postings they deem off-subject or inflammatory. Many, however, do not have moderators. Flaming has the potential to be highly damaging, as the following example from Newey (1996, 137) illustrates:

There is either an Israel or a 'Palestine': there cannot be both. Since there is no 'Palestinian' land there [is] no 'Palestinian' people, either. Therefore there is no land to take away from them since they have absolutely no title or claim to any of it; it belongs solely to the Jewish people because God gave it to us . . . Do normal Jews owe the 'Palestinians' anything? Yes we do. We owe it to them to let them know that we intend to continue living in our land, even at the cost of their lives (from Lord Zion's Homepage, <http://ryker.itech.cup.edu/~gseese/>).

In many instances, such inflammatory words may be encouraged because the screen 'acts as a mask', rendering 'relative anonymity', given the 'disembodied nature of the medium' (Kitchin 1998, 14). Indeed, this masking is further facilitated in discussion groups by the possible use of anonymous remailers that hide the original Internet address of the sender, which may result in ever more unpredictable and volatile discussions. If technology is understood as socialized, it is manifestly in this context, the provocative tool to religious strife. In countries where inter-religious sensitivities are tense, the political space that technology affords, compounded by the possibility of anonymity, poses a threat to the fabric of society. It would be crucial to examine in detail the regulatory policies and practices of such societies² and the negotiation of such restrictions, thus acknowledging political and cultural specificities across the globe. In other words, specific geographies are a crucial part of the analysis of how technologies facilitate religious discourses.

Hierarchical and power relations within religious institutions also have changed with technological developments. In particular forms of CMC, such as discussion groups, 'no authority exists to guide the reader towards truth and away from falsity' (Newey 1996, 135). Few religious leaders enter into newsgroups because they are likely to be 'nose-thumbed', with sceptics questioning their positions and teachings. Hence, discussion groups are 'populated by amateur experts, ubiquitous ideologues, would-be comedians, but mostly everyday men and

women' (Kinney 1995, 768). This, Kinney (1995, 768) argues, leads to a 'rise in ill-informed debate, unintentional misinformation, emotional disputes, and the airing of stereotypes . . .'. The absence of a voice of leadership may imply a crucial lack of authority to neutralize conflicts, and the lack of an official, institutional and authoritative voice to lead any cyber-crusade against other groups. Crucially, research is needed to examine the interconnections between cyberdiscourses and real world discourses and the ways in which the negotiation of hierarchical and power relations within religious institutions have been affected by the fluidity of cyber-communications and lack of hierarchy and authority therein.

Poetics of community

Writings on community frequently have dealt with the desirability of *gemeinschaft* and its demise with modernity. Within the multi-disciplinary literature on religion, much of the attention in the pre-1990s was focused on religious places such as mosques and temples as social centres where adherents gathered, not only to pray, but to engage in social activities as well, thus contributing to the development of a poetics of community. With the advent of new technologies, the poetics of community may be analyzed in terms of how technology facilitates new religious practice and how religion harnesses technology, consequently altering the constitution and meaning of religious community. I will focus on two key dimensions of religious practice here, namely, the interaction among adherents with the rise of computer-mediated communication and the role of ritual in the construction of community.

Numerous researchers have attempted to understand the sociality of technology-mediated networks, particularly CMC, in terms of the nature of 'community' in CMC (Rheingold 1993; Baym 1995; Harasim 1995; Jones 1995; Holmes 1997; Willson 1997; Kollock and Smith 1999; for a useful summary, see Kitchin 1998). Few have examined this specifically in the context of religious groups. Within the general literature, optimists suggest that virtual communities can exist, as Rheingold (1993), perhaps the chief utopist, does. These virtual communities, he asserts, 'are social aggregations that emerge from the Net when enough people carry on . . . public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace' (Rheingold 1993, 5). While Rheingold at least placed

certain criteria on the nature of the interaction (length of time and intensity of involvement) before admitting that netizens form a 'community',³ even more extreme optimists suggest that the 'contours of a genuine community' exist simply because the medium is interactive and mass-participatory (Newey 1996, 132). Others suggest that CMC affords a new meeting place, a new 'public space for fashioning new kinds of communities' (Shields 1996; Holmes 1997). These new communities have new freedoms: freedom from the limitations of interaction within Cartesian space; freedom from the cycle of time; freedom of speech; freedom from traditional forms of formal and informal social control, such as hierarchies of race, class and gender (Dawson and Hennebray 1999, 32).

On the other hand, as others have illustrated, some of the purported freedoms are at best mythical. As I had elaborated earlier, not all have the freedom to enter this space in the first instance, and when they do, not all have the same freedom to interact. Further, as Dawson and Hennebray (1999, 32) document, 'communities' shaped by the Internet are not really 'real communities' because the interaction and exchange are not sufficient in 'kind, number, and quality to replicate and . . . replace the social relationships born of more immediate and spatially and temporally uniform kinds of communal involvement'. Willson (1997, 146) suggests that the interaction is a 'purely intellectual engagement', while Holmes (1997, 18) argues that dialogues on the Net tend to be 'quite transient and directionless, seldom acquiring a substantive enough history to constitute a political [or religious] movement'. These writers claim the impossibility of 'community', though perhaps somewhat too negatively.

A negotiated position, in my view, is more likely. Interaction on the Net, for example, need not be purely intellectual, and dialogues can move beyond transient exchanges. However, there is insufficient grounded empirical research, involving detailed ethnographic work with participants in CMC, and much of the debate is informed by opinions (Kollock and Smith 1999, 16). In particular, there is little work on how CMC of a religious nature might be different from other secular CMC. Campbell's (1999) work-in-progress is singular in this respect. Citing Wellman (1997), she posits the view that cyberspace supports "'glocalised'" communities of individuals in a local area who have a global network of connections; in which one's village can span the globe' (Campbell 1999, 3). Illustrating this, she shows how the network

relations within her chosen religious community are both social and spiritual:

Social connection comes from interactions of the ... members in the form of email posted to the list involving the encouragement and exhortations offered by individuals on the topic of prophecy. Spiritual connections involve the bonds and exchanges which are facilitated 'by the Holy Spirit' with individuals being used as a 'spokesperson of God'. (Campbell 1999, 6)

The 'spiritual connections' or 'spiritual networking' work at two levels — networking with spiritual friends, and the notion that the connections are not coincidental but reflect God's hand. Further, Campbell suggests that the on-line community is very much situated in the real world, citing the example of how many practices are quite similar to those in a 'real world' charismatic gathering. Finally, the network dominates participants' lives:

One community member, overwhelmed by stress and the amount of email, publicly spoke of wanting to withdraw from the course/community. However, these personal feelings were re-interpreted within the spiritual world context in which she saw this circumstance as planted by Satan to get her away from the community. (Campbell 1999, 6).

While pioneering in many ways, Campbell's work raises further questions. For example, though she acknowledges the 'social connection' of those involved, the question remains as to what kind of 'community' they constitute; how it differs from a 'real world' community; what are the detailed inter-connections between the 'real world' and the virtual group beyond that, particularly in terms of specific practice and social interaction. Beyond her immediate empirical case, further research is also needed into how new religious communities might develop in cyberspace, or how old ones might be enhanced or diminished. If, at the same time, community boundaries are always constructed and contested (see, for example, Eade 1990; Brah 1992; Baumann 1996; Dwyer 1999), the question arises as to how community boundaries become (re)drawn, negotiated or dismantled with technology-mediated communications.

A second key question in the poetics of community is the role and nature of ritual in the making of community in a technological age. Durkheim has argued that religion is all about group solidarity, that rituals such as sacrifices and commemorative rites

have cohesive and revitalizing functions, that they establish perpetual communion and renew the consciousness of the group. While religion and its rituals apparently function to strengthen bonds attaching a believer to his/her god(s), they actually strengthen bonds attaching an individual to society. So what happens to ritual in a technological age, how is social solidarity affected and what is the role of 'place' in any 'new' ritual practice? What role will rituals performed via technology-mediated means have vis-à-vis face-to-face communal rituals?

I would like to propose the notions of 'living-room ritual' and 'cyber-ritual' and to call for detailed empirical scrutiny here. Might vicarious rather than participatory ritual action become important (performed elsewhere and watched on screen: whether on television (living-room ritual) or on computer monitor (cyber-ritual))? On the other hand, might simultaneous living-room rituals and cyber-rituals develop, involving simultaneous others elsewhere? As Kinney (1995, 773) points out, an integral part of ritual involves being part of a felt and shared experience simultaneously. To replicate this using technology may be possible, using the example of online game networks where individuals can dial in separately and play competitive computer games against each other simultaneously. A similar simultaneous environment could also be created in which there may be a call and response pattern, as in the Catholic rituals between priest and congregation. The critical question in such a situation is how living-room and cyber-ritual affects the participatory feeling of community, for which empirical analysis is needed.

Poetics of place

The 'poetics', the 'substantial', the 'essential character' of religious place, assumed to be sacred place, has long drawn research attention from scholars of religion. Eliade's (1959) work, mentioned earlier, immediately comes to mind: the sacred, he contends, irrupts in certain places as revelations (hierophanies), causing them to become 'powerful centers of meaningful worlds', set apart from ordinary, homogeneous space. The experience of such sacred place may be described as the 'numinous' (Otto 1917), and experience of the *mysterium tremendum* in place grants it a 'spiritual essence' and 'poetic quality'.

In as much as religious groups and individuals harness technology to modify hitherto received practices, thus reshaping the poetics of community,

equally, the 'poetic' experience of religious place is mediated as new technologies are adopted. I will focus on two related questions here: the place of place in rituals and hence religious experience, and the place of the human body in new rituals and the implications for conceptions of sacred space. First, how will geography and place figure in the reproduction of religion as rituals metamorphose? One view, expressed by a Catholic website founder, publisher and editor, is that it may in part depend on whether ecclesial requirements can be fulfilled from a distance. Thus, one of the sacraments, the confession, may be conducted via CMC, as some of the requirements of the confessional are possible, one of which is confidentiality. He acknowledged, however, that the technology of the telephone had been available for a long time, but had not been used for confessions, so perhaps the Internet would not succeed either (Zaleski 1997, 109). Holy communion would most definitely be impossible. If one reads further into Zaleski's (1997) reports that those who run websites for religious or spiritual organizations recognize its limitations, and use the web only to sell books, present ideas, provide information on upcoming events and how to find out more, then, rather than decentralizing place, technology places the accent on its critical role even more. Zaleski (1997) suggests that this is because there is no exchange of energy, of *prana* or spirit, through electronic media. Yet, detailed systematic empirical work is lacking, particularly amongst religious adherents themselves, to confirm or refute these ideas.

A second research question is centred on the fact that, in face-to-face communities, ritual is anchored in the visual and aural, and the human body plays a crucial role in the production of sacred space. Ritual action 'manipulates basic spatial distinctions between up and down, right and left, inside and outside, and so on, that necessarily revolve around the axis of the living body' (Chidester and Linenthal 1995, 10). As technology mediates ritual, questions arise about how conceptions of space alter, and the place of the living body-axis in it, particularly given the ways in which cyberspace has been recognized to constitute a 'culture of disembodiment' (Willson 1997, 146). For example, what happens to the maintenance of boundaries between inside and outside? What happens to the bodily axis? Are different rituals developed that perhaps emphasize the visual and kinesic less (such as ritual movement) and spotlight the audio more (such as ritual songs and chants)?

Ethnomusicologist Lee (1999) addresses this last question, arguing that sacred space can become defined by the aural rather than the visual alone. He points out how, with urbanization and the redistribution of populations in Singapore, the Malay *kampungs* (villages) which were homogeneously Malay/Muslim have been replaced by urban landscapes with ethnically integrated housing, with implications for the practice of religion. His specific focus is on the Islamic call to prayer, which used to be done on a loudspeaker, outward from a mosque, to attract adherents to prayer time. In the new urban social set-up, such sound production is sometimes regarded as intrusive by those not involved in that religion or those particular events. State regulations were then introduced to deal with this, in particular, regulations on 'noise pollution', including turning the loudspeakers inwards towards the mosque rather than outwards. This caused unhappiness among Muslims. The agreed compromise was for prayer calls to be made via radio, thus making it a tool for culture reproduction, and reconstituting the religious community via the acoustic community. Such electronic mediation has caused a change in conceptualization of religious place. Specifically, it created a dialectical relation between presence of shared acoustic space among Muslims created through radio transmission and absence of shared physical space, the result of urbanization and modernity. At the same time, listening to the call to prayer on the radio 'reunites each member of the Islamic community and creates an abstract communal Islamic space without the encroachment of non-Islamic social spaces' (Lee 1999, 94).

Ways ahead

Modernity and religion, certainly in terms of the intersections between technology and the sacred, has remained under-researched by geographers in many ways. Various agenda-setting papers and reviews of the state of geographical research on religion in the last decade and a half have omitted to even mention this dimension (see, for example, Levine 1986; Kong 1990; Park 1994; Raivo 1997). Technologies that have existed for a while now, such as television, video, radio and telephone, and their intersections with religion, have not been given research attention by geographers, let alone new technologies such as computer-mediated communication of various sorts. What I have attempted to do

here is to outline a broad agenda to further geographical research on religion, as new technologies continue to improve in the developed world and existing technologies spread in much of the developing world. Such a research agenda examines questions about how religious space, and social and political relations in and between religious groups, are being refigured. Critical to this endeavour is a conscious engagement with the literature on the techno-social that is committed to eschew technological determinism, and to recognize the agency of religious groups and individuals.

In brief, geographers can take up the challenge of researching the intersection between religion and technology in various ways. First, in relation to 'traditional' technologies, the existing other-disciplinary theoretical and empirical writing requires geographical imaginations to inflect the material, engaging with issues about place, space, identity and community. Second, in relation to more recent technological innovations in CMC, much of the writing is in critical need of grounded empirical work, both within and beyond geography and religion, and geographers of religion could well be at the cutting edge of various disciplines, leading theoretical and methodological innovations.

While much more empirical work deserves to be done, on the basis of the limited empirical research available (as outlined above), several preliminary statements can be made. In some ways, the development and spread of new technologies may not be too different from the development and spread of earlier technologies, reflecting the influence of particular socio-economic and even linguistic classes and gender groups. Concomitantly then, the spread of religion is affected, for if particular religious groups have greater access to new technologies, the reach of religion via technological innovation becomes skewed. Preliminary insights also suggest that a 'centre' and 'periphery' may evolve in religious discourse and influence, perhaps a latter-day religious (neo)imperialism, made possible in part by control of or influence over production processes, both in terms of production of technology and production of meaning. The influence over the production of meaning is partially effected through the opening up of discursive space via technological improvements. The opening up of discursive space has had other effects: in religious discourse, it can prompt acrimonious criticism and debate, but can as well facilitate the development of new religious communities. Further, the limited evidence of technology-

mediated rituals cited above suggest that technology is significant for religious groups, not only in the discursive sphere, but also in the domain of practice. The nature of the sacred and of sacred place is moderated as technology evolves, in as much as the meaning and use of technology is moderated as religious beliefs and practices extend.

Notes

- 1 It must be noted, however, that religious broadcasting and computer-mediated communication are less effective in actually achieving conversions and that their most important function is in confirmation of belief (Lofland 1966; Davis 1976; Shupe 1976; Snow *et al* 1980; Rochford 1982; Hoover 1988; Stump 1991; Dawson and Hennebray 1999).
- 2 Warf and Grimes (1997, 264) mention briefly how freedom of expression is an 'unaffordable luxury' in some countries, citing Singapore's strict restraints on sites with political, religious or pornographic content.
- 3 His criteria may nevertheless be questioned: what and who defines 'sufficient human feeling', for example.

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