

DESIGN DILEMMAS IN MENTAL HOSPITAL ARCHITECTURE

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Abstract

Objective – The paper identifies dilemmas facing architects, planners and medical professionals in the process of designing a new psychiatric facility.

Background – Rarely any other type of public building has had such a turbulent and complicated history of experimentation, and of design innovations being widely implemented all over the world during one decade and completely discarded in the following one. Everyone involved in the planning process has to make moral choices every step of the way, and those choices impacted design and subsequently the provision of care.

Research question – The paper seeks to condense and formulate the dilemmas architects face in design process. Should psychiatric hospitals be dense to ensure short routes, easy observation and fast reaction in crisis? Or alternatively, should the wards be spacious, giving patients enough room to walk around freely? Should the hospital look like a medical facility, transmitting the image of competence and temporality, or should it be more ‘normal’, home-like and non-institutional? How do we combine domestic character of the ward environment with necessary safety features? Should spaces be designed according to hospital hierarchy and provide the patients with a clear structure that is easy to comprehend, or should social interactions in the hospitals be more fluid, emphasising an equally important part patients play in the treatment process? Those and other dilemmas are presented and discussed in the paper.

Methods – The dilemmas were synthesized through historical analysis of both architecture and policy related to psychiatric facilities, literature, including the studies of mental hospital environment as well as accounts of staff and former patients, modern examples of behavioural facilities and personal professional experience of being involved in the design of several psychiatric hospitals.

Results – As a result, 8 pairs of contradicting environmental characteristics were identified: privacy/isolation, efficiency/spaciousness, structure/fluidity, medical/normal, domesticity/safety, stimulating/calming, communication/distraction, care/disability. These dilemmas are discussed in detail, with reference to existing studies. Also, the possible ways to study design dilemmas further are described.

Conclusion – The paper calls for the discussion and additional studies to help solve those dilemmas and equip planners with concrete evidence. Hopefully, further research will help us to design mental hospitals that will be able not only to provide excellent care, but also be flexible enough to adapt to future change.

Keywords: *psychiatric hospital | mental health | evidence-based design | literature review | hospital design.*

Introduction

Throughout the history, architecture has had different responses to the task of designing spaces for the mentally ill. At one point it was the spatial separation in custodial buildings that some would call ‘an uneasy compromise between a general hospital and a prison’ [1]. Then, the architects attempted to create an embodiment of ‘three-dimensional reason’ which would manifest in perfectly organised isolated asylum communities and grand rational structures. As an alternative, smaller institutions providing more humane treatment were designed. At many points in time, the direction of psychiatric treatment has changed radically. Various solutions were tried and then rejected, in a struggle to deal with the complicated nature of mental illness, which is both biomedical and environmental, physical and social. For years architects have been trying to combine conflicting tasks of care and confinement in spaces for mental health.

This article is written from an architect’s perspective as it describes some of the dilemmas we face while designing a psychiatric hospital. Needless to say, this task will always be that of managing interests of very diverse groups: the service users need different types of care, the staff might prioritise their concerns over safety, the management can have various treatment models in mind, and the officials will often be constrained by the limited budget. In this process, everyone involved has to make choices every step of the way, and those choices significantly impact the design and subsequently the provision of care. As is discussed further, the dilemmas sometimes come down to moral

or ideological questions. They could form a base for discussion among the stakeholders, or a starting point of the evidence-based research.

First, the paper talks about the existing debate around design for mental health. In the beginning it touches on the existing research methods of investigating how the physical environment can influence the healing process. Then it provides a description of the themes and topics that are often mentioned in the literature about mental hospital architecture. Finally, it makes a case for studying hospital environment through dilemmas – pairs of contradicting characteristics, rather than through single elements. The dilemmas are illustrated with the examples of contradictory recommendation found in existent research.

An overview of existing research methods

There is a growing number of studies addressing the effect that the physical environment of psychiatric facilities has on clinical outcomes. The knowledge of the subject comes from the fields of medicine, social geography, architecture and environmental psychology. Existing studies sometimes focus on how psychiatric spaces are used, what environmental features have a positive impact, how changes in the physical environment of a hospital affect communication between different user groups. Both qualitative and quantitative methods have been used to study psychiatric environments.

Qualitative studies can be considered to be a good tool to provide unbiased evidence on how the design of the psychiatric facilities influences the treatment and wellbeing of both patients and staff. They may be drawn upon to convince decision-makers that a measurable benefit arises from investing in design. Researchers typically strive to identify the connections between the presence of certain design characteristics and the number of negative episodes and accidents, the length of stay, seclusion rate and the use of medication. Several papers [2] [3] suggest creating an index to evaluate important design characteristics such as the institutional and therapeutic quality, and the level of security of the ward. The index can then be measured against clinical outcomes in order to discover possible relationships between these variables. In their book, Shepley et al. [4] list 11 evaluation tools that can be used to study built and social environment. For example, ASPECT, a tool developed in 2008, evaluates privacy, dignity, comfort, control, views of nature, and a number of other items among staff and patients. PFE, a tool developed for design teams and building occupants, is helpful in assessing the building pre- and post-occupancy.

Qualitative studies are valuable in gathering background information, identifying potentially important factors, uncovering insight and anecdotal evidence. This class of methods includes interviews with stakeholders, anthropological and environmental studies, as well as phenomenological research. Photos and videos are mentioned [5] as a promising but rarely used instrument. In one study [6] of somatic hospital environment patients were given camera phones to record their daily experiences. The photographs of hospital wards were also applied in a study of children and adolescents' experience of inpatient hospital environment. Participants were shown pictures of spaces they used to inhabit as a starting point of the conversation between them and the interviewer [7].

Studying psychiatric environment is a complicated task. The presence of researchers in and of itself can affect the results, since the service users might perceive them as hostile outsiders. In instances that would be deemed inadmissible under modern ethical guidelines, undercover work has been used in previous decades, when researchers gathered data while posing as patients or members of staff. Shepley et al. [4] write about difficulties associated with gathering data in medical settings, such as the privacy concerns related to the data originating with vulnerable populations and the ability of psychiatric patients to respond to questions. Other challenges include small sample sizes, limited possibility to have a control group, a chance that patients' response might be influenced by their symptoms and hospital hierarchy, as well as the possible bias of the staff against their patients or a less constant physical presence of the staff members in the ward. Existing studies have also been criticised for not taking all the possible factors into account that include patient's diagnosis, their symptoms, history of hospitalisation, patient's and staff's background, the amount of working hours, staff's level of training, the staff per patient ratio, the amount of contact with patients, ward population makeup, day schedule, medication, spatial privileges, length of time spent in different ward locations, weather and seasonal changes. Lundin [8] writes with scepticism about evidence-based design findings, arguing that they often state the obvious, and that it is almost impossible to conduct such research properly, since there will always be room for doubt over whether the changes observed are due to design interventions or due to the change in clinical practice. Papoulias [5] questioned the existing studies for the lack of proper methodology and for not being rigorous enough.

In architectural practice, however, decisions are mostly not based on scientific research, but on close case-by-case cooperation with the stakeholders. Co-design - collective decision making in a framework of frequent meeting with different stakeholders is a tool sometimes used by architects to gather expertise. Unfortunately, in this process the voices of service users are often ignored.

Boden et al. [7] write in their chapter about the ways of adapting co-design to identify key 'touch points' in the workflow of the facility, – the moments in space and process that require special attention to design and operation planning. In the course of this process, different groups are brought together to arrive at a common solution that is acceptable to all of them. Video interviews of the user groups are utilized at the initial stage of the process to reach common ground, and solutions were developed in a series of workshops. Another workshop-based project, 'Madlove:

a Designer Asylum' by James Leadbitter aimed at giving a voice to the service users, their families and care providers. In a series of workshops held at in different locations and involving various groups of people, participants were asked to imagine what their perfect asylum would look like, smell like, feel like, as well as what activities it would have available? The responses were recorded and illustrated by an artist during each workshop, creating a beautiful palette of ideas. Parnell and Rooney [7] describe their study of remodelling the sensory room in a child and adolescent mental health unit. In this case, the users participated in the design and continuous remodelling of the room, development and management of activities, which was regarded as a very positive practice. Generally, it has been reported that involving staff and service users in the design process, choosing the artwork and developing activities has had a positive impact [7].

Themes

Several literature reviews of research regarding mental hospital design [9],[10],[11] describe the findings and themes that are studied most often. Among the most mentioned are: topics related to general physical design (natural and electric light, noise levels, views of nature, domestic features, single occupancy rooms, good visibility, diverse spaces for different activities, clear layout and functions, design and position of the nurse stations); interior design elements (positive distractions, high-quality well-maintained finishes, presence of art, movable furniture) and; psycho-social and administrative (access to gardens, social interaction, models of care, deinstitutionalized environment, crowding, security, privacy, user engagement in design, therapeutic milieu). The reviews mention that some of those features made a positive impact on reducing length of hospital stay, use of medication, aggression and seclusion rate, and reported wellbeing of patients and staff [5].

Other researchers have grouped those characteristics in order to evaluate hospital environment more broadly. For example, Chrysikou [2] has studied whether treatment and patient satisfaction rates were better in hospitals with domestic or traditional institutional design. She developed an evaluation tool called the SCP model, where SCP stands for characteristics specific to psychiatric hospitals: security, which describes whether patients are seen as a potential danger to themselves or others; competence, which indicated whether patients have a degree of disability; privacy, which points to whether gradual reintegration to society is part of the treatment). Some authors have proposed to update the Ward Atmosphere Scale (WAS) which was developed by Rudolf H.Moss in 1960s and has since then become the most widely utilized tool for evaluation of psycho-social environment in inpatient wards [30]. Currently, the evaluation categories that constitute WAS include involvement, support, spontaneity (that is, the relationship dimension), autonomy, practical and personal problem orientation, aggression (the personal dimension), organisation, program clarity, staff control (the system maintenance dimension).

Several authors have written about issues that need to be considered in the design of new psychiatric hospitals. A group of authors involved in mental healthcare system reflect on emotions and experiences that service users encounter during the hospital admission in the collection of essays gathered in a recent book [7]. Emotions that can have a major impact on mental health of a service user are grouped into the following categories: status and value, which covers humiliation, equity, status anxiety, shame, utility, and stigma; trust and belonging, which brings together connection, cohesion, resilience, community, and isolation; power and agency for authority, entrapment, control, and powerlessness; safety, security and respite which includes threat, fear, instability. Studying hospital environment through the emotions it evokes in the users is a promising direction of research, given the potential benefit of well-designed spaces towards ensuring that the users retain dignity. Moreover, this approach can help to minimize the feelings of shame and powerlessness which are commonly associated with one's admission to a psychiatric hospital and already accompany so many mental illnesses.

Attempts to provide a summary of design concerns and recommendations have also been made. Shepley and Pasha [4, 9] list recommendations underscored by emerging evidence and based on the analysis of previously made studies. They could be related to psychological needs, such as those of stress reduction, personal space, security, choice, as well as to functional needs treatment and care, safety, access to nature and effective communication. In his book, Verderber [3] identifies 74 design considerations and classifies them into 7 groups: built environment (landscape, arrival sequence, private and public spaces, inpatient and outpatient wards) and diagnostics, treatment and management (art, music and horticultural therapy, specific trauma units, virtual reality therapy, disaster resilience, salutogenic partnerships, safety of patients, visitors and caregivers). He also criticizes previous studies for the lack of focus on staff wellbeing and the effect it can have on the patients. Karlin and Zeiss [13] put design considerations into in four groups – ambient (light, noise, air quality), architectural (layout and size of the wards, patient rooms, nature views, design of group rooms and location of isolation rooms), interior (furnishing, familiarity and colour), social and specific features. Lundin and Bergsland [14] also give a list of recommendations based on literature and personal experience: positive first impression, dignified environment, gradation of privacy in spaces, poetization of daily rituals, alternative routes, smaller units with own social spaces, separate entrances for the police and ambulance, short corridors, and building as low as possible.

Unfortunately, the totality of the recommendations mentioned above, design manuals and national regulations may at times represent numerous contradictory statements. Engaging in a though experiment to illustrate this point brings to life the following constructs: "the environment should be flexible and deinstitutionalised, allow spontaneity, but at the same time be ordered and organised"; "the furniture and finishes should be made damage-resistant and easily

repairable, must also possess a home-like appearance”, “there should be large low windows, but patients should not feel too exposed”, “there should be places for respite, but the ward should be easy to observe while the social interaction should be encouraged”. The striking logical incoherence of this emphasises the problem of correctly selecting those recommendations that must be given priority and those that we can afford to ignore. One has to ponder whether it is worth trying to find the general solution at all or whether a case-by case unpacking of design dilemmas might be a better approach.

Dilemmas

As Chrysikou [2] mentions in her book, the contradictions in design recommendations might stem from the dual nature of psychiatric treatment. On the one hand, patients should not be afraid of asking for help and admission to the psychiatric ward. They should feel safe, welcomed and retain their dignity. However, they will also be sometimes stripped of their privacy through checks during the night, personal items taken away and constant observation for security reasons. The patients need to have enough autonomy to feel self-sufficient and to retain skills, but the hospital usually cannot risk trusting them. Finally, sometimes symptoms of mental illness can prevent patients from performing everyday tasks, calling for assistance or additional control to be provided, again at the expense of their privacy.

At the same time, the ideals that have informed the design of modern psychiatric hospitals in the 2000s might presently be in danger. In Finland, the amount of hospital beds has been declining and is now less than 20% of what it used to be during the beginning of deinstitutionalisation process. As a result, the severity threshold for inpatient treatment is set at a very high level. Staff shortages shift the responsibility for ensuring patient’s safety to the designers of physical environment. This leads to an increase in the risk of the environment of psychiatric wards becoming more institutional [15], [16]. Even if the architects incorporate therapeutic features, they will be sometimes removed or limited during the security checks. Curtis et.al. [17] cite interviews with hospital staff and users where they discuss not being able to use patient kitchen or open windows in patient rooms, including those that have protective mesh, because they are considered unsafe by the hospital administration.

Patients, staff and administration might have opposing perceptions of the mental hospital, a phenomenon that Nichols and Kidd term ‘split milieu’ [7]. For example, Poole and Reaveley [7] mention that while the staff sees isolation and use of the seclusion room through the lens of risk and safety, the service users always see it as a punishment. Dinesh [18] writes that the patients in the ward are always bored, while the staff are overloaded with paperwork. The staff focuses too much on safety and controlling behaviour of the users, so there is no time left for the meaningful interaction. The acute wards today tend to focus on crisis management rather than treatment, and that makes patients feel abandoned and not listened to when they are most vulnerable. The service user group is also not homogenous, some feel exhausted and in need of rest while others are agitated and demand constant interaction [18]. How those radically different groups will co-exist in the same space should be discussed during the design process of a new facility. All sides should be heard with respect to the common ideology, goals and treatment philosophy in the new hospital. Observing it from the perspective of the dilemmas, being aware of the sometimes conflicting goals, is important for finding a common ground. The following dilemmas (figure 1), – 8 pairs of environmental characteristics, - were produced on the basis of concerns voiced in the literature, as well as the contradicting design goals encountered by the author in her architectural practice.



Figure 1. Design dilemmas

Dilemma 1: PRIVACY – ISOLATION

Psychiatric hospitals have historically been placed in remote rural areas to both provide service users with a quiet space to heal and to shield them from the pressures of life in the society. Closed wards, common in Finland, may be regarded as the continuation of this trend. The question, therefore, is that of where the hospital should be built to ensure that the users have a peaceful stay, yet are able to maintain a connection to the community. First, some modern hospitals are still being built in the countryside, thanks to its suitability for generous gardens being established and their beautiful landscapes. However, a remote location makes it harder for the users to stay connected, or for the family members to visit and be present during the care process. Second, locating a hospital on the somatic hospital campus, or on a floor of a general hospital, normalizes the mental illness and provides possibilities for multi-disciplinary care. However, such campuses are often very dense and have limited access to the outside green spaces. Third, bringing hospital closer to the community, making it permeable rather than fortress-like helps to keep it accessible and its users connected to the outside world while not offering patients the same protection inside their own universe of a psychiatric institution. Service users treated in community care experience everyday stigma more frequently, since the ‘healthy’ population that rarely tolerates differences surrounds them. In terms of architecture, transparent buildings, living rooms with large windows, balconies, courtyards and gardens that are open to the outside can help to reduce the stigma, but at the same time they may make the service users feel as if they are being put on display. To sum up, this dilemma hints at a crucial question of ensuring the patients’ privacy is protected without making them feel hidden away and isolated.

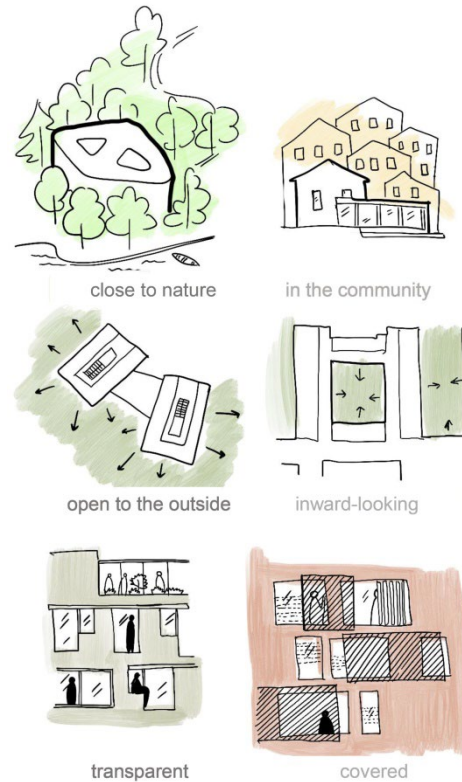


Figure 2. Privacy and isolation

Dilemma 2: EFFICIENCY – SPACIOUSNESS

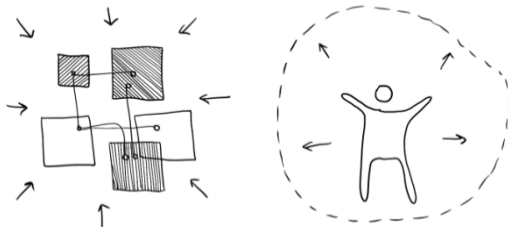


Figure 3. Efficiency and spaciousness

Hospitals today are prioritising efficiency of operation, short routes and simplified observation by a smaller number of nurses. The imperative that dictates that everything is to be placed next to everything else, is forcing architects to design dense and dark buildings. Truly, security is a big concern in mental hospitals, which makes the ability to quickly reach the patient and interfere in a crisis so essential. Therefore, short routes need to be a priority without a shade of the doubt. On the other hand, the service users need not to feel trapped; they need room to move freely and a variety of spaces for activities. Still, more space means that more staff is needed for observation. The lack of resources makes it almost impossible

to follow the recommendations for therapeutic wards, instead settling for the bare minimum. There is also a danger in designing an extensive facility when there is not enough staff to maintain the operation. In case this danger materialises, courtyards and gardens end up being secluded because they would otherwise be difficult to maintain and control. Therapy and exercise rooms that might be shared with the clinic become out of bounds for the inpatient because there is no one to escort them. Family overnight stays become impossible because patient rooms are too small to house other individuals than the patient themselves. People with the experience of living both in old asylums and new mental hospitals report missing the sense of space and light, high ceilings and green spaces. ‘*Getting lost in the lovely gardens. There was plenty of places to look and come to terms with one’s feeling. There was light in the old wards. New hospitals feel like being in an air raid shelter except you don’t feel safe*’ [19]. This puts an architect to the task of designing spacious wards with enough light in rooms and corridors while keeping the routes short and the building easily to monitor.

Dilemma 3: STRUCTURE – FLUIDITY

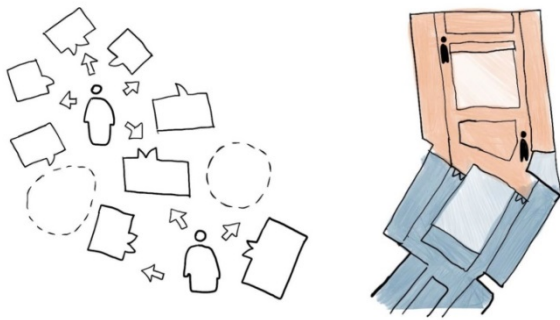


Figure 4. Structure and fluidity

Nowadays, both somatic and psychiatric hospitals are striving to move from hierarchical patient-practitioner relationship towards patient-centred care where the user is more informed and is an active party to treatment decisions. It is an especially important development for psychiatric care, since it is the service user who has the greatest degree of knowledge about what can help them to wind down, what triggers or motivates them. This calls on architects to deliver a response to that change. Designing less formal consultation rooms and providing spaces that can chance encounters, can help to establish trust, facilitate mutual understanding, and reduce the occurrence of abusive behaviour. Service users often mention that they find informal interactions more therapeutic than structured scheduled activities [7], [17]. On the other hand, studies on violence in mental hospitals [20]

link unpredictability and the lack of structure to aggression episodes. Easy-to-comprehend layout, clearly demarcated rooms and functions are often mentioned in recommendations among the ways of avoiding confusion, anxiety and irritability. At the same time, hierarchy can provide a social structure that is simple to comprehend and adapt to – it is easier to know how to act when relationships have clear boundaries. The thinking behind rational asylums of the past was to provide the patients with the sense of structure, comprehensibility, and safety that mental illness strips them off. Architecture has a power to influence the social environment of the hospital. Therefore, what we have to do is successfully marry the need to design spaces that foster both equality and spontaneity with the desire to keep boundaries and regulations in place where necessary.

Dilemma 4: MEDICAL – NORMAL

This debate has existed as long as the field of psychiatric care itself, reflecting both medical and the environmental nature of mental illness. Many psychiatric facilities today follow the medical type of mental hospital which incorporates rational, form-follows function with minimalism. Designs, influenced by normalisation theory, which aim at making a hospital's appearance as close to a normal home as possible also exist. Solutions that follow salutogenic and antroposophic principles, where spaces are designed to be surprising, fluid, unusual, have also been suggested earlier. It seems that most presently operational mental hospitals are premised the medical model while retaining some cosmetic features of domesticity. Some would contend that the medical appearance of a hospital conveys a message of competence and scientific precision, while home-like facilities may appear to be a final destination, much like elderly care homes do [2]. However, service users sometimes spend months as inpatients and might begin experiencing the negative effects of institutional environment. Even though short-term admissions are the goal, it is not yet a reality for all patients. Psychiatry is constantly advancing and changing, but it is still unclear if it would shift closer to either medical or social care or would remain on the spectrum between those two fields. Many studies recommend ensuring that the mental hospital's environment is as close to normality as possible while failing to clarify what normality represents in that sense, whether it is the normality of a home where one resides or the normality of a hospital where one receives treatment. To conclude, we need to decide whether we should combine social and bio-medical nature of psychiatric care or prioritise either one of these instead.

Dilemma 5: DOMESTICITY – SAFETY

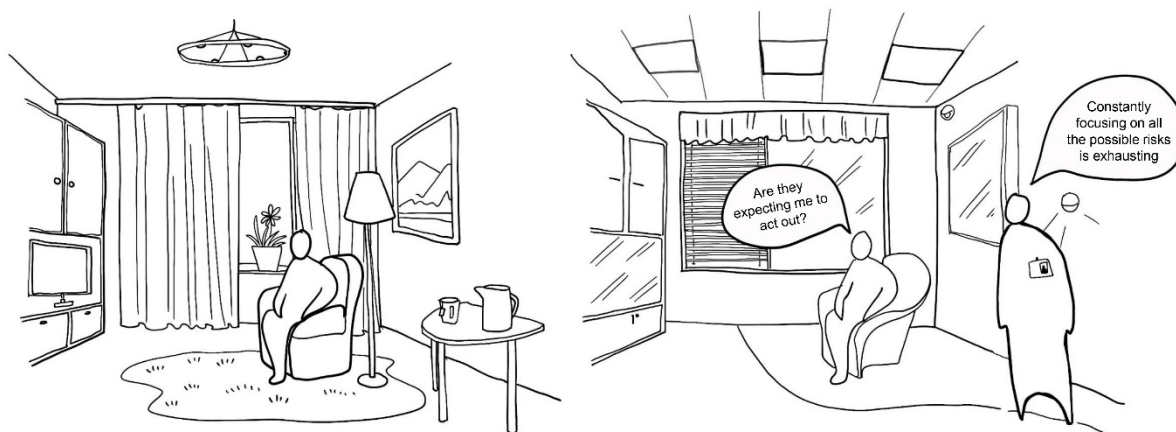


Figure 5. Domesticity and safety; domestic environment (left), institutional environment (right)

The conflict between the principles of therapeutic atmosphere and the attempts to create a harm-proof physical environment is one of the most widely discussed dilemmas in literature about mental hospital design. Hunt and Sine [21] argue that the attention dedicated to the safe design is disproportionate to its effectiveness, as suicide rates in US hospital have remained unchanged despite the new approach to design having been introduced. A common assertion is that the service users react to the physical environment and the signals embedded in it: for instance, if the hospital's security features are visible, if the staff are hiding behind the glass wall, patients may start to feel that they are feared, are expected to act negatively, which in turn induces them to respond with uncooperativeness and aggression. Simultaneously, the responsibility of staff to protect patients from risks, often by limiting their freedoms and rights, adds a great deal of stress to their work [22]. In traditional hospitals patients are vulnerable, and the medical staff are providing care. Given that the staff are always forced to perceive the patients as a potential source of danger, it is unclear who exactly is placed in a vulnerable position in a mental hospital and who is being protected from whom. The question then becomes that of whether there is a place for isolation room in a 'domestic' psychiatric ward. Architecture can have a big influence on the atmosphere and operation, whether it does so through installing physical barriers between user groups or by means of providing connections. The significance of safety cannot be underestimated, similarly to the personal relationships, trust, and positive interactions between service users and medical staff. All of these are essential for successful recovery and should be nurtured as much as possible by the facility design.

Dilemma 6: STIMULATING – CALMING

Psychiatric hospitals treat service users with very different symptoms. As a result, there is a variance in need in terms of their environment. For example, those in the manic stage of bipolar disorder require a calming and peaceful atmosphere, while those with depression need stimulation and opportunity to socialise. One distressed or manic patient, whose needs are not met, can disrupt the entire atmosphere on the ward. No clear guidelines exist pertaining to the separation of the users into different wards. There is a consensus that psychotic patients should be treated separately from those with mood disorders or cognitive disabilities, with some hospitals containing an intensive care unit for those in risk of harming themselves. However, such departments, as well as smaller mental hospitals and emergency units, do not usually possess the resources necessary to divide the users. Therefore, the problem that we have to tackle is that of combining those contradicting needs into a single design, especially under pressure from spatial and financial constraints, as well as that of prioritising the needs of one group of patients over another.

Dilemma 7: COMMUNICATION – DISTRACTION

Positive communication between users and care providers is a vital part of psychiatric treatment. Architecture can create spaces for different groups to interact and also create patient-only or staff-only spaces for quiet work and rest. This dilemma most commonly manifests itself in the question of whether to design open or closed nurse stations. Staff sometimes tend to prefer the nurse station with the glass partition, since they are afraid that patients will abuse any sort of increased access to them. Indeed, frequent interaction with patients has been linked to higher rates of burnout among the staff members. On the contrary, users often complain about care providers being unavailable, 'hiding in their offices as much as possible' [19]. Dinesh and others [18], [23], [24] write about the staff being burdened with filling forms and working with documentation, never having enough time to spend with the service users, while the patients often left to feel bored, misunderstood and abandoned. Patients mostly interact with one another; the same

goes for the staff, since neither of the groups has enough physical and time space to dedicate to meaningful communication. The psychiatric ward needs to be an attractive place to work at, since many mental hospitals often find themselves desperately needing more staff. To archive that, spaces for respite and quiet work should be made available. This dilemma overlaps with that of privacy versus isolation. When resources are scarce, the complex trade-off must be made between prioritising patients' need for communication and emphasising the staff's need for the quiet isolated working environment, which also affects the number of private and shared spaces to be provided for the both of those groups.

Dilemma 8: CARE – DISABILITY

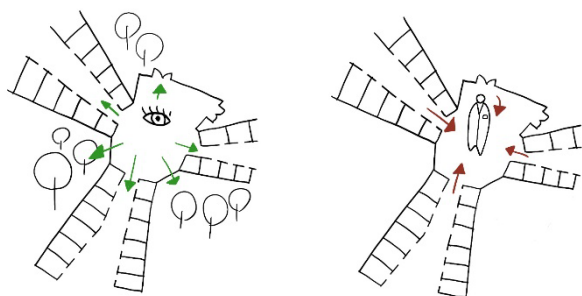


Figure 6. Care and disability

engage in this task independently whenever their condition allows them to, they might feel helpless, dependent, and lose their sense of self-esteem. Then, the issue in front of us is that of discovering the most efficient way of designing psychiatric facilities that patients can use with a degree of independence without undermining the patients' safety and simultaneously avoiding infantilising the service users while making the environment suited to their abilities. We need to find an optimal method of designing diverse spaces that reflect patients' path to recovery.

Preparing the service users for the life outside of the institution is one of the main treatment goals. However, guidelines regarding clear observation lines, control over entrances and the overview of the common spaces lead to a very staff-oriented design with the nurse station in the middle of the unit. Together with hospital policies, this places the focus on on-duty nurses, making them the solution to all the problems and concerns at the expense of fostering independence in the patients [25]. The symptoms of mental illness can suppress motivation and make it very hard for the patients to perform daily tasks, during which they might require assistance with dressing, cleaning and hygiene. However, if the patient is not encouraged to

Conclusion

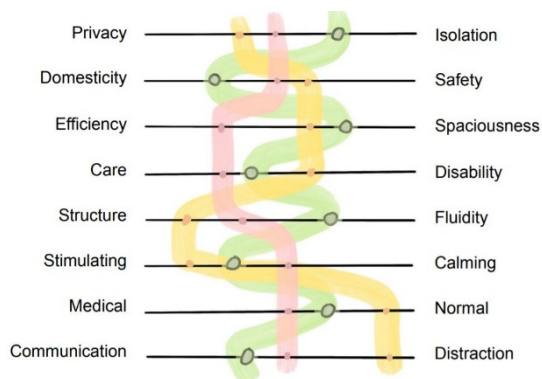


Figure 7. Possible balance between opposing environmental characteristics

accepted. Different treatment philosophies manifest themselves in the contradicting recommendations that appear in literature. Could evidence-based design provide architects with the knowledge necessary to make more informed choices? Or should the decisions be made separately for each project, through co-design and close cooperation with the users? It would be helpful if we could see the motivation and thinking behind design decisions of newly built hospitals, and with respect to how those decisions affect the mental healthcare provision, the well-being of the staff and service users, as well as the public image of the institutions. More research, evaluation and knowledge-sharing between designers and practitioners would help to strengthen our understanding of the healing architecture.

The dilemmas discussed above could be used to shape the conversation with the stakeholders in order to reach an agreement on principles that we could implement to define the new institution of a psychiatric hospital. Creating a consistent building in which all elements work together without undermining its operation should be seen as the paramount aim. When it comes to architectural design, various groups might interpret what constitutes therapeutic environment differently. The dilemmas could be a start of the qualitative and quantitative exploration and evaluation of existing buildings and the therapeutic environments that they create. This approach could supplement the design guidelines that are usually discussed in the literature, since it helps to uncover the underlying motivations behind the ways the stakeholders try to influence the design. As we can observe from the new psychiatric facilities built worldwide, no single approach is currently found that is universally

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