The hospital bed as space

Observations from South Africa and The Netherlands

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This paper shows how the hospital bed is constructed in different ways through human practice and meaning making as cultural, economic, political and symbolic space. We draw on ethnographic research done in training hospitals in South Africa and in the Netherlands to highlight the dissimilar conditions under which people get access to hospital beds, are treated and discharged or die. By giving attention to the bed spaces in different settings, and especially in a wealthy country with good hospital infrastructure and abundant resources, such as the Netherlands, and juxtaposing it with a resource poor country like South Africa we highlighted the similarities and differences in meanings and practices related to such beds in poor developing, and wealthy developed countries.

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This paper shows how the hospital bed is constructed in different ways through human practice and meaning making as cultural, economic, political and symbolic space (Harvey 1989, Lefebvre 1991). The hospital bed is not a mere material object, it is spatially and socially produced through experience and action (Hirsch 1995), and it is a site that illuminates distinct differences between the health services of the wealthy countries of the North and the poorer South. We draw on ethnographic research done in training hospitals that deliver the highest level of care to highlight the dissimilar conditions under which people get access to hospital beds, are treated and discharged or die – contrasting understaffed and under-funded settings in Cape Town, South Africa, and the well-staffed, well-funded and high technology settings of Amsterdam in the Netherlands. Although the focus is largely on beds where acute care is delivered, the paper first focuses on hospital beds in tertiary training settings in general.

Attention is given to the hospital bed as political-economic and administrative space and the second focus is on beds as spaces of discipline and of medical surveillance. The bed is also a disciplinary space in which patients are observed and controlled but also practice self-surveillance. Hospital beds have multiple meanings – they are spaces of training, production and display of knowledge, but are equally work spaces where discipline over staff and patients have to be enforced to ensure the smooth running of the

institution and the effective delivery of services. At the same time hospital beds are cultural spaces and the meanings and practices attached to it shift a great deal.

The research

The research consists of separate studies, one done by Gibson in hospitals in Cape Town and the other by Olarte Sierra in Amsterdam (in 2004). This combined paper intends to highlight some of the similarities and differences between the two settings.

The hospital bed

Political-economic space

Hospital beds differ in construction, function and symbolic meaning from other beds. Hospitals are authorised or covered by a license to operate a particular number of beds, which are in the first instance political-economic spaces. A hospital bed is a complex construct, which implies that certain necessary services, medication and expertise are 'attached' to it. In health care terms, the 'availability' of a number of particular hospital beds implies that these kinds of beds are physically accessible in a health care facility. It also means that each bed is maintained and that supporting services such as health care, assistance, food, laundry, and housekeeping are available for each occupant. Hospital beds have to be staffed, i.e. a doctor and nursing staff have to be scheduled to provide care 24 hours per day seven days a week, 365 days per year to occupants of the beds.

A hospital bed is the minimum space where institutionalised curative services are provided and it implies the availability of the equipment, medical material, ancilliary and support services necessary for the treatment of each patient who occupies a bed. Once a patient is admitted to hospital and a bed is allocated to her, this becomes the particular space a patient has access to and is attached to during the time spent in the hospital. When there is no bed space in a certain ward of a hospital, the convention is that no medical or nursing care is delivered either. In reality this limitation is often ignored in poor countries and times of duress.

The artefacts surrounding a hospital bed are simultaneously instrumental, symbolic of knowledge and expertise, and indicative of the level of care that can be provided in terms of the economic resources of the health services and the country in question. For example, a bed in a training hospital in the Netherlands is principally an edifice of science and technology: the bed itself is meant to provide the patient with all possible technological means to save (or to prolong) her life. This is particularly the case in an intensive care unit. According to a nurse practitioner interviewed in a training hospital in Amsterdam:

> On each bed we have basic equipment and this is: a ventilator, a monitor, several cables to the monitor, so you can see the blood pressure, the heart frequency, you can also see

> the other vital functions as *saturatie* (sic): the oxygen in the blood. Also we have near each bed is PDMS (patient data management system) so we have digital report. We have pumps to give medicine. But that's basic equipment, then we wait for the patient to come and we bring in the rest of the equipment the person needs for surviving (Mattijs, ICU head nurse, 2004).

Moreover, within the Dutch health care system, acute beds and beds in an ICU are the most expensive, but are always available. Before a patient is brought to a particular facility, the paramedic staff ascertains where the patient can be brought to, as explained by an intensive care head nurse:

> …At first the doctor is called [by the paramedic staff] with the question: we have a patient with this problem do you want to have him? Then the doctor calls the nurse and asks if there are free beds for that patient, and if there are beds, the patient is brought to the hospital with beds… (Mattijs, ICU head nurse, 2004).

In South Africa the most acute beds are in ICU and in tertiary training hospitals, which also provide the highest level and most expensive form of care in an increasingly structured health care system. Because of financial and staffing constraints patients are seldom sent directly to such a hospital, efforts are first made to accommodate and treat them at lower level hospitals (Gibson 2001, 2004). There is a severe shortage of ICU beds in most provinces and according to Mathivha (2002) access to such beds is not necessarily guaranteed and depends on the number of nurses available on a daily basis. As a result strict criteria for the admission to or exclusion of patients from such beds and their concomitant expensive therapies are used in the public sector. Criteria for exclusion include AIDS, neurological devastation, end-stage cardiac or renal disease, and severe head injury with a Glasgow Coma Score <8 in an adult patient (Mathivha 2002: 22).

Even though the Western Cape and Gauteng provinces of South Africa have the best equipped health services in the sub-Saharan continent, systems of triage similar to those encountered in war zones have at times been instituted in efforts to lower the mortality rate, as patients wait to gain access to hospital beds (Kaufman & Morgan 2005: 318; Smetherham 2004: 6). In the Netherlands, access to acute hospital beds is guaranteed once the patient is recognised to be in need of a bed. This is especially the case in an Intensive Care Unit (ICU) (Olarte Sierra 2004).

In this context, in the Netherlands, the bed as a service space also includes the availability of ambulances and paramedics who transport the sick person in an expert way to the hospital bed. The assumption made in the Dutch setting of an acute hospital bed, as an entity connected to the necessary services, including passage to the bed, is less sustainable in countries with fewer resources like South Africa.

The study in Cape Town showed that ambulance services are poorly resourced and patients sometimes have to resort to buses, taxis, private transport or even being pushed on anything with wheels to get to a hospital. Depending on the nature of the ailment there could be referral to another level in the health service system. Once the correct level of hospital is accessed patients are admitted in accordance with the above mentioned triage system, depending on the severity of the patient's condition or the

nature of the emergency. Access to the hospital does not mean the sick person immediately gets a bed. In one big training hospital in Cape Town, the average waiting time for admission to a bed in some categories is two days. Patients sit on benches, or if they are too weak, they lie on the floor, on a blanket, to be in line for a bed. In the casualty area a system of 'hot beds' is used, where a patient is placed on a hospital bed for medical procedures and then moved back to the benches or blanket to recuperate. During ward rounds health care staff will bend or kneel down next to the ailing person to conduct observation or give treatment. The ideal is nevertheless for each patient to have access to his/her own bed in hospital. Despite being under-staffed and under-equipped, or struggling along with antiquated equipment and a perennial shortage of drugs, urban training hospitals manage to offer good service. As a rule of thumb, hospital bed occupants are discharged as soon as possible to make the beds available for more desperate cases. In this setting, the hospital bed is a space for treatment rather than convalescence.

In South Africa health care varies considerably across urban and rural hospital settings and between provinces. In the poorest provinces, including Mpumalanga, not even the bare necessities to run health services such as emergency power generators can be taken for granted. Doctors reported in 2002 that they had to operate by torchlight, while nurses in ICU said they were sometimes forced to keep intensive care patients alive by manually pumping air into their lungs during frequent power blackouts. In rural areas the package of services assumed to be attached to a hospital bed is not necessarily available and often two patients may have to share a bed. Hospital wards are not always cleaned and patients cannot count on regular meals. At the same time there is a shortage of basic medicine, doctors, nurses and ancillary staff such as radiographers, dieticians and physiotherapists. Unlike in the Netherlands, in some rural areas in South Africa, having access to a hospital bed thus does not always mean having access tot the complete health care and services package that supposedly goes with it.

Such struggles to deliver not only treatment but also care are alien to the Dutch setting. In the Netherlands, once admitted, the patient is granted access to high quality staff and technology for delivering care, treatment and diagnosis. Even more, in cases of extremely acute patients lying in the ICU, a close relative can stay with the patient all day long, and the companion will also have a bed to sleep on, however, devoid of all medical technology and care and other hospital facilities, for instance meals.

To further underscore differences between the two countries, the availability of hospital beds and of physicians per 1000 of the population is viewed as an important indicator for good state health services. And as seen above, such differentiated access to hospital beds, and to the care, staff and ancillary attached to them, also demonstrates vast disparities between rich and poor, developed and developing countries, the Netherlands and South Africa. Within countries the number of beds available per 1000 of the population might also vary between rural and urban, wealthier and more economically depressed areas, as well as between public and private services.

In this regard, the Netherlands has one of the highest number of hospital beds (about 11) per 1000 and physicians (about 3) per 1000 people in the world. The projection of the type of beds, e.g. oncology, intensive care, maternity, needed in future are also indicative of the development of particular epidemiological patterns and of health

care needs in a country. Thus, with its rapidly greying population, the Netherlands will need more beds for diseases related to advanced age and chronic diseases (The Netherlands Board for Hospital Facilities 2003).

In contrast to the Netherlands, South Africa only has about a quarter of the number of beds (2.8) and even fewer physicians (about 0.7) per 1000 of the population. Financial constraints and a change in health care emphasis from curative to preventative regimes led to the closure of hospital wards and beds in wards in all provinces. This is changing and it is anticipated that the number of beds available in South African hospitals will have to increase by 30% to provide for the projected increase in patients with AIDS, tuberculosis and other opportunistic infections. As illustrated above, the availability and allocation of beds can be highly political. During the apartheid years the uneven spread of beds and physicians between the white and black population was representative of the racist politics of the time. In the past decade the government has shown the political will to restructure all state health care in an effort to bring about a more even spread of beds and concomitant services across the whole population, as well as between more and less advantaged provinces, rural and urban populations.

According to Boulle et al. (2000) the overall number of beds in South Africa has declined since 1994, with the largest number of hospital bed 'closures' occurring in the Western Cape and Gauteng, the two provinces with the best infrastructure at the time of the country's first democratic elections. Over 5000 beds were 'closed' in these provinces, meaning that the services associated with each bed were removed. In theory it meant that the funds previously budgeted for the upkeep of these beds could be allocated to provinces with even fewer resources. Despite the reductions the spread of functioning hospital beds between provinces is still not equitable. While Gauteng province has 2.96 acute beds per 1000 people, the nearby North West province has only 1.59 beds per 1000 population. The differentiation between richer and poorer provinces and rural/ urban divides is also evident in the following table:

Hospital beds per 1000 population available in South Africa

Province	*District Level*	*Regional Level*	*Tertiary Level*	*Sub-total Public*	*Specialised*	*Private*
Gauteng	0.39	1.20	1.36	2.95	3.49	3.40
Western Cape	0.51	0.66	0.99	2.16	3.54	3.95
Mpumalanga	0.81	0.75	0.14	1.70	1.83	1.63
North West	1.00	0.49	0.10	1.59	2.08	2.58

Source: South African Department of Health 2006.

It is evident that there is a disparity between beds available for poorer and wealthier South Africans and that State patients, which means the majority of the black population in the country, are dependent on fewer beds per 1000 people. Medical aid schemes members, i.e. usually black and white people with full-time employment, have access in the private sector to a larger number of beds per 1000 population. In addition, there are more private beds in wealthier provinces and in urban areas. In the case of private

care, all the services usually assumed to be attached to a hospital bed are available if the patient can pay for it or if it is covered by the medical aid scheme.

In the Netherlands, however, all hospitals count with the same essential care facilities, though there are hospitals specialised and sub-specialised in different health care areas (The Netherlands Board for Hospital Facilities 2002). On the other hand, and for assuring Dutch residents equal access to essential health care, from January 2006 the health care insurance system changed so no difference is made between private and social insurance. As called by the Dutch Ministry of Health The new system is a private health insurance with social conditions. The system is operated by private health insurance companies; the insurers are obliged to accept every resident in their area of activity' (Ministerie van Volksgezondheid, Welzijn en Sport 2006).

Disciplinary spaces of medical surveillance

Through its authority over beds and all other hospital spaces, the institution plans for, organizes, regulates, supervises, administrates and administers its patient and staff population. The bed in the ward is designated for a specific kind of ailment or specialized treatment, and it is also the focus for the training and control of the work force associated with it. Hospital beds are arrayed in wards in such a way that observation, measurement and control is enhanced. The bed as entity largely represents the patient, as well as the diagnosis, and their spatial distribution. In South Africa staff often referred to the patient in terms of their ailment, e.g. as a 'CA lung', 'query BE' or 'H cubicle (bed) on nebulisers, oxygen and antibiotics'.

In the Netherlands, as well, patients are recursively reduced to their condition, especially by doctors, as expressed by one nurse:

> They [doctors] only look at the fragments of the person, they say "oh it is pneumonia so we give antibiotics, or it is this so let's do that." So, they forget that everything is in a body (Olarte Sierra 2004: 32).

In the Dutch intensive care ward studied, doctors, before starting their rounds, take a look at the board hanging at the nursing station to inform themselves of the 'cases' present in the ICU and in which bed they can be found. Once the information is gathered doctors start their observation bearing in mind that in bed B 3 is an 'acute aneurysm case'.

Beds are attached to wards or units and the occupants are assigned to individual physicians or even nursing staff. Occupancy of a hospital bed makes the patient more eligible for treatment and the use of expensive technology, drugs and expertise (Gibson 2000:162; Olarte Sierra 2004). For example a nursing round in the morning in a hospital in Cape Town, South Africa would include an overview of the beds and the patients, with their physical condition and treatment. This was exemplified by an extraction from research notes made of a nursing round in a hospital in Cape Town:

> Ok in A cubicle, CA lung, nil per mouth. Stop his heparin at 24-h00, he is going for a scopy. His consent and everything is signed already. Mr C in B cubicle, dying patient,

> but he's fighting though and through. They have stopped all drugs. They're trying to expedite things. It is very cruel, but that is the way it is, lots of tender loving care. Mr K in D cubicle he is the one with liver failure. They have discontinued his intravenous therapy yesterday so he is on oral agents… Mr V in L is pneumonia. He is on two hourly nebulizers alternating with Atrovent and Berotec… (Gibson 2000: 391).

Beds are accordingly not only treatment spaces but also assist administrators in keeping track of number of patients treated, their diagnoses, medications used, cure rates, number of days spent in the hospital, the deployment of staff, expenditures and such. The beds are the focus of much of hospital activity: the number of beds dictates how many patients can be admitted (Olarte Sierra 2004).

It is with this in mind that hospital wards are often designed to enhance the ability to observe beds and the patients in it, as well as the staff 'attached' to the beds. In a Foucaultian sense (1979), bed and patient form a unit for observation, care and services and beds of the very ill are usually placed closest to the central nursing station. This indicates that they need closer scrutiny and more frequent attention. Patients who have infectious diseases or who are dying are often put in private cubicles. The allocation of beds, the bodies of patients in them and the space surrounding the hospital bed are controlled by health care providers.

The bed is a disciplinary space, where patients are observed, but also practice self-surveillance. They wear hospital gowns or their own pyjamas, stay in or around their own beds and return to them during ward rounds. Their days are controlled by the schedule of the hospital and its staff and patients have little choice in terms of when they are woken up, their beds are made up, they get washed, have their meals, medication and medical procedures, or when they can receive visitors. Patients who go out of control can be 'contained' with medication or physical restraints.

In a South African tertiary training hospitals acute patients have little claim to private bed space. Medical and health care staff gathers around the bed to attend to the patient's physical, and to some extent psychosocial state. In training hospitals the condition for which the patient has been hospitalised tends to become the identity allocated to the person, as it is the focus of treatment, care and staff training sessions. When hospitals are under strain as a result of high patient loads, the diagnosis and the treatment of the patient becomes the focus and the 'outside' identity of the sick person is easily negated. According to a doctor interviewed in Cape Town:

> The ideal is the kind of all-round holistic care, but in reality you hardly have time to talk to the patient. You look at the disease, the diagnosis and try to deal with that, given what you have available. That is what we can do at that moment, take care of the bodies, the patient has to become an object, if we spend too much time with one, others might get worse or even die.

This focus on objectifying the affliction of the patient was very striking when patients were presented by medical staff during ward rounds in a Cape Town hospital. Staff often leaned in so close to patients that doctors' hospital coats or their bodies would brush the patient, or the patient's face. Any health care provider could touch a patient,

undress her or him or remove the sheets or blankets (Gibson 2000). Because staff needed to keep patients under observation, curtains were seldom drawn around beds in wards and the bodies of patients were sometimes exposed to the full or partial view of others during examinations.

This was also the case in the Dutch setting. Acute patients were confined for the reason that brought them in and doctors hardly recognized the person lying in bed (Olarte Sierra 2004: 24, 26). Daily, groups of around ten resident physicians gathered together around each bed to discuss the bed's 'case', and very few doctors (if any at all) would greet the patient, and even more rarely, doctors would greet the patient by name. Hence, what was at stake during such rounds was the condition and the prognosis of cases attached to beds and not the individual lying on it. Accordingly, it is noteworthy as well that in, e.g. intensive care units; the beds are the only space patients have access to. Patients' mobility is confined to the space they have in bed (e.g. there is no 'wandering around' the ward). In other words, patients are confined to their beds and more often than not they are devoid of a minimal space of individuality, as will be shown later.

Both in South Africa and in the Netherlands there was a quite marked lack of obvious individualization of the occupants of ICU beds. The vast majority of patients in public hospitals wore very short hospital gowns, designed to make treatment easier (giving easy access to the patient's body and open at the back). Donning such gowns can also be perceived as a form of discipline in that it de-individualizes patients, makes them homogeneous and more docile – even if this was not necessarily the intention.

Yet in South Africa, patients outside ICU also mostly wore the hospital gowns because they had no personal pyjamas or robes. In this sense, wearing gowns was thus also an indicator of poverty rather than a conscious institutional effort to depersonalize the sick and turn them into objects of scrutiny. However, since that is not the case in the Netherlands, in the Dutch setting, hospital gowns are, to a great extent, the way to transform the individual body into a body *for* medicine. Patients in 'normal' acute beds nevertheless often wear their own nightclothes, which is usually in good condition and fairly new. A certain level of smartness of pyjamas and robes are expected in such a public setting. The bed attire is also individualising.

Efforts to discipline the bed space and its occupant was at first sight evident in the case of a number of the hospitals in the Western Cape where all new bed sheets had the following on them in very large print in four languages:

> *This is the property of the PROVINCIAL ADMINISTRATION: WESTERN CAPE. Removal of this is a criminal offence* (in English, Afrikaans, isiXhosa and isiZulu).

Although the sheets can be 'read' as an effort by the state to reduce theft and claim ownership over the beds if not the occupants, it equally signified state health care services under siege. Each year hospitals in all the provinces lose millions of Rands worth of stolen linen, drugs and equipment. In February 2006 a new MRI scanner was stolen from a hospital in Johannesburg. In contrast to the picture of hospital wards as tightly controlled and surveilled spaces, the reality is a lack of staff and patients often leave hospital wards without permission or without official discharge. In South Africa, as in most developing countries, the majority of hospitals thus cannot be fully understood as

'Goffmanesque closed institutions' or as 'Foucaultian spaces of surveillance'. Here hospitals are not unitary, essentialised, medicalised institutional structures that can necessarily enable or constrain the actions of its 'inmates'. In fact, hospitals are becoming increasingly permeable and porous, an issue that will be further discussed in following sections (Donnan & Wilson 2003, Zaman 2005).

On the other hand, in the studied ward in Netherlands, linen and dishes also have the stamp of the hospital, which can be interpreted as a sign to aware patients, visitors, and staff that such things belong to the hospital and that such must remain there. The practice of self-surveillance coupled with institutionalised control by staff members in the ICU reduces the possibilities for stealing in such a ward.

Medicalised spaces

Hospital beds are essential equipment produced for use in health care provision. As described by Oomen and Heule in this special edition, the hospital bed as a particular design was developed as a clinical artefact to enable and enhance the treatment of patients by doctors and health care staff. By definition the hospital bed is intended and manufactured for the treatment of the unwell. Most hospital beds consist of metal frames with detachable or drop down sides and the position of the patient on the bed can be regulated manually or electrically, e.g. when lowering or raising the feet, head or upper body. Wheels allow for easy mobility, and to enhance access by the staff the beds are higher than normal. The mattresses have waterproof covers and they are designed to prevent bedsores developing. A small bedside cupboard is provided for personal possessions, although patients are advised not to store anything valuable in them. Each hospital bed usually has a movable tray tall enough to be pushed over the bed. Three plugs, namely for oxygen, air and suction are installed in an accessible place.

In South Africa, as discussed above, intensive care beds are in a sense 'constructed' on a daily basis in some hospitals. If the staff is not available, the bed, although present as an artefact, does not exist as a service unit. When patient is admitted to ICU, the kind of care and technology available might still vary.

In the case of other acute beds, the equipment for particular treatments, e.g. a drip stand with a drip, a drainage bottle or bag for fluids, blood pressure cuffs, etc. is kept in the nurses' station from where it is taken to the bed of an individual patient. Above the bed is the name of the doctor who is responsible for the care of the patient, as well as a list of the particular dietary, observational or nursing care needs. At the end of the bed, the patient's folder and medical charts are stored in a special file that hangs on the bed frame. Most of the beds are arranged in wards and have curtains, which can be drawn when the patient is being examined, although this is not always done. When a patient is discharged, moved to another ward or hospital, or dies, the bed linen is changed, all personal belongings are removed, and the bed and bedside cupboard are sterilised or at least wiped clean. The bed is then ready for the next occupant.

As for the Dutch case, intensive care and other acute beds and activities around them have as well to be understood in terms of the context. Empty beds are cleaned,

sterilised and the linen are changed every morning. The floor is swept and the dust removed so as to make beds and their surroundings sterilised spaces always ready for coming occupants. Intensive care beds however are not limited to the mattress.

ICU beds are stable units of care. They involve high tech medical equipment, enlarging the bed space to the area above and beside the mattress, where drips and high tech equipment are. Therefore, intensive care beds can only be understood in terms of the technology attached to them. The absence of basic intensive care high technological devices supposes the altogether absence of an intensive care bed. Ventilator, drips, monitor, and Patient Data Management System can be accessed from any computer at the ward belong to the bed and will become patients' identity for as long as they stay in that bed. The absence the surrounding medical technology would make the intensive care bed a completely different bed.

However, intensive care beds need to be understood as well as multifunctional spaces that admit other occupants besides the patient. Intensive care beds were considered part of the furniture of the ICU by staff and visitors; hence beds could have more usages than just receiving a patient. Family and medical staff gathered around the bed (though not always together) to approach, visit or observe its occupant. Relatives often sat on the bed for getting closer to the patient. Nurses permanently move around the bed for checking and controlling patient's information provided by the bedside technology, as well as for providing medicines. But also when nurses were having a conversation with doctors or among themselves (whether referring directly to the patient or not), nurses tended to lean against the bed for resting their legs. Also nurses tended to lean over the bed (with a person lying on it) exams results, folders, or anything they were carrying with them. Noteworthy is that such activities were exacerbated in cases of unconscious occupants. However, once the conversation, the round or the visit were over, visitants or nurses leaning against or sitting on the bed and the elements left over the bed were removed so the bed became again a space only occupy by the patient. On the other hand, doctors rarely sat on occupied beds, but if they were engaged in a conversation around empty beds doctors would use the bed to sit down, and the one sitting on the bed was the one with higher hierarchical position. This is, if an intensivist or specialist was sitting on a bed no nurse or resident would join him.

In this context one can argue that such a use of beds entails denial of the person lying on it: if we are to say that patients become one with the bed once the former are admitted to the ICU, the acts of leaning against, sitting on and leaving objects on *the bed*, is to do such actions to *the person* occupying the bed.

In South Africa, patients who occupy acute or ICU beds were in a sense a transitory population who were shifted between different kinds of beds according to their health care and treatment needs, or the services available on a particular day. A close family member might be allowed to sit next to the bed of a severely ill patient outside visiting time, but this was not often the case.

In both countries the hospital bed is a therapeutic space where professional ideas and meanings intermingle and where medical knowledge is generated, displayed and contested. During ward rounds the bed and its occupant is the focus of medical knowledge, medication and technology. In training hospitals, the bed is also a performative

space where the bodies of patients are 'posed' for training purposes. Patients and parts of their bodies are exposed, highlighted, percussed, handled and discussed not only to find a diagnosis and to develop a plan of treatment, but also to instruct staff-in-training.

Both in South African and Dutch hospitals the position of care givers around the bed was found to indicate levels of authority and knowledge. The medical consultant and the registrar had the most control over the patient's bed-space. They were always positioned closest to the patient and would often sit down on the bed without asking for permission to do so. Medical students were almost always arrayed in a semi circle around the bed and they moved in front of nursing staff. If a professional nurse attended a ward round, she invariably positioned herself separately at the head or foot of the bed, opposite the consultant or registrar.

On ward rounds in South Africa the patient file, hanging at the end of the bed, or in the Netherlands, stored in the PDMS, was an important artefact through which the body of the sick person was medicalised, and medical and nursing work were constituted. The patient record was also an essential part of the mechanisms of discipline and surveillance (Rabinow 1984). Nurses routinely recorded and charted patients' measurements, took temperatures, blood pressure, heart rates, visidexes, administered medication, fluid inputs and outputs and such. These captured and fixed the patients in their beds, as well as the nurses who administered to them, in a spatial network of documentation. The documentation was also indicative of differentials in knowledge and power. The written instructions of the doctor had special significance and carried the greatest authority – it determined what kinds of services would be deployed in and around the bed space. It was an acknowledgement of the doctor's power over the bed and its occupant, and gave him or her particular rights and entailed certain duties. The routine observation and comments written up by nursing staff, who spent most of their time around the hospital bed had a different kind of authority from medical records. In both settings, the observations and nursing records were not only used to keep track of what was happening to the patients in the beds, but also to keep an eye on the activities of the nursing staff. Thus the documentation of care giving was used as a medium to reinforce nurses' work compliance or labour discipline. It was also a measurement for the performance of student nurses, and senior nurses often checked the patient records to ascertain whether specified measurements and duties had been performed. A health care function accordingly equally served as an administrative function.

Hence, the hospital bed is a complex cultural space where many layers of meaning, beliefs and practice interface. As discussed above, it is firstly a medical space where the understandings and practices of biomedicine prevail. This does not mean that local understandings, meanings and practices of, e.g. the patients and their families, disappeared, they only became less visible or emphasised. In South Africa, the four languages displayed on the bed sheets as described above reflected the heterogeneous population, with its diverse meanings and practices related to the spaces of illness and healing. Depending on the area in which the hospital is located, the language spoken at the bedside can be indicative of the identity of the patients. In the Western Cape, for example, English, Afrikaans and isiXhosa will be routinely used when health care staff interacts with patients and their families.

Apart from language differences, cultural practices and beliefs were most strongly displayed on the bodies of the patients, around their bedside tables and in their practices. Although most patients wore the uniform hospital gowns, female Muslim patients almost always wore their own pyjamas and often a headscarf as well. Male Muslim patients often wore a *kofia*. African patients sometimes displayed fresh scarring made through incision for administering traditional herbs and substances for healing on their bodies. For them, the treatment received in the hospital was just one the many therapy choices they made. Nursing staff, which often also had to take up the role of cultural brokers, was sometimes affected by this display of cultural identity and beliefs of patients. Unlike doctors, who were seen as protected from the effect of local indigenous beliefs concerning the causation and treatment of ill health through their medical authority and knowledge, nursing staff at times expressed fear of the *muti* (medicine) used by patients and even by their beliefs. Nursing staff accordingly perceived themselves as more 'open' to influence of, e.g. the effects of witchcraft or malignant spiritual influences and would find ways to counter it. They did this by only standing at the head of the bed, changing the colour arrangements of flowers, performing their duties in ritualistic ways or wearing some form of 'protection' under their uniforms. A few nurses even said that they had to be 'cleansed' by a healer after being potentially 'contaminated' while working with a very 'traditional' isiXhosa speaking patient. As indicated above, the space of the hospital bed can be viewed as one where institutional and medical power is produced and reproduced, but because the 'inhabitants', the patients, come from diverse cultural settings, it is also a space where inside and outside meet and where such power and knowledge can be subverted, where medical and local practices and beliefs intermingle.

The bedside locker was often the only space where patients could assert some of their own 'outside' identity, by displaying flowers, get well cards, food packages, Bibles, Korans, prayer mats and protective amulets. In Cape Town hospitals, particular actions could transform medical into sacred spaces. Muslims patients, who could move, knelt on prayer mats next to the bed to pray at specific times. Other patients were visited by Christian ministers, faith healers or traditional healers who performed prayers and healing rituals.

Because patients in Cape Town often drew on both medical and local understandings of illness causation and its treatment they did not always follow the treatment prescribed for them. Patients sometimes hid their pills under their sheets, pillows or even mattresses. Some also secreted cigarettes, alcohol, sweets or traditional concoctions in their beds or lockers. The bed was thus also a space of resistance, where patients defied institutional authority, which had to be re-established by removing the offending items or by forcing patients to take their pills.

As indicated, the hospital bed was usually closely surveilled and patients had very little privacy. When patients wanted to sleep they sometimes pulled the blankets over their heads. In the hospital in Cape Town patients said they did it to "get away" or because they were tired of the ward. They were 'sick' of "having everybody come and look at you", of being treated like a "*piece of meat*" and being "*prodded*". At times patients cried under the blankets, which acted as a thin veil for them to conceal themselves, their sorrow, or pain.

Nursing staff usually ignored such 'hiding', although they frequently shook patients awake, or drew the blankets away to take their temperatures or blood pressure. Sometimes patients resisted efforts to remove their blankets, but institutional tolerance for this 'hiding' under blankets usually did not last very long. What was intended as a way to become invisible in fact made a patient very visible and, if sustained, eventually invited close examination. The very effort to conceal oneself, could serve to disrupt and intensify the scrutiny of the ward. When the curtains around a bed were drawn for any length of time patients and nursing staff concluded that something was wrong, that a patient may have gone into arrest or died.

By attempting to stay under their blankets patients were sending out a powerful signal but thereby came increasingly under institutional and medical purview. Nursing staff then looked at the specific bed more often, and made remarks like: "*he just stays under those blankets, something is wrong*". Soon a registered nurse would say: "*go and have a look, that man has been lying covered up all day*". According to nursing staff, if a patient "*withdraws like that, it could be a sign of depression. We try to get them out from there*". This form of concealment became a cue indicating 'look here' or 'see me'. When this occurred, the aim of the nursing staff became to 'restore' the patient to the surveilling space.

Resisting efforts to pull the blankets away could also be understood by ward staff as a kind of defiance, or resistance. Lower ranking nursing staff like student nurses or staff nurses would joke about it and say that the patient "does not want to be weighed again" "is really fierce/cross today " or he/she "doesn't want to have anything to do with us". This kind of behaviour was thus perceived as a performative rejection of the institution.

Contrastingly, surveillance over beds and their occupants in the case of the Dutch intensive care ward was indeed effective. In ICU, the fact that most patients were unconscious made the hiding under the sheets an absent practice. However, some times awake, but (mentally) disturbed, patients confronted the medical staff and refused to accept further treatment. But, given that in the ICU medicines are provided intravenously, patients' refusal was easily overcome, so nurses could successfully follow beds' schedules of medicines and treatments. Also, the fact that patients' files were stored in the PDMS bed's information on patients could be surveilled from any other bed or computer at the ward by any member of the medical or nursing staff.

Conclusions

In this paper we have shown that hospital beds are not merely medical artefacts, but can also be understood as spaces which are constituted through meaning and practice as political, socio-economical, cultural and social. By giving attention to the bed spaces in different settings, and especially in a wealthy country with good hospital infrastructure and abundant resources, such as the Netherlands, and juxtaposing it with a resource poor country like South Africa we highlighted the similarities and differences in meanings and practices related to such beds in poor developing, and wealthy developed countries.

Hospital beds are never neutral spaces. They are first of all socio-economic entities. Although a hospital bed supposedly has certain necessary services that accompany it, we have shown that in a country where economic and staff shortages exist on a broad scale, the availability of neither beds nor attached services and expertise can be taken for granted. Whereas acute beds in the Netherlands were stable units of service and care, lack of resources in South Africa meant at times that even the highest and most expert kinds of beds, i.e. intensive care, could be shifting entities.

Secondly, we argued that hospital beds are spaces where knowledge is generated, displayed and debated. They are spaces of identity construction and deconstruction and also have cultural and therapeutic meaning. We showed that in South Africa, where the health care system is in transition, medicine, which has previously been able to enforce its own definitions and practices concerning spatial meanings and practices, has come increasingly under stress. In the Netherlands patients and their kin might contest individual treatment or medication to some extent, but institutional meanings and activities are not much affected by this. Patients are both more culturally homogeneous and more subject to governmentality in a Foucaultian sense, and are accordingly a part of the normalizing forces and processes of the hospital (Foucault 1993).

Thirdly, the hospital bed can be a homogenizing space. We showed how in the Netherlands, however equipped with high quality medical technology and health care, and where ideals of individuals who decide upon their lives are profuse, individuals lost almost completely their individual identities and become one with the bed, which is defined by the ailment that brought them to the ICU. Individuality is acknowledged to the extent that curtains serve as limits for when patients are being washed, or in times of profound distress. But most of patients' individual identities are blurred while lying on bed. In this sense, intensive care beds serve to render prevailing ideas about the function and the limits of the health care system, which serves to perpetuate its hierarchical nature.

At the same time, and in the fourth instance, beds can be spaces of individualization and differentiation. In both the Netherlands and South Africa patients in acute beds found ways to display their own identities through differences in bedclothes, personal artefacts on the bedside table or inside it. How the bed is understood, used and dealt with, can be contested and reconstituted.

In South Africa the inhabitants of beds were, e.g. homogenized through the wearing of hospital gowns, the discipline on the wards and by their ascribed identities in terms of 'cases', diagnoses and treatment. But they also embodied their own cultural practices and beliefs, which could disrupt their treatment, the professional sense of self of nursing staff and even activities on the wards. During wards rounds acute beds were turned into medicalised spaces, but could also soon be reconstructed as culturally heterogeneous spaces through the practices of patients in and around the beds, the artefacts they stored or hid, the languages they spoke and the signs they displayed on their bodies. In South Africa medical construction of the bed as a space of healing and therapeutic intercession was earlier the only or at least the 'most legitimate' construction. Latterly, cultural understandings and experiences brought from the 'outside', e.g. *muti*, faith or indigenous healing that represents wider and more heterogeneous cultural society have also found

expression in and around the hospital bed. Patients displayed both medical and local understandings of illness causation and its treatment in their behaviour.

By attending to acute hospital beds in two different countries we tried to show similarities and differences in the way health care is provided and experienced. Inequalities in access to health care and over control performed by the medical system reproduces not only ideas of hierarchy and power that vividly characterise biomedicine as experienced in everyday life and exacerbated while in the hospital, but also serves to shed light in the understanding of a wider structural global problem of unequal wealth and resources distribution. However, of equal importance is that by highlighting differences in the way medicine is exerted allows cultural variations of the understandings and practices around the health care system.

On the other hand, and of great relevance is that by bringing to the surface the similarities shared in terms of how patients are portrayed and treated, and the place patients occupy in the hospital, not only physical space (i.e. the bed) but also symbolic space (i.e. subject devoid of individual identity), coupled with the attitudes (of sometimes passiveness) patients have while being hospitalised, shows that biomedicine, as a western and westernising practice, can still reproduce dominant ideas and practices over individuals through healthcare.

Notes

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