Hospital de Tavera, Toledo

Healthcare takes place within the built environment – hospitals, outpatient clinics, health centres, care homes, to name only some. How these spaces are designed – and how they are seen by the users – is determined not only by their function but also by social, aesthetic and economic factors. The reverse is also true: the so-called architectural determinism suggests that the built environment shapes the behaviour of people who inhabit it.

The physician's perspective on healthcare includes diagnosis, treatments and preventive actions and their effects on the patient's safety and wellbeing. There is a new dimension to add to the physician's gaze: the awareness that the environment in which treatments take place contributes to the effectiveness and safety of the entire process.

The current large hospital building programme in the United Kingdom provides an opportunity to re-examine the built environment in healthcare and optimise its design to facilitate healing and recovery.

Beyond Functionality

How does one assess the quality of buildings? The Roman architect, Vitruvius, working around 2,000 years ago, had thought of them in terms of their strength, utility and beauty. The balance between 'looks' and function has been a theme present in the history of architecture since, and it applies directly to discourse on the healthcare environment today.

Utility (functionality) of the healthcare environment is obviously critical. Patients' safety and the need to prevent hospital-acquired infections remain overriding factors in hospital care. But is there an effect of the built space that goes beyond functionality? A lot of ongoing research explores how space affects the sick person's path to recovery, and their response to medication and advice. How can the built environment facilitate the process of seeking treatment and being treated and make it less traumatic? How can it – for humane, societal and financial reasons – facilitate patients' collaboration with carers?

Evidence-based design. There is now experimental evidence that

Reception, New Stobhill Hospital

The last decade prior to the recession has witnessed an increasingly debilitating polarisation between extravagant 'iconic' architecture, laden with poetic, metaphoric references, and commercialised 'generic' buildings driven by naked market forces. These amount, in effect, to two branding levels within the system of competitive individualism in architecture – an architectural expression of an economic system that has now collapsed. In the UK, one of the most stereotypically downmarket of all building systems has been the private finance (PFI) programme of social building, whose relentless principle of cost-cutting competition has scattered countless shoddy, banal school buildings across the country.

Hitherto, attempts at reforming the architectural deficiencies of PFI have perpetuated, or even accentuated its competition-led system, by adding design quality as another factor within the competitive process – with predictable results. Reiach and Hall's newly completed Ambulatory Care and Diagnostic Centre (ACAD) at Stobhill Hospital, Glasgow, suggests a radically different way out of this quandary: not by 'adding design', but by curbing competition. In this way, hopefully, many of the best features of the golden age of welfare state building, including its combination of consistency and originality, could be revived, without also reviving the organisational chaos of many projects of that period.

For the 1960s and 70s were years of very high aspiration and debate in hospital architecture, with constant architectural innovation sustained by a system of negotiated building contracts. No sooner had the multi-professional 'Nuffield' pattern of the highly serviced ward tower/services podium been generally accepted, than a new generation of architects got to work, devising a more horizontal, courtyard-centred pattern. This pattern was pioneered in RMJM's Ninewells Hospital in Dundee (commissioned 1956, built 1963-74), the UK's first new postwar teaching hospital, its low, stately building mass comprising a central concourse flanked by hospital and medical school. But at the same time, these often innovative hospital designs, with their constantly changing values of hospital 'community', and scientific management, sometimes proved almost impossible to get built and (if completed) alienated many users. At Ninewells, the project took nearly 20 years to design and construct, including disastrous feuding between contractors and designers, while at RMJM's contemporary in-situ redevelopment

The Doctor *Sir Luke Fildes*

Open-air school Amsterdam, Johannes Duiker

Attitudes to the provision of 'healthcare' are changing. In particular the second part of the word - 'care' - is starting to receive attention comparable to the 'health' element. Doctors are being trained not only to cure, but to heal.

In the Western world, at least, widespread acceptance of the concept of holistic care seems relatively new. From the earliest days the medical profession has concentrated its efforts on curing specific ailments or controlling symptoms. The very word 'physician' implies investigation of the physical attributes of illness. Until recently, little attention has been paid to the potential difference between a lack of symptoms and holistic "wellness". The possibility that a state of mind can influence the health of the body has been little explored.

Interestingly, one of the first examples of this relationship to come to public notice was psychosomatic illness, or illness "caused by anxiety and worry and not by an infection or injury". The negative side of life is often easier to understand than the positive. 'Psychosomatic wellness' is not a commonly used phrase, but is surely an inevitable counterpart. If a disturbed emotional state can cause symptoms, then a settled emotional state may help to dispel them.

The ability of the physical environment, and in particular buildings, to influence health (for example by admitting sunlight) is known and has contributed to the development of Modern architecture. The power of architecture to influence human emotion is equally self evident (churches to uplift, palaces to impress, fortresses to intimidate, etc), and architecture which encourages a state of emotional wellbeing can surely play a role in assisting the clinician to achieve a 'well' patient in a holistic as well as a physical sense.

Patients generally attend hospital because they have something wrong with them. Maternity is an obvious exception, although many of the issues are similar even here, as the period surrounding a birth is one where the mother is in a vulnerable state, physically and emotionally.

The purpose of hospitals is that people should be made well. To *be* well a person must feel well, in mind, body and spirit.

New Stobhill Hospital

Kildrum Parish Church

These thoughts developed at the same time as the design for the Ambulatory Care Hospital at Stobhill in North Glasgow. This is a new type of facility for Scotland. Whilst it has no bed accommodation, it can carry out around 80% of the work of a general hospital. It has over 20 departments and handles up to 2,000 patients per day with around 800 staff.

Reiach and Hall's involvement in healthcare architecture goes back almost to the founding of the practice. It has never been a dominant element in the portfolio, and the fundamental attitude we have brought to health buildings is the same as for others. The aspiration throughout has been to provide simple, modern buildings, with a dignity and quality of space which supports the people and activities to be housed. This is of importance for all buildings, but perhaps particularly so for healthcare environments due to the enhanced state of vulnerability of at least some users.

External influences on the practice over the years have come from many sources, but those which have persisted have in common the kind of directness which is often found in Scandinavian architecture. In recent years we find ourselves looking to the north, and to early Reiach and Hall schemes which use light, space and materials in a Modern northern European manner – buildings such as Kildrum Church, Cumbernauld, Knox Academy Primary Department, Haddington, and the Royal Victoria Hospital, Edinburgh.

Our investigations into healthcare design over the last decade have led us to develop specific ideas on movement through public spaces and buildings. Dumfries and Galloway Maternity and Day Surgery Wing, a building modern in expression but comparatively traditional in plan, was followed by Wansbeck Hospital which places circulation along elevations and separates different functions into a community of buildings, linked by glazed walkways.

Downpatrick Local Hospital, a competition entry, further explored how daylight and views can aid the patient experience and provide a means of orientation. The centrepiece to this design was a glazed route running the length of the site and giving access to all departments.

These thoughts crystalised in two small competition schemes for

Clinic waiting area, New Stobhill Hospital

To offset the loss of previously existing trees on the site, and to evoke the colonisation of the Lowland landscape by birch, the New Stobhill Hospital is set within an apparently random planting of silver birch (Betula pendula). At the heart of the building itself, open courtyards are planted with larch (Larix decidua) and surfaced with natural larch boarding.

While breaking up the density of the building, bringing in light and space, the larch courtyards also introduce a contemplative element. Patients spending time in waiting areas here have access to a different scale of time, that of the seasons or the growth of trees, or to the timelessness of looking.

My proposal was that Reiach and Hall's new building should be considered as 'a grove of larch in a forest of birch'. Four artists were asked to respond not only to the structure and material circumstances of the building but to this imaginative dimension. In waiting areas and corridors, and in the spiritual care centre, abstract and figurative paintings by Kenneth Dingwall, Andreas Karl Schulze and Donald Urquhart, and film by Olwen Shone, mingle with brief texts of my own on the theme of woodland light and shade.

It was our assumption that art is installed in a hospital not for purely aesthetic reasons but to contribute to a whole (or healing) ambience. For this it is not enough that art works be situated at strategic places, taken up with themselves and drawing attention to themselves. Art must be an integral part of the building fabric, developed simultaneously with the architectural design.

Together with such familiar architectural devices as uncluttered spaces, glass walls or open courtyards planted with trees, words can also help to bring the outside in, to enlarge through a range of reference the imaginative space of a building or a room. In a situation where language usually plays a specialised or informative role, and is often unintentionally confusing or alienating, the names of trees, butterflies and grasses, or short poetic texts about the landscape, allow a subtle transformation: the situation is not only as it appears to be but as it is said or thought to be.

Closely related to blessing and prayers, the traditional role of poems was often therapeutic. A syllabic pattern with an even,