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Note on re-issue of the current paper.

It is a quarter of a century since this paper was published, but it seems to me that the issues it raises are still relevant and the research it draws on is now often forgotten. With hindsight it seems that the research reviewed was being carried out at a crucial stage in thinking about hospital designs. So although present-day hospitals are often very different from those that were the focus of the studies here the ways in which hospital design has implications for nurse patient interaction is just as relevant today.

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DESIGN CONTEXT AND NURSING ROLES

David Canter and Andrew Cooper

A SPECIAL PLACE FOR NURSING

The themes of this chapter are derived from the central premise that the profession of nursing, as it is generally understood, is characterised by a particular type of physical environment: the hospital. There is a growing awareness in many areas of professional life that the physical surroundings (such as the design, layout, acoustics and lighting) may make an important contribution to professional activities (Canter and Craik, 1981). Therapeutic environments in general have also been closely examined for the relevance of design to their functioning (Canter and Canter, 1979).

It seems likely that, more than many other professions, nursing has developed in relation to the development of the layout, planning and design of hospitals. Indeed in mediaeval times the care of the sick was frequently provided by monastic groups who had special facilities built into their institutions, where the provision of care and creation of special, spiritually pure places, separated from the profane community at large, housed the sacred duties of tending those who were sick in either mind or body.

However, even though Florence Nightingale secularised the calling of nursing, nevertheless the discipline of the religious order was preserved. Nursing and nurse education were firmly based in special buildings - hospitals - and caring for the sick outside hospital was regarded as supplementary to hospital nursing. The significance of these places has been emphasised by the undoubted benefits which have come from the great advances in the technology available to nurses in the modern hospital. This change in the environment from being primarily a 'caring' one to one that focuses on 'curing' by means of increased technological expertise is likely to have had important consequences for nurses' views of their profession, and of appropriate behaviour within the hospital environment. One is the pull towards ever greater reliance on the technology and fabric of physical services which are provided by the hospital, with its impact on the role of the hospital nurse as a caring technician. Another is the push out into the community, where the nurse will not have a specified building as her primary focus of activity. The absence of a special setting has implications for the role which the nurse performs, and the way in which she carries out her duties. Furthermore, this absence of a special setting has implications for the complementary role which the patient performs.

Within the hospital the ever closer reliance on the services and facilities of the hospital is fraught with the potential dangers which have been identified in other contexts as the 'technological fix' (Burton et al. 1968). This is the defining or 'fixing' of a problem by means of specifically technological solutions. The solution of the problem then comes to rely on the availability of the technology, any further difficulties requiring increased technical input. Thus simple human requirements may become locked up (fixed) within a complex technological system and earlier, simpler solutions to those problems are no longer available. A parallel would be cases in which people become reliant on medication to relieve symptoms, which might have been relieved by changes in diet, or life style, so that eventually non-medical changes are no longer of any use and aggravated symptoms can be cleared only by increased medication.

Illness and its cure, if seen in these technological terms, ceases to be understandable by, or under the control of, the person who is ill, and is viewed as a biological malfunction requiring the application of the appropriate technology, whether it be medical, physical or surgical. On entering hospital this view is supported and encouraged by the technology encountered, and by the reinforcing behaviour of the nurse who is seen as the guardian of

the technology, and indeed may well see herself as such too. Illnesses may even be defined in terms of what chemical or physical intervention is possible. Wards and their patients, for example, being regarded as 'medical' or 'surgical', 'orthopaedic' or 'oncology'.

Indeed, the organisation of hospital buildings and the way their component parts are labelled relates heavily to the particular technical requirements of the activities they house. As Kenny and Canter (1979) point out 'the general hospital, with its operating theatres medical wards and its many other facilities, not only makes a 'technological fix', possible, it also symbolises it.' (p311). This is also becoming true for psychiatric hospitals which have changed from being custodial environments to places where 'cure' is often seen as an application of technology in the form of a simple pill to the more complex ECT or laser surgery.

The changes in design and layout of hospitals, geared as they must be to particular functional and technical requirements, carry social and psychological implications. They also convey mixed messages to both nurses and patients. On the one hand the hospital symbolises warmth and caring as the foundation for treatment, as laid down by the religious orders; undoubtedly nurses are committed to providing this. On the other, it has come to symbolise the curative power of technology. For the nurse this mixed message contains a paradox and as a consequence nurses can become distanced from their patients as a way of resolving this conflict. Furthermore, the technology itself facilitates the use of this mechanism of conflict resolution. The problems associated with this paradox can be more readily avoided if there is an understanding of the social psychological concomitants of any given physical context. This understanding is of great importance when considering the effects on nurses of removing them from the hospital into the community. Understanding what they will have to do *without* when working in the community can be reached through investigating the social implications for nursing activities of the physical context of those activities. As mentioned earlier, there are likewise related implications for patients as well.

THE OPERATING THEATRE AS A FOCUS

Although the laboratories and special investigation facilities such as X-ray and cardiovascular examination are undoubtedly dominated by sophisticated technology, it is the operating theatres which reveal most clearly the way in which the physical surroundings carry social and psychological consequences. What is interesting about the operating theatre as a setting for nursing activities is that although the patient is the focus of attention, the nurses' activities are centred on the preparation and use of the various technological aids in the theatre. The relationship she has with the patient is mediated by the technology she

manipulates in the service of the surgeon. The technological environment determines very largely how she relates to her patient, and this is, in the event, a distant relationship, despite the intensity and urgency of the overall activity.

Similarly, the staffs' relationships to each other are determined, in the main, by the use of the physical services, space and equipment. Certain areas within the operating theatre are designated as being under the control of different members of staff. For example, the nurse referred to as the scrub nurse is charged with guarding and guaranteeing the asepsis of the table containing the surgical instruments. Her tasks thus have a clear environmental demarcation to them giving her the power in the social framework of the theatre to give short shrift to junior doctors who may accidentally encroach too close to the domain she protects by saying: 'Watch it, you're close to my table!' (Goffman 1969, p.105).

Goffman, a social scientist with particular interest in the processes of interaction between people, and how the situation they are in influences those processes, spent some time within operating rooms observing closely the interactions between staff. He points out that 'the scene of activity generates for the individual a self' (p. 102). He goes on to discuss the way in which some of the pressures on the individuals in an operating theatre are such as to lead to various mechanisms for enabling people to imply some distance between themselves as coping individuals and their intense roles in the setting. The technology, therefore, can become a defence against the anxiety aroused by the 'life and death' nature of the task in which the nurses are engaged. It also becomes a way of disengaging from the patient who, literally, embodies the struggle in which the staffs are engaged.

Admittedly, the operating theatre is an extreme example. Nonetheless it illustrates the way in which the nurses' view of themselves and their roles as nurses are open to definition from the setting they are in and the equipment they use. The extent to which the role of the nurse outside the operating theatre is influenced by the intensity and focus of her role within it is open to debate. Certainly in the course of her training, a nurse spends the majority of her time outside the operating theatre, and her contact with the special setting of the theatre is at the periphery. However, the heightened emotional intensity of the operating theatre when she does a tour of duty within it may be such as to alter lastingly her way of relating to her patients and other staff members.

What is clear is that physical settings can define the nurse's relationship with her patients, and a component of that setting is the equipment she is called upon to use. The effects of a particular setting can be illustrated by the surprise, bordering on disbelief, of the general nurse who, when extending her skills by taking further training in psychiatric nursing, discovers that she is allowed to sit down and talk to a patient on the ward without the reprimand she would incur in a busy ward of a general hospital. To put this viewpoint on nursing at its most extreme, the question can be asked whether the archetypal image of the nurse as the 'lady with the lamp' (Florence Nightingale) should be thought of not as a

ministering angel, but as the person whose job it was to carry the lamp! If nurses find themselves in the role of property mistress to the cast, preparing and assisting but never in a leading role themselves, they may feel that their real vocation to care for their patients and help them back to health has been usurped by the demands of the setting.

Admittedly, what has been expressed here is an extreme and oversimplified view, complicated not least by the changing relationships between doctors and nurses and between both these professions and the increasing number of other professions ancillary to nursing. Differing areas of nursing also give different emphases. Psychiatric nurses, for example, are more likely to feel the limits and constraints of a role defined by an environmental and technical context than are, say, nurses in an intensive care unit. For the duration of the shift in which the nurse is working in an intensive care unit, her attention is focused on one patient in bed. The environment in which she is working is, therefore, defined by the various technological aids alongside the bed which monitor and control her patient's physical condition. The physical limits and constraints the nurse experiences in intensive care are wholly appropriate to the goal of her work, namely providing minute by minute nursing care for one patient. As such they are unlikely to be felt as unpleasant or even experienced as limits or constraints at all.

The psychiatric nurse, however, is required to provide nursing care for a number of patients simultaneously in a variety of settings such as the dayroom, the dormitory, the dining room, the corridor etc. A role that has come to be defined by an environment and technical context can present limits, constraints and even confusion for the psychiatric nurse. If not actually involved in a 'technical fix activity' (giving an injection or a tablet, assisting with electro-convulsive therapy), the environment offers little or no indication of how the nurse should interpret a role defined by a technical context. Is the nurse to be constrained in her interaction with her patients to those activities consonant with a role defined by 'technical fixes' or is she to re-define it in such a way that the environment enhances her nursing care? If the technical aspects of nursing are seen as not being the primary elements that define the role of the psychiatric nurse, other activities, such as talking privately with patients, going for walks, developing domestic skills, may begin to define the role. At this point the environment/technical limits and constraints may be noticeably reduced. It is still important to establish as clearly as possible the extreme case of context dependence as a basis for understanding situations in which the relationships between role and environment are more subtle variations of these.

ECOLOGY AND CONCEPTUAL SYSTEMS

An obstetric example

A fascinating study of an obstetric hospital carried out by Rosengren and DeVault (1970) throws some useful light on some of the more subtle ways in which the physical surroundings reflect and enhance certain roles and activities. Over a four-month period they spent 150 hours observing what went on in 'a large lying-in hospital in an eastern metropolitan area' of the United States. One of the most crucial discoveries was that where an activity or relationship between two people took place was of enormous importance in determining the quality and nature of that transaction. Merely recording what occurred, which is what they set out to do, became somewhat meaningless since they found that it was 'improper, for example, to speak only of the "doctor-nurse" relationship without specifying where those two persons interacted'.

Furthermore, they found that there were distinct regions of the hospital: 'each region is itself set apart in several ways from the others. This segregation appears to be accomplished not only by space but also by rules of dress, of expected behaviour and of decorum - all of which serve to indicate the dissimilarity of each place, as well as to present an image of the place that might cast both patients and staff into desired roles with respect to one another' (p.443). Thus, in the context of this obstetrics example at least, a variety of distinct roles existed for the nurse. These ranged from the friendly, casual relationships of the admitting office, where no barriers such as doors existed, to the much more formal, proscribed relationships of the delivery room with its stainless steel, bright lights and special equipment. It comes as no surprise to experienced nurses to learn that Rosengren and DeVault argue strongly for the centrality of the delivery rooms, and that the roles nurses perform there are given great emphasis. It is surely no coincidence that here, once again, the nurse is encountered as one skilled in the administering of technology, much in the same way as was the case in the operating theatre.

A Children's Hospital

A parallel to regionalisation described by Rosengren and DeVault was also found to exist in a large children's hospital in Scotland studied by Canter (1972). Using a different procedure derived from the repertory grid technique of Kelly (1955). Canter revealed how the nursing staff saw the hospital, as well as the ward, being comprised of three main regions - specialist treatment areas of which the operating theatre is paramount in importance, bed bays on the wards where patients spend a considerable amount of time, and what Goffman would call 'back stage' areas such as laboratories and staff rooms which are out of bounds for patients.

It is the interaction between the latter two regions which provides the main environmental context for nursing.

However, the existence of a back stage preparatory region on the one hand and an area which is for patients yet readily accessible to the nurses, on the other, gives the region in which 'nursing' occurs a specially significant quality in the conceptions of all concerned. It is to this region and the activities which take place within it (whether it is the treatment rooms on a ward or an operating theatre) that the hospital is dedicated. It is conceptually, and often physically, central to hospital activities. Other regions thus tend to be seen as a preparation for, or a result of, this central activity. What happens, then, when the nurse moves out of this building and away from this focus? What then is her role?

THE CONTEXT OF THE WARD

Given the framework provided for the nurse's role by the physical context what, if any, advantages are to be accrued from understanding what nurses will have to do *without* when working in the community? To answer this we must now look a little more closely at the nurse in the hospital ward. A number of studies have been carried out in which the location of activities on a ward have been systematically mapped over a period of time. Ittelson et al (1970) worked in a psychiatric hospital, and Canter (1972) worked in wards in a children's hospital. Sime and Sime (1979) carried out a similar study in a secure ward for forensic patients. These studies all used 'behavioural mapping' (Ittelson et al. 1970). This can be regarded as a refinement of the ecological approach of Rosengren and DeVault (1970) mentioned earlier, in that the exact location of any activity is recorded on a plan of the ward being studied. A plan coded with who is doing what, where, is prepared for each of a large number of time periods, almost like taking photographs at specific intervals of time. Composite plans can then be prepared to show changes over time of the spatial distribution of people and activities overall.

In the different behavioural mapping studies similar patterns emerge. Three broad regions of the space can be identified which do relate directly to the categories of nurses' concepts discussed above. The region of the ward in which nurses are most often found is that area designated as the office, or nurses' station. In the large, open 'Nightingale' ward, which usually has a central aisle with all the beds facing into it and an office at one end, a form of 'progressive patient care' frequently takes place. Those patients who are very ill are kept in beds close to the office and are moved further away as they recover. The design of modern hospital wards, sometimes called the 'Nuffield' ward design because they were proposed by the Nuffield research team (1955), is one in which the ward is divided up into bays with the nurses' station in the centre. Here, too, the idea of 'progressive patient care' is

frequently reflected by locating four or six bedded bays near the nursing station and larger bedded bays further away. But in both designs the consequences are the same. The area of intensive nursing is located near and area specifically for the nurses. Thus, partly for reasons of efficiency, there is a limited area of the ward in which nurses are most frequently found. Those hospital designs that put a treatment room and possibly a preparation room close to the nurses' station also encourage the same uneven distribution of activity.

The same kind of patterning is apparent in mental hospitals, possibly as a result of grafting general nursing regimes into a psychiatric setting at a time when the mentally ill began to be regarded as 'sick' and needing treatment, rather than 'bad' and needing custodial care. The boundaries are, perhaps, not so clear. In this respect hints within the ward can be seen of the confusion that the nurse can experience when nursing out of the context of areas of well-defined activity. It must be made clear that no criticism of nurses and their use of space are intended by the above account. There are, on the contrary, some considerable advantages to be gained by limiting the amount of time that nurses may spend moving around the ward. The point that is being made is that it seems that certain areas are defined as appropriate for 'nursing' which means that other areas become, by default, non-nursing areas. These demarcations reflect the same process; the recognition that the activity of nursing has a physical locus. One example, drawn less systematically than the others already given, is from personal experience of a recently built out-patient Accident and Emergency department. Clear environmental demarcations, such as fitted carpets and easy chairs in the reception and waiting areas, stainless steel, tiled floors and cubicles in the clinical areas, are apparent. From the earlier examples quoted, it comes as no surprise to discover that nurses seldom, and doctors virtually never, cross the barrier (large double doors) between the two areas. The technological accoutrements of the diagnostic and healing processes are clearly the domain of those who are engaged in putting right that part of the system that has become faulty and dysfunctional. The receptionist, who seldom ventures across the boundary either, has charge of the 'person' - name and address, close relatives etc. The way the nurses use, and respond to, the whole Accident and Emergency environment indicates that the business of nursing is seen by them as being located almost exclusively in particular areas of the department. Interestingly, a different approach has more recently been adopted by another hospital's Accident and Emergency department, for which the instigator, the senior nurse, gained national recognition and an award.* The department is regarded much more as a 'whole' place, and nurses undertake many more of the welcoming and receiving tasks. Patients are accompanied by 'their' nurse throughout their time in the department. It is said

* This award was given by the Nursing Times in 1985 for the most beneficial innovative changes made to the design of the building by a hospital.

that patients' anxiety is greatly reduced by this and that the through-put of patients is facilitated.

A COMPARISON OF WARDS

As has been indicated, the design and layout of hospital wards has developed in relation to the development of the pattern of nursing activities. The influence of the conception of a typical 'nurses day', and the work flow of which the nurse and patient are considered to be a part, can be traced to early post-war Nuffield research (Nuffield 1955) which led to current hospital ward designs. In many ways the Nuffield ward design was the first major change in the design of wards in British hospitals since the long, open layout named after its designer, Florence Nightingale.

From looking at what the nurse does during a day the Nuffield team decided that the large open ward was inappropriate and that a series of compartments, bed bays, arranged around a nursing station, treatment and preparation rooms, would reduce wasted movements and generally fit nursing activities more readily. What the Nuffield team failed to do, and this weakness in the research is argued in some detail by Kenny (1983), was to consider the *service* the nurse was providing, rather than just looking at what she was doing. In a Nightingale style ward, the reassurance afforded to some patients by seeing the nurse working nearby had not been taken into account; neither had the implications for nurse training been considered in terms of the Sister being able to keep an overall eye on what is going on in her ward. Thus the Nuffield observers, and it must be admitted their own and later nursing advisors, formed a conclusion that the activity of treatment was inappropriate on a ward and should be moved to a treatment room. The pressures of the operating theatre focus can also be seen at work here, creating a domain in which the nurse can perform off the ward.

In the psychiatric environment, there has been a related and similar change in ward design. From the large-roomed wards of the old Victorian hospitals where privacy, for the patient, was virtually impossible to find, there has been move to a more Nuffield style of ward, particularly in the psychiatric units of District General Hospitals. Here smaller divisions of space are found, with a few beds in a number of bays. The messages from this environment are mixed for both nurses and patients. Privacy is, apparently, offered by the environment; yet nursing procedures dictate that patients should be easily observed (especially on an admission ward). Either the bedroom areas become out of bounds for patients during the day, or else the nurse has make individual and fairly frequent checks on the 'private' areas in the ward. The environment is not helping either the patient or nurse in their interactions with each other.

When an environment is being designed for specific purposes, the ideas that govern the design are frequently those of the designer and commissioning agent only, intentions of the participants for whom the environment being designed are not sought at the design stage. Furthermore, the variety of meanings the participants attribute to a certain environment are not taken account, and these meanings may be very different those of the designers because of the different roles they each have in relation to the proposed environment (see Canter 1977).

This is illustrated by the findings of Rivlin and Wolfe (1979) in their study of a large home for mentally handicapped children. The design brief and architectural plans were created by one set of people who had clear ideas about how a children's home should be with regard to the sorts of activities that should be carried on there and the degree of integration that the home should have with the wider community. The person who was subsequently appointed as Director had very different ideas about how a children's home should be used, with the result that the 'fit' between the intentions of the staff and the intentions of the designer, as expressed in the structure of the building, was poor. The activities of both staff and children were not helped by this mismatch.

In the case of hospital wards it seems that there is little consensus about the meaning of the environment between those two distinct groups who live and work within it. An extreme example of this is the situation in which a person is compulsorily taken into a psychiatric hospital because he is too ill to understand his need for in-patient treatment. For him or her the ward can be seen as somewhere from which to escape, whilst for the nurse it is seen as somewhere to be kept escape-proof in the best interests of the patient.

WAYS OF THINKING ABOUT NURSING

One useful way of thinking of these strengths and weaknesses is in terms of the models of the nurse's role which the Nuffield and Nightingale designs enshrine. It is easiest to start with a general framework of what the nurses' objectives are, and then to consider how different ward designs enshrine variants of this. One general model of the nature of nursing care, as reflected in ward design, has been proposed by Kenny and Canter (1981) on the basis of their study of nurses' evaluations of hospital wards. From this they developed a general framework for considering the role of the physical context of nursing. This framework starts from the premise that the central objective of nursing is to provide care and comfort to patients. However, the model also makes the point that this provision can be exercised over various distances - the immediate bedside, or the ward as a whole. In other words a distinction is made between direct and indirect provision of care, and this is related to the design of the ward.

The study also shows that ward design has a relevance to three distinguishable aspects of the nursing situation: the social, the spatial and the engineering services back-up. Taking all these constituents together, a detailed framework is provided for considering ward-related nursing roles and the different emphases this can have as reflected in ward design.

The layout of the traditional Nightingale ward indicates that the full range of interactions between patients and staff are catered for. All the beds and their occupants are visible to the staff in the wards, as are those patients who are allowed out of bed and are walking about the ward. Activities ancillary to nursing are carried out elsewhere. The nurse is seen as one who dispenses help and comfort to those who need it, and because she is visible to all on the ward and within earshot she is easily summoned. By contrast, the Nuffield plan provides a ward which is compartmentalised into bed bays, treatment spaces, nurses' station and offices. The nurse is either at close range in direct contact with the patient or not. There is no indirect contact between patient and nurse as in the Nightingale ward. Those areas near the nurses' station, perhaps close to the treatment facilities, are clearly under the nurses' control. Here, she is in command doing the job she probably regards as central.

But what of the other parts of the ward? What of the space designated as being for patient's relaxation? In the Nightingale ward this is any free area on the ward so it is always within the nursing area. The fact that different rules apply to the patient areas in the two different types of ward can readily be observed from the fact that in the past smoking was sometimes allowed in the day spaces of Nuffield wards but was typically forbidden in the central patient areas of Nightingale wards. Surely, the roles which the nurse takes in these different settings are very different too?

It would appear, then, that the Nightingale ward stresses the broad provision of nursing care as being central to the activity of nursing, while the Nuffield design owes more to the intensity of the operating theatre and the 'technological fix' approach to nursing. Of course, the social and clinical skills of the nurse, in the great majority of cases, override the effects of the assumptions built into the designs so that patients' reactions to hospitalisation are usually positive (Raphael 1969). Yet the costs that nurses, and patients, must pay for counteracting these design pressures are not known, nor is it clear how deeply ingrained are the habits of staff-patient interaction encouraged by these designs.

In terms of the costs of different ward designs, Trites et al. (1970) in an extensive study of new ward designs, quite different from the Nightingale and Nuffield designs, were able to show clear relationships between ward designs and nursing activities. Three broad designs of ward were looked at: radial with bed areas along corridors radiating from the nurses' station, double corridor, and single corridor.

The analysis of the data collected in this study demonstrated that the nurses on the radial wards not only spent less time in travelling around the ward, but that this greater efficiency in layout resulted in the nurses spending more time with their patients. Thus the role of the nurse as comforter and care-giver was enhanced because she was not spending so much time travelling to prepare and give treatments. The analysis of staff absenteeism, staff accidents on the ward, and questions about which type of design nurses, doctors and patient preferred all confirmed the greater success of the radial wards.

HOMES AND HOSTELS

It is when the nurse is placed outside the District General Hospital that the inappropriate effects of her training within that setting are most apparent. Mazis and Canter's study (1979) of homes for mentally handicapped children looked at 20 different institutions. They varied in size from those which housed a handful of children to those which accommodated a thousand or more adults and children.

The degree of cleanliness of the home or hostel, and the extent to which the kitchen was an integral part of the home emerged from this study as general indicators of how much the home was used like a hospital by the staff and residents. Most places were cleaner than equivalent places in a private home and the children had less opportunity to use all places themselves.

Other institutions besides those for children present similar challenges for the nurse who steps outside the hospital ward. Provisions for design frequently do make such assumptions. Lipman and Slater (1979) were so concerned with this problem that they proposed a design for old peoples' homes which kept the staff as far from the residents as possible and thus enabled residents, they hoped, to gain as much autonomy from the organisation as they could.

Homes and hostels for the mentally ill present a marked contrast with hospital wards. A resident has a room which can be personalised and frequently the upkeep of the hostel - such as cleaning and washing up - is considered to be part of the residents' responsibilities. In addition, the kitchen is available for all who wish to use it.

For the patient who has spent a number of years in hospital this change in environment, and its concomitant change in expected behaviour, is often hard to make. So, also, can it be for the nurse who may feel confused by the confrontation between the 'internalised ward' she brings with her from her hospital training, and the reality of the 'home' in which she is required to care for her discharged patients. This is particularly so in the more ambiguous regions of facilitating self-help or providing a resource. In these cases

environmental design may not provide clues as to the most appropriate, facilitating behaviour the nurse can adopt.

CONCLUSION: BEYOND THE INSTITUTION

The 1950's image of the midwife on her bicycle, and later the community nurse in her Mini-Minor, has passed into popular folklore. These and subsequent nursing roles help to emphasise the implications for nursing of the activity no longer being based within the context of an institution. Here the setting is defined by the 'patient' within the community. Must the nursing station and preparation room now be replaced with the famous black bag? Must the kitchen be turned into the treatment room/operating theatre? Or is it possible actually to develop new frameworks, new models of nursing for these settings?

Once the nurse is working outside hospital the issue of authority/ownership becomes relevant. The hospital, and more especially the ward, is frequently seen as under the authority of the Sister or Charge Nurse. People coming on to the ward, whether they are patients' visitors or even a junior doctor, are 'allowed' into the Sister's territory somewhat in the manner of a visitor being admitted into a person's private home. The environment declares where the authority lies and to whom that environment 'belongs'. When performing her duties in the community, the nurse is no longer the 'host'; she is in the role of 'guest' in the patient's personal environment. The setting no longer invests her with the authority of the kind she grew to accept whilst training and working in hospital. The patient may be reluctant to let the nurse in - particularly in the case some psychiatric patients for whom the invasion of privacy is a very sensitive matter.

The environmental symbolism of the 'technological fix' is gone - no sterile, stainless steel treatment rooms behind which and through which the role and activities of nursing were shielded and shaped. All that the hospital environment taught the nurse to believe was central to her role as nurse has been replaced by an environment that introduces her to the patient as a whole person who has been ill. For the patient, too, there is confusion. Has his home become a treatment room on the arrival of the nurse? If he has come to rely on the 'technological fix' interpretation of his personal dilemma, how will he fare in the non-technological environment of his own home and the community? These are shared confusions for nurse and patient, and as the degree to which her efficacy as a 'nurse' is bound up with 'the hospital' as the place to do it, so will her ability to nurse effectively in the community be governed.

Reference has been made a number of times to the technological fix' and the possible effects this could have on nurses' and patients' attitudes towards nursing. In some instances it seems likely that both sets of people hide behind the available technology as a way of

dealing with the anxiety engendered by their situation. This resort to a 'higher power' is not unlike that described by Menzies (1970) when she indicates that the function of the nursing hierarchy can be a defence against the anxiety nurses can feel in relation to their work.

If patients and nurses were to be asked to specify the physical setting for the role of nursing and how the role might change if the setting changed, it is likely that much could be learnt of how they define their respective activities, commenting on what they feel should be done, and where they feel they would like it to be done. A nurse who sees herself very much within the 'operating theatre' model, may find difficulty in knowing what her role is in a patients' day space, or in the play area for mothers and their children. This difficulty is increased outside the hospital. An examination of the 'activity of nursing' from the nurses' point of view may well provide some answers to these problems. By the same token, the patients themselves may be able to offer invaluable insights into nursing and thereby free nurses from becoming increasingly more highly skilled technicians, and allow them to re-discover that understanding and manipulating technology is only one of many aspects of their professional role when caring for sick people.

Nursing has come a long way since its launch in Victorian times. It has come even further since nursing orders of nuns set up *hôtels-Dieux*. Yet these founding traditions die hard. They are enshrined in physical forms which pass on their implicit expectations from one generation to the next. New procedures and policies all too easily forget the consequences of the physical surroundings. But it is only by understanding the contribution of the physical context of nursing, and all that it means to both nurses and patients that we can hope to move effectively beyond it.

REFERENCES

- Burton, I., Kates, R.W. and White, J.F. (1968) The human ecology of extreme geophysical events. *Natural Hazard Working Paper No. 1*, Department of Geography, University of Toronto
- Canter, D. (1972) Royal Hospital for Sick Children *Architect's Journal* 6 September
- Canter, D. (1977) Children in hospital: a facet theory approach to person/place synomorphy. *Journal of Architectural Research* 6(2), August
- Canter, D. and Canter, S. (eds) (1979) *Designing for therapeutic environments*. John Wiley and sons : Chichester

Canter, D. and Craik, K.H. (1981) Environmental psychology. *Journal of Environmental Psychology* 1(1) 1-11

Goffman, E. (1969) *Where the action is*. Penguin: London.

Ittelson, W.H., Rivlin, L.G. and Proshansky, H.M. (1970) The use of behavioural maps in environmental psychology. in H.M. Proshansky, W.H. Ittelson and L.G. Rivlin (eds) *Environmental psychology; man and physical environment* Holt, Rinehart and Winston, New York . 658-668

Kelly, G. (1955) *The psychology of personal constructs*. Norton : New York

Kenny, C. (1983) *The evaluation of hospital ward design*, PhD Thesis, University of Surrey (unpublished)

Kenny, C. and Canter, D. (1979) Evaluating acute general hospitals. In D. Canter and S. Canter (eds), *Designing for therapeutic environments*, Wiley: Chichester 309 -332

Kenny, C. and Canter D. (1981) A facet structure for nurses' evaluations of ward designs, *Journal of Occupational Psychology* 54, 93-108

Lipman, A. and Slater, R. (1979) Homes for old people: Towards a positive environment. In D. Canter and S. Canter (eds), *Designing for therapeutic environments*, John Wiley and Sons: Chichester, 277 - 308

Mazis, S. and Canter, D. (1979) Physical conditions and management practices for mentally retarded children. In D. Canter and S. Canter (eds), *Designing for therapeutic environments*, John Wiley and Sons: Chichester, 119 - 158

Menzies, I.E.P. (1970) The functioning of social systems as a defence against anxiety. A report on a study of the nursing service of a general hospital. *Tavistock Pamphlet* No. 3, Centre for Applied Social Research, Tavistock Institute of Human Relations, London

Nuffield Provincial Hospitals Trust (1955) *Studies in the function and design of hospitals*. Oxford University Press: Oxford

Raphael, W. (1969) *Patients and their hospitals*. King Edwards Fund: London

Rivin, L. and Wolfe, M. (1979) Understanding and evaluating therapeutic environments for children. In D. Canter and S. Canter (eds), *Designing for therapeutic environments*, Wiley: Chichester, 29 - 62

Rosengren, W.R. and DeVault, S. (1970) The sociology of time and space in an obstetric hospital. In E. Freison (ed), *The hospital in modern society*, The Free Press of Glencoe: London

Sime, J.D. and Sime, D.A. (1979) A therapeutic environment for forensic patients. In D. Canter and S. Canter (eds) *Designing for therapeutic environments*, John Wiley and Sons: Chichester. 175 - 198

Trites, D., Galbraith, F., Sturdavant, M. and Leckwort, J. (1970) Influence of nursing-unit design on the activities and subjective feelings of nursing personnel. *Environment and Behaviour*2(3)

