Environment and Planning C: Government and Policy 2007, volume 25, pages 591 – 610

DOI:10.1068/c1312r

Therapeutic landscapes in hospital design: a qualitative assessment by staff and service users of the design of a new mental health inpatient unit

Sarah Curtis
Department of Geography, University of Durham, Durham DH1 3LE, England;
e-mail: s.e.curtis@durham.ac.uk

Wil Gesler
Department of Geography, Queen Mary, University of London, London E1 4NS, England;
e-mail: wgesler@aol.com

Kathy Fabian
Independent Newham Users Forum (Mental Health),
e-mail: staff@inuf.org

Susan Francis
NHS Confederation, England;
e-mail: Sue.Francis@nhsconfed.org

Stefan Priebe
Centre for Psychiatry, St. Bartholomews and the London School of Medicine and Dentistry, Queen Mary, University of London, England; e-mail: s.priebe@qmul.ac.uk
Received 13 December 2005; in revised form 29 May 2006; published online 16 May 2007

Abstract. This pilot research project sought to provide a postoccupation assessment of a new mental health inpatient unit in East London, built under the Private Finance Initiative scheme. Qualitative discussion groups or unstructured interviews were used to explore the views of people who had been service users (but were currently well) and of nursing staff and consultants working in the new hospital. The participants gave their views on the aspects of the hospital which were beneficial or detrimental to well-being and the reasons for their views. Informants discussed hospital design in terms of: (1) respect and empowerment for people with mental illness; (2) security and surveillance versus freedom and openness; (3) territoriality, privacy, refuge, and social interactions; (4) homeliness and contact with nature; (5) places for expression and reaffirmation of identity, autonomy, and consumer choice; and (6) integration into sustainable communities. Themes emerging from this research were interpreted in light of ideas from geographical research on therapeutic landscapes constituted as physical, social, and symbolic spaces, as well as research from environmental psychology. The findings have practical implications for hospital design and underline the need to consider empowerment of patients in decisions over hospital design. We note the challenges involved in determining therapeutic hospital design given changing models of care in psychiatry, lack of consensus over models of care, and the varying and somewhat conflicting requirements these imply for the physical, social, and symbolic attributes of design of hospital spaces. We also note the implications of our findings for an interpretation of therapeutic landscapes as contested spaces.

Background: the therapeutic landscape perspective as a framework to assess psychiatric hospital design

This paper explores the relevance of concepts of 'therapeutic landscapes' for hospital design (specifically in the psychiatric sector) and considers the links between models of psychiatric care and the buildings within which care is provided. This study is therefore situated at the intersection of debates summarised below in geography (concerning therapeutic landscapes), in architecture and environmental psychology (concerning hospital design), and in social psychiatry (concerning environments that are conducive to different models of care).

The Private Finance Initiative (PFI) in England involves long-term contracts with private companies to design, build, and often manage public facilities which are leased by the public sector for the duration of the contract [for more details, see Department of Health (2005) and, for a more critical discussion, see Atun and McKee (2005)]. This has supported a new wave of National Health Service hospital construction, including new psychiatric inpatient facilities, prompting renewed debate over hospital design that is conducive to human wellbeing in the broad sense, as well as clinically efficient.

A number of authors, including geographers, have documented the development of ideas about 'therapeutic' settings for providing mental health care that reflect changing social construction of mental illness advances in treatment models in psychiatry (for example, Curtis, 2004; Dear, 2000; Dear and Taylor, 1982; Dear and Wolch, 1987; Edginton, 1997; Furlong, 1996; Hughes, 2000; Jones, 1979; Milligan, 2000; Parr et al, 2003; Philo, 1989; Rogers and Pilgrim, 1996; Scull, 1979; C J Smith, 1977; 2000; Wolch and Philo, 2000).

The recent trend in clinical strategies for care of mentally ill people has been towards what Thornicroft and Tansella (2004) describe as a 'pragmatic balance of community and hospital care', aiming to support people with mental illness living in the community as far as possible, rather than in institutions. Inpatient hospital facilities are generally intended to offer care and treatment for acute phases of mental illness, rather than long-term residential care. This contrasts with the older 'asylum' model of care and necessitates new approaches to design for psychiatric hospitals.

The current resurgence of interest in hospital design is also associated with work in environmental psychology, including research on clinical outcomes, which demonstrates the importance of hospital environments for treatment outcomes and the more general wellbeing of patients (eg, see discussion in Ittelson et al, 1970; Lawson et al, 2003; Rothberg et al, 2005; Ulrich, 1997). Hospital design can also help to create healthy workplaces and may affect staff recruitment, retention, and morale (for example, reviewed by Gross et al, 1998). However, what aspects of design are important and how they may be therapeutic is a contested domain (Reizenstein, 1982): NHS planners and managers, architects, government ministers, staff, consultants, users, and other members of the public may put forward differing ideas about therapeutic design.

We argue below that hospital design, especially as it relates to the social dimensions of space, place, and well-being, can be usefully interpreted using perspectives from health geography, including the notion of *therapeutic landscapes* (Gesler and Kearns, 2002; Kearns and Gesler, 1998). The therapeutic landscape concept is a conceptual framework for analysing physical, social, and symbolic environments as they contribute to physical and mental health and wellbeing in places (Gesler, 1992; 2003). Its early development was based on three main lines of thought (the first stemming from traditional cultural geography and environmental psychology and the second and third from social theories that informed the 'new' cultural geography (Cosgrove and Jackson, 1987): (1) from cultural ecology and environmental psychology came ideas about nature as a healer and the importance of building design; (2) from structuralism came ideas about social interactions and power relations in health settings, legitimisation and marginalisation, and health consumerism; and (3) from humanism came ideas about the importance of beliefs about disease and its treatment, the role of experiences and feelings in places, and the symbolic power of myths and stories.

Over the past decade research informed by therapeutic landscape ideas has been criticised for relying solely on developed country examples (Wilson, 2003), as well as for neglecting negative aspects of healing environments. Researchers have noted that what is perceived to be therapeutic must be seen in the context of social and economic conditions and that everyday geographies of care must be studied as well as places with

well-known reputations for healing (Gesler, 2005). The therapeutic landscape framework has been employed in a wide variety of settings in both developed and less developed areas (Gesler, 2003; *Health and Place* 2005). In a recent review of the hospital design literature it is noted that "the therapeutic value of hospitals is related to their physical, social and symbolic design" (Gesler et al, 2004, page 117). This paper extends the usefulness of the therapeutic landscape concept by expanding on this statement.

The research reported here used a case-study approach to investigate perceptions of hospital design among different groups of people using a newly built mental health inpatient unit. We have interpreted their accounts in terms of a number of themes which are also recognised in the research literature, and which we have summarised here by way of introduction.

Respect and empowerment for people with mental illness

A recurrent theme that runs through the mental health literature is the stigma attached to mental illness (Smith and Giggs 1988). Throughout history human societies have labelled the mentally ill as different, deviant, or dangerous and treated them accordingly. Philo (1989; 2000b) is among those offering a geographical interpretation of Foucault's (1993) analysis of hospitals as spaces of medical power where patients are subordinated to medical staff (and subjected to control by wider society, because hospitalisation is not always voluntary in psychiatry).

Places in general are important for power relations because they contribute to both expression and formation of the individual's sense of identity and their position in society. This is certainly true of hospitals, given the transition of roles which the individual undergoes in relinquishing the status and responsibilities of social life as an ordinary member of a community and adopting the sick role of the patient with its restrictions and subordination to medical regimes. People with mental illness often find it difficult to exercise power in the treatment process and experience a lack of respect, in hospitals as well as in wider society (Geores and Gesler, 1999; Parr, 1999). It is important to consider how far the environment in a hospital respects the personality, preferences, and cultural and religious mores of patients, especially when these may be seen to be partially modified due to the nature of their illness, and when they may be detained in hospital against their will.

Security and surveillance versus freedom and openness

Mental health treatments have been characterised by a conflict between a need to control and restrain the mentally ill and a desire to promote human needs and individuality (for geographical reviews, see Curtis, 2004; Philo, 1989; 2000a). "We continually vacillate between isolating these people behind locked doors and demanding that they be treated as full members of society living in the community" (Geores and Gesler, 1999, page 119). In contemporary society with its emphasis on risk management, Moon (2000) finds madness is often confused with badness and this contributes to a climate of fear of the mentally ill.

The symbol of security and control, in places such as asylums and prisons, is Jeremy Bentham's late-18th-century 'panopticon', a design featuring corridors radiating from a central observation point from which inmates can be continually inspected (Philo, 1989). Foucault (1979) has extended the notion of 'panopticism' to include any disciplinary techniques whereby human subjects are converted into docile bodies. "The control and division of space (and time) became a vital means for the discipline and surveillance of individuals" (Driver, 1985, page 426).

Also associated with the desire to manage possible risks of mental illness is the traditional role of the psychiatric hospital as *refuge* for the patient who may need to withdraw from social contact in order to recuperate or come to terms with illness

(Tomlinson and Carrier, 1996). Parr (1999) reports views among users of psychiatric facilities as 'sanctuary', 'haven', or place of 'safety' (Parr, 1999).

In recent times, there has been growing emphasis on 'risk governance' and as a result confinement and surveillance have regained respectability in response to public perceptions of the dangers posed by particular groups, particularly in places such as the inner city (Moon, 2000). The public, many feel, must be shielded from the deviant 'other' (Cornish, 1997; Sibley, 1995). Health care spaces may be organised for security: for example, Gillespie (2002) describes how, in a family planning clinic, staff are positioned as gatekeepers to screen out certain individuals (Gillespie, 2002). The current NHS strategy to tackle the problem of that small group of people who present real risks in the community is to keep them under surveillance in a confined space. Countering these moves, however, is a history of attempts to keep treatment facilities as open as possible. Philo (1989) points out that many actual and proposed 19th-century asylums did not follow panoptican principles of design. York Retreat (Edginton, 1997) and milieu therapy (Jones, 1979) fostered freedom and individuality.

Territoriality, privacy, refuge, and social interactions

The idea of spaces of power in hospitals is also associated with literature concerning territoriality (for example, Sack, 1986). Effective territorial space needs to be demarcated, defensible, and respected by other people. In psychiatric care settings, users need to have spaces where they do not feel constrained in their behaviour or observed by staff (Parr, 2000; Parr et al, 2003). In addition, we note the traditional role of the psychiatric hospital as *refuge* for the patient who may need to withdraw from social contact in order to recuperate or come to terms with illness (Parr, 1999; Pinfold, 2000; Tomlinson et al, 1996).

The literature on the social environment in hospitals also stresses the importance of social relations and interactions among those who live and work there (Main, 1980; Manning, 1989). Moos (1997) speaks of a *social climate* in hospitals that promotes healthy interpersonal relationships and personal growth. Space is often consciously organised to foster interactions desired by designers of mental hospitals (Philo, 1989) and an important part of care regimes, including occupational therapy, is to promote positive interactions and improve social skills. Inside hospitals, as well as elsewhere, certain spaces may be recognised as zones with special potential for social interaction. There may be 'territorial' demarcations separating these 'interaction spaces' from areas for withdrawal and privacy, so that patients and staff are able to exercise some choice over how and when these interactions take place. Thus, in addition to spaces for interaction, users need to have their own spaces within the hospital or the grounds to allow space and time away from staff (Parr et al, 2003; Philo, 2000a).

Homeliness and contact with nature

One's own home can be important as a place of privacy permitting uninhibited self expression and behaviour, especially for people with chronic illness whose bodily appearance and behaviour are not always well accepted by others in public places (Dyck et al, 2005; R G Smith, 2000). Thus a theme running through the mental hospital design literature (Edginton, 1997; Philo, 1989) concerns the possibility of recreating a 'homelike' atmosphere and reference is often made to features such as lighting and soft furnishings which enhance a homely atmosphere (Waller and Finn, 2004). Canter and Canter (1979) state that, to make people whole, one should create places similar to normal environments. The incorporation of natural elements such as plants, water features, and views of natural scenes are often invoked as therapeutic (for example, Parr et al, 2003), and some research (for example, Francis and Glaville, 2001;

Ulrich, 1984; Ulrich et al, 1991; Whitehouse et al, 2001) demonstrates benefits to health outcomes associated with such aspects of hospitals.

Places for expression and reaffirmation of identity, autonomy, and consumer choice

Balanced against the emphasis on the need for powerful medical regimes to treat illness, and protect patients and other people, is the desire to empower users of mental health services and enable them to live autonomously in the community and to take a part in decisions about their own treatment. These goals require that hospitals should be places where a patient's identity can be revealed and expressed. Hospitals, then, need to provide settings which respect the individuality and diversity of the patients and staff, including their cultural practices and personal choices. Links with their family and community and the spiritual support derived from faith and worship need to be encouraged. Planners of health facilities increasingly try to respond to different needs and perceptions (for example, related to religious faith, gender, ethnicity, age, disability status, and sexual orientation) (Kearns, 1995; Parr and Butler, 1999). Differences in social and cultural background may result in different perceptions of what makes hospital design 'therapeutic' (Gillespie, 2002).

Growth in 'consumerist' approaches in health care in recent years has also encouraged users to be more assertive about their health-care preferences and choices (Kelner and Wellman, 1997; Wiles and Rosenburg, 2001) so they may seek to have more control over the treatment environment (Ben-Sira, 1983; Gesler et al, 2004; Parr, 1999). One response to these changes in user attitudes is the provision of health-care facilities more resembling commercial outlets such as hotels and shops (Kearns and Barnett, 1997).

Integration into sustainable communities

Social interaction, linked with goals for social reintegration of people with mental illness, calls for hospital facilities that are well connected to the community setting beyond the hospital (CABE, 2000; Francis and Glanville, 2001; Weaver, 2001). Design features that are important in this respect include whether the building fits in with its surroundings (Spring, 2001), conveys a sense of civic pride (Milburn, 2001), and is located within a community.

Social integration is also important as part of the goal to make hospitals part of environmentally sustainable communities. Crucial issues concern ease of travel to and from a hospital and the surrounding area; how well a hospital is served by transportation links, including transport modes which do not require use of private cars; how well visitors are provided for; and how easy it is for users and staff to access services and amenities outside the hospital.

The research design: a case study in a new mental health inpatient unit

We report below results of a case study involving a 'postoccupation evaluation' of a newly built psychiatric inpatient unit (which is referred to below as the 'hospital', since this is the term most participants in the research used to describe the building). The research investigated the views of people using the building, and focused on what they thought were the important features of the new hospital affecting its value as a 'therapeutic landscape'.

The research strategy involved in-depth discussions with small groups of people using the new hospital. This method was selected because it would allow participants to put their own views, in their own words, rather than asking larger numbers of people to answer fixed survey questions based on preconceived ideas of what would be the important features of design. The sample of informants was purposive in the sense that there were three key groups of informants which we sought to include;

(1) service users who had knowledge and experience of the new hospital but had recovered from their illness at the time they participated in this study; (2) nursing and managerial staff working in the new hospital; and (3) consultants working in the new hospital. We approached potential participants by written invitations to an introductory meeting where we explained the study in more detail and requested their written consent to take part in discussions which provided the information reported here. Depending on what was convenient and comfortable for the participants, we met some of these people in discussion groups (convening staff and users separately), and we had 'one-to-one' conversations with some other informants.

The study hospital is located in a community which is extremely diverse in its ethnic composition. We would ideally have liked to make provision for interpreters in order to provide information and discussion group facilitation in some of the local languages. For our pilot study we did not have sufficient resources for this (particularly since over forty different languages are spoken in this area and it would have been very difficult to cater for all of them). We acknowledge that this has excluded members of minority ethnic groups who were not able to speak or read English. However, our English-speaking participants did represent a wide range of different ethnic groups living and working in the study area.

We aimed for an inclusive approach, so all staff and consultants working in the hospital at the time of the study (approximately 170 persons) were informed about the study and invited to take part. Those who actually participated were, however, self-selecting, because our initial contact stressed the voluntary nature of the activity, and participation required a positive initiative to attend the meeting and availability at the times when meetings were booked (early afternoons around the change of shift). We spoke to ten members of the nursing staff and management, who came from five of the eight wards and the day care unit and included two ward managers, one ward clerk, two charge nurses, four staff nurses, and one secretary. Of the seven consultants invited, three took part in individual discussions with the authors. It is likely that those who participated were particularly interested in the question of hospital design. Some of them had been involved in decisions about the hospital design at the planning stage, and were able to compare the new hospital with the old facilities, which provided a useful perspective for this study.

Given the resources available for this study, and the ethical restrictions, it was not possible to recruit users on such an inclusive basis. We avoided discussion with people who were currently inpatients. This would have involved holding the discussion groups within the hospital buildings where it might have been difficult for patients to express critical views. Also our ethical clearance by the local Medical Research Ethics Committee placed careful restrictions on how we could approach participants. The written invitations to attend the introductory meeting were distributed via two routes; community psychiatric nurses who had contact with ex-users of the hospital living in the community and the Independent Newham Users Forum (Mental Health) (INUF), a voluntary organisation run by and for psychiatric service users in the study area. INUF also allowed us to use its premises for the meetings with users, in a location easily reached by public transport, and where users would feel confident to give their views frankly. The discussion groups were partly cofacilitated by the researchers and by volunteer workers who were known to the participants.

In the event, no responses were elicited via community nurses and all the participants were recruited through INUF. This may reflect a greater confidence in invitations from a voluntary organisation, and may have resulted in a degree of bias towards any shared views of members of this organisation. We were able to obtain the views of six people who had used the new buildings at the Newham Centre for Mental Health,

and a seventh ex-user of local psychiatric services who had been closely involved in deciding about the hospital design and had seen the new hospital but had not been treated there. One ex-user, who wanted to take part but could not attend the meeting, sent a written statement of experiences at the centre. The users included six men and one woman. For confidentiality reasons we could not collect further information on potentially relevant characteristics of the speakers such as faith or ethnic group, or length of experience of the hospital.

Discussions and interviews were prefaced by an introduction of the idea of wellbeing as a broadly defined physical, psychological, and social state, not defined medically. We started discussions by stating that we had two basic questions:
(1) What specific features of [the hospital] (in terms of physical layout, activities, etc) do you think are good for the well-being of users and staff?
(2) What specific features of [the hospital] do you think are not good for the well-being of patients and staff?
Then we allowed the participants to set the agenda in terms of the topics that they thought were important and wanted to discuss.

Permission to tape-record sessions was requested at each session and was always granted. Two of the authors then carefully read through the transcriptions of these recordings several times, coding or highlighting items of special interest. Our aims in interpreting the transcripts were (a) to discover which specific aspects of the hospital design informants would identify as significant in response to our initial questions, and (b) to elicit their views on how and why these features of the hospital environment were important. To achieve this we experimented with a process of attributional coding (Sylvester, 1998) with the aim of deriving a reasoned account of *why* certain hospital features were important. Attributional coding involves coding to distinguish the 'agent' (a person, group, or entity associated with what *produces* an outcome—in this case some physical, social, or symbolic aspect of the hospital environment producing a therapeutic or nontherapeutic effect—and the 'target' (a person, group, or entity mentioned in the outcome) in this case a therapeutic or nontherapeutic outcome for one or more patients, staff or consultants. Accounts of the causal processes by which the 'agent' and the 'target' are linked were also of particular concern. After several consultations, the two authors agreed on what themes dominated the discussions. We have organised these according to different 'themes' or topics that seemed to be important for a number of people in this study. We were interested to know how far their perceptions 'fitted' with the findings of the research literature on these topics, which are summarised above.

After the material had been collated and interpreted we held 'feedback' meetings in the same locations as the original discussion groups and invited the participants to attend. We also sent them a written report in an accessible format showing the quotes used in the paper here and explaining how we were interpreting these. These feedback sessions were intended to give informants a 'right of reply' and help them to feel engaged in the work and also to validate our conclusions. Not all the informants chose to come to these sessions but two or three from each group either took part in the feedback meetings or sent us positive feedback supporting our interpretation of their comments. The feedback meeting with users, in particular, confirmed and amplified some points for us.

Extracts from the discussions with informants are presented in the report of our analysis below. In transcripts of group interviews it was not always possible to identify each individual speaker and in the following pages, we only report which 'category' of informant was speaking. 'U' stands for a view expressed by an ex-user of psychiatric services, 'S' stands for a view from a member of the nursing or managerial staff, and 'C' stands for a view from a consultant psychiatrist working at the new hospital.

Findings

Most of the discussion related to the inpatient facility but references to 'the centre' indicate both the hospital and the attached day hospital, which was designed and built as part of the same development. Both are on the same site and some informants had experience of both buildings. The design of the site to incorporate both inpatient and outpatient facilities reflects the aim to integrate care in the community and inpatient care in a modern psychiatric service.

Respect and empowerment for people with mental illness

This theme, discussed particularly by ex-users, concerns the degree of respect shown to people in the centre, as well as the degree to which people are empowered to participate in decisions about hospital design. An important issue was the attitude of staff and others toward users, reflecting concerns about disempowerment of patients in hospital and the social stigma often suffered by people with mental illness in wider society. Some users commented that staff were friendly, concerned about their well-being, and not coercive: "well when I was there the nurse was looking after me alright. The nurse was kind, was very nice to me, they look after me, they [were] very good to me" (U). However, the same informant had also experienced less acceptable treatment on another occasion: "She shout at me and say I got nothing wrong with me. She say, 'You got nothing wrong with you, what you come in hospital for?'. ... I wasn't pleased about that." Most users expressed some negative feelings about a lack of respect shown to them by staff while in hospital, and reported instances of staff shouting at users, not listening to them, exceeding their authority, giving preferential treatment, or treating users as inferior and a danger to society. There were also charges that staff bullied patients or gave orders in a peremptory way: "Not, 'Will you?' 'You will'" (U).

While these issues were clearly of paramount importance for them, users were sometimes unsure how much they could rely on their own perceptions of their experiences in hospital, at a time when they would be particularly sensitive and vulnerable. One particularly thoughtful user said: "Whereas I've had a lot of negative stuff happen to me, but I can't sit here and say it's uniformly bad, because in a sense if a client or patient does say that then to a degree they're still in their process of recovery, so they may be suffering from a lot of depression, so see a lot of stuff that's really bad" (U). This perspective may make it difficult for users to have confidence to express their views.

Several comments by both staff and users pointed to the importance of involving users, staff, and consultants in the design of the hospital, as well as day-to-day decisions about the hospital regime. This was seen to be beneficial in giving greater empowerment and autonomy to users. A user said, "Wherever possible clients/patients should be given as much input as possible into the organisation of their own space" (U), and a staff member suggested nurses should "You know, sit down and discuss things ... and ask service users what they want. 'Cos you have to give them autonomy 'cos they are the ones who get the treatment. It certainly works" (S). Several of the respondents had been involved in planning the centre (for example, deciding what rooms were needed for various activities, choosing wall colours and curtain fabrics). However, comments about empowerment of patients extended beyond questions about the physical design of space in the hospital, and also related to decisions about the hospital regime. It was suggested users could do more to help plan therapies and activities for inpatients.

The public image presented by the centre seemed to some respondents symbolic of varying popular perceptions of mental illness. One user commented positively: "I thought that in terms of the way the place greets you it was pretty good. The design

was brilliant" (U). There were also comments from consultants and staff about how a new, clean building could reflect a positive, respectful attitude towards people with mental illness: "It's new, and it's tidy and it's neat, and for me that's important because it reflects ... what you think of the people, and what you think of the service users that you're helping" (C). In contrast, there was concern that locating the facility near an old sewage outfall and a busy motorway (with no barrier to shield the centre from heavy traffic noise) showed a lack of respect for users and staff. One user commented, "If you are trying to recover from mental illness you don't want to be feeling that the world is literally a shit place" (U). Another user, dismayed by the high metal fence around the psychiatric intensive care unit which is visible from the entrance said that "when they have visitors, family and friends go and visit them, they must think it's a prison" (U). It was suggested that the fence could have been disguised or else the psychiatric intensive care unit constructed at the back of the building, out of public view. One user was also incensed that a government minister declared at the opening ceremony "I hope you've got ninety foot railings around this hospital" (U). Thus there is considerable sensitivity about the 'carceral' symbolism that is still attached to hospital inpatient facilities, associated with representations of mentally ill people as 'deviant' and requiring containment to separate them from the rest of society.

Security and surveillance versus freedom and openness

It was clear in discussions that informants had varying views on how best to provide proper surveillance of users and restrain potentially dangerous behaviour in order to protect users and staff. These issues had been discussed during the design process and were still being debated as the facility came into use. For example, there had been discussion over whether users should be allowed to use the kitchen at all hours, or have an aquarium in the ward. Some staff argued that unsupervised access to kitchen equipment such as microwave ovens or to the glass in an aquarium posed safety risks, but users disagreed.

The discussion about appropriate methods of surveillance focused especially on two specific design features, the nursing station located at the intersection of the three corridors in each ward, and vision panels in the doors of users' private rooms. A staff member described the importance of surveillance this way: "The nurse's station ... I mean observation is what nursing's about for instance. Being aware of what people are about means dealing with them as appropriate ... getting an environment where nurses can nurse in a passive as well as in an active way" (S). Opposing this view, a consultant said, "I don't see the need for having ... an observation station really, you should either be out sitting down and chatting with the clients or, if you have paper work or whatever to do, then do it in your office. To me it feeds into the idea of observing people rather than interacting with them" (C).

At the time we undertook the study there had already been debates about vision panels in doors to patients' rooms, and at the time the research was carried out the NHS Trust Board responsible for the hospital had already made a decision to install 'visomatic' panels to all patient bedrooms. These panels are generally obscured by blinds to preserve privacy, except when patients are under enhanced observation. Vision panels were supported mainly by nursing staff with responsibility for making visual checks on users throughout the day or night (for example, to prevent them from harming themselves). A staff member also said one needed to know before entering a bedroom how a user might behave when the door was opened. However, two of the consultants stated strong opposition to vision panels. One said, "I really feel that it's irrational ... I don't think there is any evidence to show that it actually does reduce risk .... So I think its quite countertherapeutic" (C), and the other commented that

"They create a prison-like atmosphere ... they shift focus from engagement, therapy, and trust to disengagement, mistrust ..." (C).

Other detailed aspects of the hospital design also emphasised the tension between security and freedom for patients and illustrated wider security issues that were important for patients, staff, and other people using the hospital. Door handles were designed to prevent ligature and some informants talked about problems caused by slippery and hard-to-turn door handles on users' rooms because they made users feel locked in and could impede a nurse or doctor from leaving quickly if a patient became aggressive. Windows on the wards were originally designed with restraints to allow only partial opening, but these were too weak to prevent patients forcing the windows open. They were therefore locked to prevent users from absconding or jumping from the upper floor. This prevented patients from regulating room temperature or letting in fresh air, even though the building was not air conditioned.

Informants also perceived problems of security in the site surrounding the hospital. A staff member said, "Basically, they don't have contracted security staff ... nursing are having to deal with intruders walking into the building, ex-patients who are perhaps returning, drug dealers that wish to come and sell their wares, and anyone else that maybe just fancies a little bit of mischief or theft" (S). Another said, "yesterday ... someone cut himself to pieces in the car park ... . It's very dangerous ... it's your life, at the end of the day" (S). Another security risk came from the inadequate lighting in the approaches to the centre. Several staff, mostly women, expressed a fear of coming to work at night through what one called a "wasteland" (as discussed below).

In spite of these concerns, informants praised the openness of the hospital. Most of the hospital operated an unlocked ward policy. A staff member put the case for the benefits of openness this way: "And the doors here are unlocked and that's made a huge difference. If someone did a research study on eight weeks ... and the amount of violence I saw there [at a previous mental health centre] and aggression, hostility, and sort of bad relationships between clients and staff ... and coming here if someone did a study, its very, very different" (S). It is interesting here to note also how this speaker apparently seeks to 'legitimate' his or her personal view using the language of scientific experimentation. This suggests that scientific evidence might usefully be included in reflections on hospital design and would be taken seriously, at least if it was concordant with the views of those using and working in the hospital. However, none of the interviewees otherwise referred directly to existing research evidence to support their arguments.

Territoriality, privacy, refuge, and social interactions

In addition to discourses relating to surveillance and control, another 'protective' aspect of the hospital environment concerned the importance of places of refuge and comments about this were also linked to ideas about territoriality and the need for defensible space.

There were several comments about the need to have space in the hospital for some privacy, and to be able to withdraw from staff and other patients. Several points made by users showed that having private space on the ward was important. One of the ex-users participating in the study expressed this in the following way: "Well I mean how would you feel ...? You're feeling a bit weird. You need some peace and space on your own" (U).

For some, the individual bedrooms helped to enhance a sense of private space. The following comments showed one ex-user felt this gave her freedom to determine her own rhythm of activities: "I had my own room, so I could do what I wanted. I could lie down when I want. This was very nice you know" (U). However, for other patients,

overall design of the hospital did not allow sufficient private space: "They're great wards to be on. ... But there just wasn't enough space on the wards ... . There wasn't space for someone to ease off by themselves ... . There was just no private space to go to, whether it was on the ward or in the building" (U).

The consultants and staff were also aware that sometimes patients wanted places where they could be free of contact with the staff (especially, perhaps, free of the surveillance imposed on them) and also to engage in behaviours such as smoking, which would normally be forbidden in a hospital building. One consultant seemed to condone both the withdrawal from observation and the smoking behaviour when discussing the small rooms on the wards that were designated as smoking areas (smoking was not allowed elsewhere).

> "I suppose some of the staff tend not to go in there ... because a lot of them don't smoke ... . I suppose that perhaps the service users ... they don't always want staff round them; they want to be having their own conversations ... they maybe want to escape from the staff sometimes ... the majority of our clients do smoke and you know they have to have somewhere, particularly in the winter, when they can't go out in the cold" (C).

Provision also needed to be made for certain users to be apart from other patients and having separate common rooms helped with this: "they made some effort to allow female services ... a separate sitting room if they want to be away from the male clients for a while ... we've got four ... separate sitting rooms on the ward, so that allows people to ... have a break from the staff if they want without having to move them to another unit" (C).

It was explained to us that this hospital design had not incorporated separate wards for male and female patients, although guidelines for hospital design now require this. Separation was achieved, where it was deemed necessary, by accommodating men and women in different corridors, and designating some common rooms as 'for women only':

> "we don't rigidly keep to the separation. It really depends if you've got a ... service user who is either quite vulnerable or ... may be disinhibited sexually ... we would tend to put, you know, place her in a room ... where the rest of the female clients are ... if we've got a couple of male clients who are more disinhibited or whatever we would probably try to allocate them more separately ... . But there are other times when there isn't that issue on the ward then it's not so rigid ... . It really depends on the mix of clients on the ward" (C).

This need for privacy and withdrawal from contact with others was also important for staff and consultants, who wanted space in the hospital to be able to relax or work quietly without interruptions. They wanted to be able to contact others if necessary, but also wanted to feel that they could be alone at other times.

First participant (S): "I think it's very important that everybody has access to private space that they can actually say is their own."

Second participant (S): "Right! That goes for staff as well as users. Also, the staff have a lot more resources than they had at their previous places, with their staff rooms and access to offices where they can sit—it's much better."

A consultant also commented:

> "I like my office ... I'm working next to my secretary, which is a nice thing, and there's just one door and I can leave it open, [or] I can leave it shut ... most of the time the office door is open which is good so you can communicate if you feel you need to. But then other times when I dictate or there are a lot of telephone calls, I just shut it, which is fine, which is good" (C).

This last quote is also interesting in the way that it shows self-awareness of behaviour in demarcating space in a flexible way to create a communication barrier at one moment or, alternatively, to create an 'interactive space'.

In contrast to the need for spaces for withdrawal, discussed above, patients also said they needed interactive spaces. Friendly contact between patients and staff was seen to be important to a therapeutic setting and would make it easier to provide treatment. One service user described events at the opening of the hospital as follows: "the bottom line is: 'Look, you're feeling a bit mad—interact!'. 'Interact, no matter what'. ... Plain and simple. So this new place, from what I saw on the day with the patients, it was, everyone was interacting at that presentation ... sitting down, eating, smoking, talking, drinking..." (U). Another user said: "if they turned round to the patient and said, 'Well, what did you do before you came here?' That helps slightly. 'Is there anything we can do to help you do that?'" (U).

Homeliness and contact with nature

Perhaps associated with ideas of refuge was the desire that was commonly expressed, particularly by staff and consultants, to make the hospital look and feel 'homely', offering a sense of 'attachment'. There were references to soft furnishings in bright colours, potted plants and other features typical of domestic interiors. A consultant commented about the centre that,

> "I think it's a nice building to come to and I think the round bit of it is quite inviting; that's probably got something—even—it's like an enclosure which can be quite a holding thing. ... it needs to have something positive about it to be able to attach to. Often people, services users who are in and out of hospital more often and see many doctors, they attach to the building; it doesn't matter about the staff and the doctors or whatever, it's the building that they go back to, because that's the most consistent of the lot" (C).

This comment is interesting both for the expression of what geographers might refer to as 'topophilia' (Tuan, 1974), an emotional attachment to a place (similar to that reported by Parr et al, 2003), and for the perception of symbolism of the curved shapes of the building.

Supporting these comments were perceptions of a relaxed, warm atmosphere, in tune with day-to-day living: "A little bit more homely and less institutional-like and more like somebody's house" (C). A staff member said, "I think the readiness of the staff to make the patients feel like they are at home is quite an important aspect" (S). Having personal items in one's room was especially conducive to a feeling of being at home.

However, the feeling of homeliness or enclosure was not universally expressed. Another consultant said, "I don't think it's a living space, no" (C). Others remarked that the place still felt a bit bare, almost impersonal, and that visitors said it had no feeling to it. A consultant expressed a thought that was contrary to the homeliness theme: "The hospital is not your home and it doesn't need to feel like home ... . I mean form should follow function in these things and with [this] place it generally does" (C).

Users pointed out that the degree of homeliness might depend on the function of the ward: a ward for older persons receiving long-term care should definitely be a home-like place. However, a consultant also commented on the 'temporary' nature of this 'home from home' for patients who must be prepared to return to the community.

> "You always feel they start to feel too comfortable ... when they start saying, 'Oh I never want to leave [the] ward', I always think, 'Oh no, now we should be thinking of you leaving really'. It's a sign that they're getting ... settled and stable and then I don't want it to become their home, I want it to be homely but they don't feel that that's it for ever, you know what I mean, that they want to leave the place. Our job is to help people leave, really, not to keep them there" (C).

This expresses very well the awkward tension, in an acute hospital which is part of a community-based psychiatric care system, between making patients feel comfortable in a domestic type of environment but also having to prepare them for being discharged.

Consistent with theories about the healing properties of natural landscape elements, participants mentioned some physical aspects of the building that enhanced these dimensions. Discussion of these features was often linked to ideas above about a homely, rather than institutional, living space. One of the first design features mentioned in many discussions was the amount of light that floods into the hospital through large areas of glass in the walls and roof. This was universally praised; one person said: "Working in a bright open place has much more positive effect on both staff and clients who are using the building" (S). The garden spaces provided at the centre were also appreciated, but several people thought they were too small. Also, so soon after opening the hospital, there had been little time for any new planting to grow. Wishes were expressed for a large garden with trees and grass and places to sit in the fresh air to read a paper or enjoy a cigarette. Also suggested as possible improvements were: a greenhouse where users could watch their own plants growing; a theme garden; and some pets or wildlife on the premises.

Places for expression and reaffirmation of identity, autonomy, and consumer choice

Connecting with some of the themes discussed above (empowerment, homeliness, and the need for spaces of refuge and contemplation), were comments on the need to respect individual identities and the differences between the various social, ethnic, and faith groups using the hospital and working there. For example, one focus for discussion was on the lack of suitable spaces for prayer and faith-related practices:

> "I don't think the building was designed to have a prayer room, 'cos that prayer room is not adequate. ... It was originally possibly an OT [occupational therapy] room. It's got a whole kitchen unit in there which is completely inappropriate ... they've made it into a prayer room just over a year ago. But half the time ... [when] they go to prayer they've got to call a porter to get it unlocked. ... So if you're like me and you pray five times a day it's very difficult ... . It's not really a proper prayer area. They've put a wash area in for the Muslims, ... but they didn't ask anyone and it's not sealed off, there's no privacy, there's no toilet. So, if *I* find it offensive, I don't know what the patient's think, who aren't well" (S).

There were criticisms of the quality of the food available in the hospital, which was not seen to provide a healthy diet and, while apparently it was aimed at responding to the diversity of preferences of different social and cultural groups, was not acceptable to some. One member of staff commented

> "people who are over 65 are not very adventurous to new types of food. They prefer the traditional foods, so they don't get the choices that they usually do. ... they do get to be frustrated—they're being sent things like chow mein, or they've never had things like curry" (S).

The design of the hospital was also important for its function in preserving and promoting patient's skills and aptitudes for independent living in the community. Facilities for formal occupational therapy (OT) in the hospital were important for this reason. A significant part of the day on the wards was structured around these sorts of activities which were provided according to a timetable posted on the wall of the ward. They included producing a group painting of London, a group mosaic, cooking sessions, a woman's beauty group for users with a habit of self-neglect, and a sports group. These all contribute to the rehabilitation process, and may help users to feel they have a chance to express themselves and relax doing things which are useful or enjoyable. It seemed important to have space for these in the hospital. Our discussion

groups with staff, in particular, included accounts of the sorts of activities that were provided in purpose-built spaces, such as large and well-equipped kitchens, or else were not possible due to space restrictions in the hospital.

"You're not going to be put on a big dormitory as used to be before. They can try to maintain that independence as [if] they were in their own home ... so they won't lose that skill that they already have" (S).

"it may be quite a long time before they actually go outside the unit, ... we have ... an art room ... and they can [do] the cooking on the unit, but we have facilities on site as well ... we were thinking of having a music therapist at one point ... but there was the issue of a room ..." (C).

In addition to these formal 'OT' activities, users and staff thought that it was important to be able engage in 'informal' activities and do things that were more relaxing and helped to pass the time during their inpatient stay. Ideally these would involve taking patients out of the hospital, or at least giving them places to go to which were off the ward. There were some limits to the range of activities provided, partly because of lack of suitable space in the hospital and partly due to restricted availability of staff time to facilitate these activities or escort patients leaving the site. Thus there was a perceived contrast between the almost regimented daily routine of activities in the week compared with the lack of stimulation and a corresponding sense of boredom at the weekends. These are issues which are probably especially important for psychiatric patients who have relatively long stays in hospital, as compared with patients in general medicine and surgery, for whom length of stay is usually short and discharge is timed to avoid staying over weekends when the level of staffing is reduced. Some complained of a lack of activities such as a gym with equipment which helped to 'work off' their sense of frustration:

"from Monday to Friday there's activities ... but not during the weekend ... it's a good thing they have the weekends open. It's a shame there's no outreach worker, people would be escorted, leave to go to the pictures ..." (U) .

"It would have been nice to have a little bit more space to do the pool [billiards] and stuff, like, chill out—those kinds of things which a lot of clients are very good at and we quite like" (C).

"It would have been nice to have a shop within the hospital. We have a restaurant but it's only open between 9.00 and 5.00 ... there is nowhere where the patient can go and have a cup of tea ... [so] they can just get out of the ward" (S).

Other suggestions were made about activities which would be desirable therapeutically, and which had implications for hospital design and location, including working in a garden or greenhouse, cooking for oneself, getting out into the fresh air, and trips out from the hospital. A user advocated occupational therapy over medication, saying that staff should encourage users to pursue their special interests (for example, writing poetry), "rather than just fill up people with medications and push them on like cured zombies" (U).

However, the mere fact that facilities are available may not give all patients the confidence to use them. The following quote, from a female patient, illustrates how she felt inhibited to use the television room. " They have a TV in there for watching. So I went and stood outside, because I was scared if I watch it they would say no" (U). Although the physical environment was providing a space the patient wanted to use, the social environment did not give her a sense that she was permitted to use this space.

Integration into sustainable communities

The discussion concerning need for more contact with the community surrounding the hospital was associated with the question of the geographical location of the hospital and its connection with the rest of the physical and social urban landscape. On one hand, the urban location offered potential for activity outside the hospital, to help users maintain community links and facilitate the move out of hospital and back into the community. On the other hand, as noted above, staff were not always available to help patients during outings from the hospital: "where the unit is situated is ... close obviously to those amenities ... Green Street and shops and things like that. So at least it's near, you know, people can keep up the family contacts and take part in normal nonpsychiatric related activities" (C).

"I think they needed more outreach workers, basically, to take people out and socialise back into the community, because once you leave hospital, once you've been in there such a long time, it's very difficult to get back into society, unless you've been within society on a weekend or a day trip" (U).

Access to and from the local neighbourhood was not only important for patients but also for staff and visitors. Related to this was discussion about the degree to which the hospital had achieved aspirations for sustainable transport links to the wider community. There was general agreement that it is important to be able to get to the site easily and safely, but the original plans for sustainable public transport links to the new hospital had not been implemented because of unplanned restrictions in the design of the approach roads. The hospital buildings are reached by a side road off the main thoroughfare, which lacked proper footpaths and at night was ill lit. This was a source of concern to some of the participants, especially for staff when travelling to work.

"I think at night time it's really scary. I drive, I would not walk up there" (S).

"we're always stuck, just getting in ... maybe 25 minutes every day.... I don't know why this building was designed with such poor access" (S).

"in the original design the transport plan was a green travel plan .... The bus was meant to drive in here ... [But] when London Transport saw it, it would actually be physically hard to drive a bus up there ... so we've got a fundamental problem" (S).

Thus problems of inaccessibility and isolation from the local community, associated with earlier asylum institutions in semirural areas, seemed to be reproduced in this urban hospital. The comments from our informants seemed to suggest that, in these respects, the hospital design failed to support its function as a significant civic building or as an integrated part of the urban fabric.

Conclusions: potential and obstacles for therapeutic landscapes in hospitals

In this paper we have commented on the congruence between the lay views of psychiatric hospital design reported here and the findings from research in health geography (for example, Gesler, 1992; Gesler and Kearns, 2002), from environmental psychology and environmental management (for example, Canter and Canter, 1979; Douglas and Douglas, 2005; Holahan, 1979; Reizenstein, 1982), and from clinical comparisons of health outcomes for patients in different design settings (for example, Lawson et al, 2003; Parsons et al, 1998; Ulrich, 1997; Ulrich et al, 1991; Varni et al, 2004). These all suggest that hospital design is important for patient well-being because it has a bearing on: perceived levels of respect and empowerment for people with mental illness; efforts to achieve the right balance between security and surveillance versus freedom and openness for patients; the sense of privacy and refuge, and the social interactions experienced by patients and staff; psychological comforts of a

homely environment and contact with nature; opportunities to exercise self-expression, autonomy, and consumer choice; and integration into sustainable communities.

Of the three environments that comprise the therapeutic landscape concept, physical environments appear to be the most commonly considered in hospital designs by architects, planners, and government ministers. This may be due, in part, to the success of environmental psychologists and others in getting across the results of their studies over the past few decades. In this study, respondents commented, positively or negatively, on several aspects of the physical environment: light, colour and quality of materials, food quality, air conditioning, and gardens.

Since they are relatively neglected in hospital design (Gesler et al, 2004), we stress here aspects of social and symbolic environments that were mentioned by respondents as often, if not more often, than physical environments. Under social environments, we note that achieving the correct balance between the felt need by nurses to supervise users and the rights of patients to be free of supervision was a hotly debated issue. Respondents argued about specific design features, such as the role of the nursing station, door handles designed to prevent suicide by hanging, vision panels in doors, and window security. There was much discussion of the proper balance between private space for reflection and public space for activities and interaction between patients and staff. Ex-users emphasised the importance of being empowered to make more decisions concerning their treatment and environments. Social relations involving difference were also commented on. There was concern that female patients needed to be protected from male harassment and that more could be done to respect differences between the various social, ethnic, and faith groups living and working in the hospital.

Achieving respect was a major component of the symbolic environment for ex-users. Former patients expressed strong feelings about being shouted at or talked down to by nurses. Some felt that they were treated as a danger to society, the lowest of the low. Specific design features had powerful symbolic force for patients, including location on a waste site near a busy highway and the very visible high fence erected around the secure unit that gave the impression of a prison. Several respondents remarked on aspects of the 'homeliness' of the place: the relaxed, warm atmosphere in tune with everyday living, and the feeling of a refuge or protective space. It was also pointed out by some that an overemphasis on 'homeliness' could make it more difficult for patients to leave the hospital and resume living within the community.

From a geographical perspective, we conclude that theories about therapeutic landscapes are relevant for hospital design and that research in hospital settings, as well as in other sorts of 'healing places', can usefully contribute to knowledge in this field of health geography. We agree with authors such as Gillespie (2002) and Parr et al (2003) who have argued that health facilities provide important settings for research on the interactions between physical, social, and symbolic environments as they relate to health.

Our findings are also relevant to policy for health facility design and they are consistent with reviews of the history of hospital design in the UK, (for example, Francis et al, 1999; Gesler et al, 2004), in which it has been argued that in addition to clinical functionality and clinical outcomes (which have tended to be particularly emphasised in research and guidelines on modern hospital design), other aspects of design are also important for well-being. While we certainly support calls for an 'evidence based' approach to hospital planning, there is probably room for discussion about what such an approach might be. Empirical studies of clinical outcomes or 'satisfaction' surveys do not always help us to understand *why* certain aspects of hospital design are important to the wellbeing of hospital patients and health professionals, so we suggest they should be complemented by more qualitative studies to help us to

understand the causal processes more fully. Approaches which pay attention to the perspectives of different stakeholders also reveal different points of view, ambiguity, conflict, and debate over specific design features that quantitative studies may not identify, and which may limit the potential for evidence-based hospital design to promote 'wellbeing'. The views of our informants in this study reflected some persisting challenges to the creation of therapeutic hospital design in the current wave of hospital building in Britain. Our findings suggest several key issues that were important for the way that this new psychiatric hospital was designed, and we found that these had been considered to a varying degree and with varying success in the design process to date.

A first set of issues concerned the extent to which patients and staff in a hospital are empowered to influence the design of the hospital environment. Our informants (especially the ex-users) emphasised issues of respect for patients, and involvement of service users in the design process and in decisions about use of the care spaces provided in the new hospital. Our research underlines the importance of consulting with a range of users over design of new healthcare facilities. Certain issues seemed more likely to be raised by users than by other informants in our study. Users were particularly aware of how the hospital site and design symbolised public perceptions of mental illness and mental health and their relatively marginalised status in society. They linked ideas about hospital design to their experience of social relationships between patients and staff. Their comments showed that it was important to consider their needs for informal uses of hospital space which were not part of formal treatment and rehabilitation programmes.

We also noted how understanding of models of psychiatric care relate to discussion of the design and use of hospital space. The contemporary role of inpatient psychiatric care is to be part of a system stressing independent living in the community. A hospital design which helps patients retain and develop skills for independent living, and provides sustainable connections to the wider community is especially important. Our findings from the psychiatric sector support Douglas and Douglas (2005, page 264) who reported on a similar study of a general hospital in Salford and called for "homely environments that supported normal lifestyle and family functioning and designs that were supportive of accessibility and travel movements through transitional spaces."

However, even with enhanced consultation, there are serious challenges to attempts to make hospital design congruent with a preferred model of care. This would require resolution of different and sometimes conflicting requirements for hospital design. For example, creating a homely atmosphere may not sit comfortably with the imperative to discharge patients back to the community as soon as their health permits. Furthermore, we question how far it is currently possible to plan hospital design according to some consensus view on the way that mental health care should be provided in inpatient settings. For example there was a lack of consensus among health professionals over how to balance patients' needs for freedom and autonomy against what some staff saw as the need for observation and surveillance of patients to ensure security and safety. Furthermore, accepted criteria for good practice in health care evolve over time and it is particularly difficult to plan structures as long lasting as a building to be flexible in response to changing requirements. Ideally there should be potential to modify aspects of new hospital design as the building project progresses, and to alter the nonclinical services provided in the hospital when it is built. However, the long timescales required to plan a hospital and the 'rigidity' of the PFI contracting process make this difficult to achieve. Our study also raises questions over how capital expenditure on health care infrastructure, such as new hospitals, is coordinated with revenue resources which influence staffing levels. We noted that some of the potential

offered by the new hospital buildings and their location could not be used because of lack of staff to support some types of activities for patients. Our findings therefore seem to us to illustrate both the potential of and limitations to therapy by design in psychiatric hospitals, and suggest that therapeutic landscapes may be contested spaces.

Acknowledgements. We are grateful for funding from the British Academy for this project and for the contributions from users, staff and consultants at the Newham Centre for Mental Health, London, England.

References

Atun R, McKee M, 2005, "Is the private finance initiative dead? It may have failed in the United Kingdom, but that won't stop it being exported" *British Medical Journal* **331** 792 – 793

Ben-Sira Z, 1983, "The structure of a hospital's images" *Medical Care* **21** 943 – 954

CABE, 2000 *Design Quality in PFI Projects: HM Treasury Guidance Note No. 7* available from The Office of Government Commerce, Roseberry Court, St Andrews Business Park, Norwich NR7 0HS

Canter S, Canter D, 1979, "Building for therapy", in *Designing for Therapeutic Environments* Eds D Canter, S Canter (John Wiley, New York) pp 1 – 28

Cornish C V, 1997, "Behind the crumbling walls: the re-working of a former asylum's geography" *Health and Place* **3** 101 – 110

Cosgrove D, Jackson P, 1987, "New directions in cultural geography" *Area* **19** 95 – 101

Curtis S, 2004 *Health and Inequality: Geographical Perspectives* (Sage, London)

Dear M, 2000, "Asylum and post-asylum geographies after twenty-five years" *Health and Place* **6** 257 – 259

Dear M, Taylor S, 1982 *Not on Our Street: Community Attitudes to Mental Health Care* (Pion, London)

Dear M, Wolch J, 1987 *Landscapes of Despair: From Institutionalization to Homelessness* (Polity Press, Cambridge)

Department of Health, 2005, "Private finance initiative (PFI)", http://www.dh.gov.uk/ProcurementAndProposals/PublicPrivatePartnership/PrivateFinanceInitiative/fs/en

Douglas C, Douglas M, 2005, "Patient-friendly hospital environments: exploring the patients' perspective" *Health Expectations* **8** 264 – 276

Driver F, 1985, "Power, space, and the body: a critical assessment of Foucault's *Discipline and Punish*" *Environment and Planning D: Society and Space* **3** 425 – 446

Dyck I, Kontos P, Angus J, McKeever P, 2005, "The home as a site for long-term care: meanings and management of bodies and spaces" *Health and Place* **11** 173 – 185

Edginton B, 1997, "Moral architecture: the influence of the York Retreat on asylum design" *Health & Place* **3** 91 – 99

Foucault M, 1979 *Discipline and Punish: The Birth of the Prison* (Penguin, London)

Foucault M, 1993 *Naissance de la Clinique* 3rd edition (Quadridge/Presses Universitaires de France, Paris); 1st edition 1963

Francis S, Glanville R, 2001 *Building a 2020 Vision: Future Health Care Environments* Medical Architecture Research Unit, South Bank University (Nuffield Trust, London)

Francis S, Glanville R, Noble A, Scher P, 1999 *50 Years of Ideas in Health Care Buildings* (Nuffield Trust, London)

Furlong R, 1996, "Haven within or without the hospital gate: a reappraisal of asylum provision in theory and practice", in *Asylum in the Community* Eds D Tomlinson, J Carrier (Routledge, London) 7, pp 135 – 168

Geores M, Gesler W, 1999, "Compromised space: contests over the provision of therapeutic environments for people with mental illness", in Ed. A Williams *Therapeutic Landscapes: The Dynamic Between Wellness and Place* (University Press of America, Lanham, MD) pp 99 – 121

Gesler W M, 1992, "Therapeutic landscapes: medical geographic research in light of the new cultural geography" *Social Science and Medicine* **34** 735 – 746

Gesler W M, 2003 *Healing Places* (Rowman and Littlefield, Lanham, MD)

Gesler W M, 2005, " Therapeutic landscapes: an evolving theme" *Health and Place* **11** 295 – 297

Gesler W M, Kearns R A, 2002 *Culture/Place/Health* (Routledge, London)

Gesler W, Bell M, Curtis S, Hubbard P, Francis S, 2004, "Therapy by design: evaluating the UK hospital building program" *Health and Place* **10** 117 – 128

Gillespie R, 2002, "Architecture and power: a family planning clinic as a case study" *Health and Place* **8** 211 – 220
Gross R, Sasson Y, Zarhy M, Zohar J, 1998, "Hospital environment in psychiatric hospital design" *General Hospital Psychiatry* **20** 108 – 114
Health and Place 2005, "Special section. Therapeutic landscapes: an evolving theme" **11**(4) 295 – 348
Holahan C J, 1979, "Environmental psychology in psychiatric hospital settings", in *Designing for Therapeutic Environments* Eds D Canter, S Canter (John Wiley, New York) pp 213 – 231
Hughes J, 2000, "The 'matchbox on a muffin': the design of hospitals in the early NHS" *Medical History* **44** 21 – 56
Ittelson W H, Proshansky H M, Rivlin L G, 1970, "The environmental psychology of the psychiatric ward", in *Environmental Psychology* Eds H M Proshanksy, W H Ittelson, L G Rivlin (Holt, Rinehart and Winston, New York) pp 419 – 439
Jones M, 1979, "The therapeutic community, social learning and social change", in *Therapeutic Communities: Reflections and Progress* Eds R D Henshelwood, N Manning (Routledge and Kegan Paul, London) pp 1 – 9
Kearns R A, 1995, "Medical geography: making space for difference" *Progress in Human Geography* **19** 249 – 257
Kearns R A, Barnett J R, 1997, "Consumerist ideology and the symbolic landscapes of private medicine" *Health and Place* **3** 171 – 180
Kearns R A, Gesler W M (Eds), 1998 *Putting Health into Place: Landscape, Identity and Well-being* (Syracuse University Press, Syracuse, NY)
Kelner M, Wellman B, 1997, "Health care and consumer choice: medical and alternative therapies" *Social Science and Medicine* **45** 203 – 212
Lawson B, Phiri M, Wells-Thorpe J, 2003 *The Architectural Healthcare Environment and its Effect on Patient Health Outcomes* (The Stationery Office, London)
Main T, 1980, "Some basic concepts in therapeutic community work", in *The Therapeutic Community* Ed. T Main (Croom Helm, London) pp 52 – 63
Manning N, 1989 *The Therapeutic Community Movement: Charisma and Routinization* (Routledge, New York)
Milburn A, 2001, Speech at Building a Better Patient Environment NHS/Prince's Foundation Conference, 16 November, http://www.princes-foundation.org/news/milburn.html
Milligan C, 2000, " 'Breaking out of the asylum: developments in the geography of mental ill-health: the influence of the informal sector" *Health and Place* **6** 189 – 200
Moon G, 2000, "Risk and protection: the discourse of confinement in contemporary mental health policy" *Health and Place* **6** 239 – 250
Moos R H, 1997, "The social climate of hospital programs", in *Evaluating Treatment Environments: The Quality of Psychiatric and Substance Abuse Programs* 2nd edition, Ed. R H Moos (Transaction Publishers, New Brunswick, NJ) pp 23 – 44
Parr H, 1999, "Mental health and the therapeutic geographies of the city: individual and collective negotiations", in *Therapeutic Landscapes: The Dynamic Between Wellness and Place* Ed. A Williams (University Press of America, Lanham, MD) pp 123 – 151
Parr H, 2000, "Interpreting the 'hidden social geographies' of mental health ethnographies of inclusion and exclusion in semi-institutional places" *Health and Place* **6** 225 – 238
Parr H, Butler R, 1999, "New geographies of illness, impairment and disability", in *Mind and Body Spaces* Eds R Butler, H Parr (Routledge, London) pp 1 – 24
Parr H, Philo C, Burns N, 2003, " 'That awful place 'was home': reflections on the contested meanings of Craig Dunain asylum" *Scottish Geographical Journal* **119** 341 – 360
Parsons R, Tassinary L G, Ulrich R S, Hebl M R, Grossman-Alexander M, 1998, "The view from the road: implications for stress recovery and immunization" *Journal of Environmental Psychology* **18** 113 – 139
Philo C, 1989, " 'Enough to drive one mad': the organization of space in 19th-century lunatic asylums", in *The Power of Geography* Eds J Wolch, M Dear (Unwin Hyman, Boston, MA) pp 258 – 290
Philo C, 2000a, "Post-asylum geographies: an introduction" *Health and Place* **6** 135 – 136
Philo C, 2000b "*The Birth of the Clinic*: an unknown work of medical geography" *Area* **32** 11 – 19
Pinfold V, 2000, " 'Building up safe havens ... all around the world': users' experience of living in the community with mental health problems" *Health and Place* **6** 201 – 212
Reizenstein J E, 1982, "Hospital design and human behavior: a review of the recent literature", in *Advances in Environmental Psychology. Volume 4. Environment and Health* Eds A Baum, J Singer (Lawrence Erlbaum Associates, Hillsdale, NJ) pp 137 – 169

Rogers A, Pilgrim D, 1996 *Mental Health Policy in Britain: A Critical Introduction* (Macmillan, London)
Rothberg M, Abraham V, Lindenauer P, Rose D, 2005, "Improving nurse-to-patient staffing ratios as a cost-effective safety intervention" *Medical Care* **43** 785 – 791
Sack R D, 1986 *Human Territoriality: Its Theory and History* (Cambridge University Press, Cambridge)
Scull A, 1979 *Museums of Madness: The Social Organization of Insanity in Nineteenth Century England* (Allen Lane, London)
Sibley D, 1995 *Geographies of Exclusion* (Routledge, London)
Smith C J, 1977, "Geography and mental health", Resource paper No. 76-4, Commission on College Geography, Association of American Geographers, Washington, DC
Smith C J, 2000, "Many years on ... when afar and asunder?" *Health and Place* **6** 251 – 255
Smith C J, Giggs J (Eds), 1988 *Location and Stigma: Contemporary Perspectives on Mental Health and Mental Health Care* (Unwin Hyman, London)
Smith R G, 2000 *Windows in Time: The Spatial Experience of Chronic Illness and Disability in Men from Childhood to Adulthood* unpublished PhD thesis, Department of Geography, Queen Mary, University of London, London
Spring M, 2001, "Art surgery" *Building* number 48, 36 – 41
Sylvester J, 1998, "Attributional coding", in *Qualitative Methods in Organizational Research* Eds G Symon, C Cassell (Sage, London) pp 73 – 93
Thornicroft G, Tansella M, 2004, "Components of a modern mental health service: a pragmatic balance of community and hospital care—overview of systematic evidence" *British Journal of Psychiatry* **185** 283
Tomlinson D, Carrier J (Eds), 1996 *Asylum in the Community* (Routledge, London)
Tuan Y-F, 1974 *Topophilia: A Study of Environmental Perception, Attitudes and Values* (Prentice-Hall, Englewood Cliffs, NJ)
Ulrich R S, 1984, "View through a window may influence recovery from surgery" *Science* **224** 420 – 421
Ulrich R, 1997, "A theory of supportive design for health care facilities" *Journal of Healthcare Design* **9** 3 – 7
Ulrich R S, Simons R F, Losito B D, Fiorito E, Miles M A, Zelson M, 1991, "Stress recovery during exposure to natural and urban environments" *Journal of Environmental Psychology* **11** 201 – 230
Varni J, Burwinkle T, Dickinson P, Sherman S, Dixon P, Ervice J, Leyden P, Sadler B, 2004, "Evaluation of the built environment at a children's convalescent hospital: development of the Pediatric Quality of Life Inventory [TM] parent and staff satisfaction measures for pediatric health care facilities" *Journal of Developmental and Behavioral Pediatrics* **25** 10 – 20
Waller S, Finn H, 2004 *Enhancing the Healing Environment: A Guide for NHS Trusts* (King's Fund, London)
Weaver M, 2001, "Strange roads ahead for public architecture" *The Guardian* 19 October
Whitehouse S, Varni J W, Seid M, Cooper-Marcus C, Ensberg M J, Jacobs J R, Mehlenbeck R S, 2001, "Evaluating a children's hospital garden environment: utilization and consumer satisfaction" *Journal of Environmental Psychology* **21** 301 – 314
Wiles J, Rosenburg M, 2001, "Gentle caring experience: seeking alternative health care in Canada" *Health and Place* **7** 209 – 224
Wilson K, 2003, "Therapeutic landscapes and First Nations peoples: an exploration of culture, health and place" *Health and Place* **9** 83 – 93
Wolch J, Philo C, 2000, "From distributions of deviance to definitions of difference: past and future mental health geographies" *Health and Place* **6** 137 – 158