

RELIGION AND TECHNOLOGY: REFIGURING PLACE, SPACE, IDENTITY AND COMMUNITY

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Summary

This paper reviews the literature on the religion-technology nexus, drawing up a research agenda and offering preliminary empirical insights. First, I stress to 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

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Modernity, technology and religion

One of the widest refrains in the social sciences in the latter half of the 20th century must have been the secularisation thesis, that modernity has led to the substitution of religious traditions with rationalism, scientism and individualism. Public life, it is argued, has been secularised and that which is religious has been privatised (see, for example, Kurtz, 1995). Even while the view of a singular trend towards secularisation is debateable, and simultaneous strands of secular forces and religious revivalism compete, geographers have, in recent years, begun to acknowledge the intersection of the sacred and secular in modernity, and 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 singular development, but clearly integral to conditions of modernity are technological changes, and it is this aspect of modern life that I wish to focus on in relation to "new" geographies of religion (Kong, 2001). This has largely been absent from the literature, which has recently 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 has also emerged that examines the dialectical relationship between the social and the technological. The retheorised 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 "technosocial" (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 dispossession" (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-millenium, 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 revolutionised 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; manyto-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 "center", 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 globalising 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 targetted 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 indigenisation of church leadership represent resistances to western imperialism, and serves 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 evangelisation, 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, technoreligious 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

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, Zurcher and Ekland-Olson, 1980; Rochford, 1982; Hoover, 1988; Stump, 1991; Dawson and Hennebry, 1999).

parallel situations in late 19th and early 20th 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 characterised 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; Young, 1990b). This is precisely the differentiation within modernity that calls for absoluteness, a certainty that differences mark out what is true/false, legimate/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% 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 democratisation in cyberworld, given its mass-participatory nature. Such simultaneous inequalities and democratisation 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 cyber-discourses 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, <u>http://ryker.itech.cup.edu/-gseese/</u>).

Much of 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 which 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 interreligious 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 have also 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 idealogues, 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 neutralise 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 cybercommunications and lack of hierarchy and authority therein.

Poetics of community

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.

Writings on community have frequently 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 analysed 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 Hennebry, 1999:32).

³ His criteria may nevertheless be questioned: what and who defines "sufficient human feeling", for example.

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 Hennebry (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 interconnections between the "real world" and the virtual group beyond that are, 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 old ones 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 revitalising 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-àvis 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 organisations recognise 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 decentralising 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 recognised 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 emphasise 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 urbanisation 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 setup, 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 conceptualisation 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 urbanisation 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 socioeconomic, 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 "center" 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.

REFERENCES

- Baumann, G. (1996) Contesting Culture: Discourses of Identity in Multi-ethnic London, Cambridge: Cambridge University Press.
- Baym, Nancy K. (1995) "The emergence of community in computer-mediated communication," in Jones, Steven G. (ed.) Cybersociety: Computer-Mediated Communication and Community, Thousand Oaks, California: Sage Publications, 138-63.
- Bingham, Nick (1996) "Object-ions: from technological determinism towards geographies of relations", *Environment and Planning D: Society and Space*, 14, 635-57.
- Brah, A. (1992) "Difference, diversity and differentiation", in Donald, J. and Rattansi, A. (eds.) "Race", Culture and Difference, London: Sage, 126-45.
- Campbell, Heidi (1999) "Transcending space and the geography of the soul: cyberspace as a spiritual network", Paper presented at Annual Conference of the RGS-IBG Session "Geographies of the Future", University of Leicester, 4-7 January.
- Chidester, David and Linenthal, Edward T. (eds.) (1995) *American Sacred Space*, Bloomington: Indiana University Press.
- Crang, M., Crang, P., and May, J. (1999) (eds.) Virtual Geographies: Bodies, Space and Relations, London and New York: Routledge.
- Davis, B.E. (1976) "Mass media in missions", in Gurganus, George P. (ed.) *Guidelines for World Evangelism*, Abilene, Texas: Biblical Research Press, 140-69.
- Dawson, Lorne L. and Hennebry, Jenna (1999) "New religions and the Internet: recruiting in a new public space", *Journal of Contemporary Religion*, 14, 1, 17-39.
- Dwyer, C. (1999) "Contradictions of community: questions of identity for young British Muslim women", *Environment and Planning A*, 31, 53-68.
- Eade, J. (1990) "Nationalism and the quest for authenticity: the Bangladeshis in Tower Hamlets", *New Community*, 16, 493-503.
- Eliade, M. (1959) *The Sacred And The Profane: The Nature Of Religion*, Translated from French by Willard R. Trask, San Diego: Harcourt Brace Jovanovich.
- Harasim, Linda M. (1995) "Networlds: networks as social space", in Harasim, Linda M. (ed.) Global Networks: Computers and International Communication, Thousand Oaks, California: Sage Publications, 15-34.
- Herring, Susan (1996a) "Gender and democracy in computer-mediated communication", in Kling, Rob (ed.) Computerization and Controversy, San Diego: Academic Press, 476-89.

- Herring, Susan (1996b) "Bringing familiar bagage to the new frontier: gender differences in computer-mediated communication", in Vitanza, Victor J. (ed.) CyberReader, Needham Heights, Massachusetts: Allyn & Bacon, pp 144-54.
- Holmes, David (1997) "Virtual identity: communities of broadcast, communities of interactivity", in Holmes, David (ed.) *Virtual Politics: Identity and Community in Cyberspace*, London, Thousand Oaks, New Delhi: Sage, 26-45.
- Hoover, S. (1988) Mass Media Religion, Thousand Oaks, CA: Sage.
- Jones, Steven G. (1995) "Understanding Community in the Information Age," in Jones, Steven G. (ed.) CyberSociety: Computer-Mediated Communication and Community, Thousand Oaks, California: Sage, 10-35.
- Kinney, Jay (1995) "Religion, cyberspace and the future", Futures, 27, 7, 763-776.
- Kitchin, Rob (1998) Cyberspace: The World in the Wires, Chichester: John Wiley and Sons.
- Kollock, Peter and Smith, Marc A. (1999) "Communities in cyberspace", in Smith, Marc A. and Kollock, P. (eds.) *Communities in Cyberspace*, London and New York: Routledge, 3-25.
- Kong, L. (1990) "Geography and religion: trends and prospects", *Progress in Human Geography*, 14, 3, 355-71.
- Kong, L. (2001) "Mapping 'new' geographies of religion: politics and poetics in modernity", *Progress in Human Geography*, 25, 2, 211-33.
- Kurtz, Lester (1995) Gods in the Global Village: The World's Religions in Sociological Perspective, Thousand Oaks, California: Pine Forge Press.
- Lee, Tong Soon (1999) "Technology and the production of Islamic space: the call to prayer in Singapore", *Ethnomusicology*, 43, 1, 86-100.
- Levine, G.J. (1986) "On the geography of religion", *Transactions of the Institute of British Geographers*, 11, 428-40.
- Lofland, J. (1966) Doomsday Cult, Englewood Cliffs, NJ: Prentice-Hall.
- Marx, Gary and Virnoche, Mary (1995) "'Only connect': E.M. Forster in an age of computerization", Presented at the American Sociological Association, Washington D.C., August.
- Mele, Christopher (1999) "Cyberspace and disadvantaged communities: the Internet as a tool for collective action", in Smith, Marc A. and Kollock, P. (eds.) Communities in Cyberspace, London and New York: Routledge,
- Newey, Adam (1996) "Networking for God", Index on Censorship, 4, 132-37.

- Otto, R. (1917) *The Idea of the Holy*, Translated by J.W. Harvey, 2nd edition, London: Oxford University Press.
- Park, C. (1994) Sacred Worlds, London: Routledge.
- Pliskin, Nava and Romm, Celia T. (1994) "Empowerment effects of electronic group communication: a case study", Working Paper, Department of Management, Faculty of Commerce, University of Wollongong.
- Raivo, Petri J. (1997) "Comparative religion and geography: some remarks on the geography of religion and religious geography", *Temenos*, 33, 137-49.
- Rheingold, Howard (1993) The Virtual Community: Homesteading on the Electronic Frontier, Reading, MA: Addison-Wesley.
- Rochford, E.B. Jr. (1982) "Recruitment strategies, ideology and organization in the Hare Krishna movement", *Social Problems*, 29, 399-410.
- Shields, Rob (1996) (ed.) Cultures of Internet: Virtual Spaces, Real Histories, Living Bodies, London: Sage.
- Shupe (1976) Shupe, A.D. (1976) "'Disembodied access' and technological constraints on organizational development: a study of mail-order religions", *Journal for the Scientific Study of Religion*, 15, 177-85.
- Smith, D.M. (1999) "Geography, community, and morality", *Environment and Planning A*, 31, 19-35.
- Snow, D.A., Zurcher, L.A. Jr. and Ekland-Olson, S. (1980) "Social networks and social movements: a microstructural approach to differential recruitment", *American Sociological Review*, 45, 5, 787-801.
- Stein, Jeremy (1999) "The telephone: its social shaping and public negotiation in late nineteenthand early twentieth-century London", in Crang, M., Crang, P., and May, J. (eds.) Virtual Geographies: Bodies, Space and Relations, London and New York: Routledge, 44-62.
- Stump, Roger W. (1991) "Spatial implications of religious broadcasting: stability and change in patterns of belief", in Brunn, Stanley and Leinbach, T. (eds.) Collapsing Space and Time: Geographic Aspects of Communications and Information, London: Harper Collins Academic, 354-75.
- Ustorf, Werner (1998) "Global topographies: the spiritual, the social and the geographical in the missionary movement from the West", *Social Policy and Administration*, 32, 5, 591-604.
- Warf, Barney and Grimes, John (1997) "Counterhegemonic discourses and the Internet", *Geographical Review*, 87, 2, 259-74.

- Wellman, Barry (1997) "An electronic group is virtually a social network", in Kielser, Sara (ed.) *Culture of the Internet*, Mahwah, NJ: Lawrence Erlbaum.
- Wellman, Barry and Gulia, Milena (1999) "Virtual communities as communities: net surfers don't ride alone", in Smith, Marc A. and Kollock, P. (eds.) Communities in Cyberspace, London and New York: Routledge, 167-94.
- Willson, Michele (1997) "Community in the abstract: a political and ethical dilemma?" in Holmes, David (ed.) Virtual Politics: Identity and Community in Cyberspace, London, Thousand Oaks, New Delhi: Sage, 145-62.
- Young, I.M. (1990a) "The ideal of community and the politics of difference", in Nicholson, L.J. (ed.) *Feminism/Postmodernism*, London: Routledge, 300-23.
- Young, I.M. (1990b) *Justice and the Politics of Difference*, Princeton, N.J.: Princeton University Press.
- Zaleski, Jeff (1997) *The Soul of Cyberspace: How New Technology is Changing our Spiritual Lives*, San Francisco: Harper-SanFrancisco.