

The SCP model: A three dimensional methodology for understanding, profiling and evaluating mental healthcare architecture

Dr Evangelia Chrysikou¹

¹SynThesis Architects, GB

Abstract

Purpose: Architecture for community based facilities for acute mentally ill people predominantly borrowed vocabulary and methodologies from neighbouring fields or relied to experimentation in order to accommodate the uneven and varied development of community psychiatry in the Western world. Mostly, the model used was normalization theory, a linear model of understanding, designing and evaluating healthcare facilities, originally developed for learning disabilities. This research supports that the domesticity-versus-institutional concept suffered from a number of limitations, especially since it was not originally constructed for acute mentally ill people.

Methodology: To develop a methodology that fits mental healthcare architecture, a three-dimensional, comprehensive theoretical model has been created. The methodology puts together the dialectics behind mental healthcare: the idea of dangerousness that includes the danger of harm and self-harm, the idea of disability as a result of the illness itself or as an effect of institutionalization and the idea of social reintegration as expressed by clients reclaiming their role in decision making.

Findings: The three parameters stated above are analogous to the three prevailing models of mental health care -- the jurisdictional, the medical and the psychosocial-- presenting an integrating three-dimensional grid of the various mental healthcare regimes and architecture. Those dimensions/parameters were safety and security, those of competence and of personalization and choice. The model created was named SCP from the acronyms of the parameters. Due to this flexibility, the model can be used for evaluating and defining the therapeutic environment of the facilities when combined with evaluation tools such as checklists, to highlight any limitations regarding the domestic character of those environments. Keywords: mental health architecture, evaluation, normalization theory, psychiatric facilities

Introduction

The study of the physical environment of psychiatric facilities is of fundamental importance for the care and the treatment of mentally ill people. It is also of great value for understanding and caring for mental illness, since this is still among the diseases that present low diagnostic accuracy and low medical treatment accuracy factor (Christensen 2009). According to Tucker (2010) space is essential component for de-institutionalisation and the social re-integration of mentally ill people. Yet, despite the fact that the study of the environment is a central theme for the quality of care of mentally ill people little research has so far involved the actual environment of those facilities. On the contrary, borrows from other fields, such as normalization theory that was borrowed from learning disabilities, were imported to the discussion regarding the design and evaluation of mental health facilities. This prevented the development of a purpose-designed methodology.

Throughout history, changes to institutions that dealt with mental illness transformed society's attitude towards the illness and subsequently affected its buildings and treatment regimes (Foucault 1961, Goffman 1961). Each new concept would question and subsequently substitute the previous one. The idea of the protection of society initially that Foucault described eloquently, and the protection of the individual from oneself, which has been described under the term of dangerousness (Liakos 1990), gave judges the power of incarceration and dealing with mental illness (Cavadino, 1989, Cayla 1992). In the nineteen fifties, though, the discovery of anti-psychotic drugs set the medical model as the predominant model of care and the psychiatric ward of the general hospital became its physical locus (Vavylis 2003). Yet, limitations of drug treatments and lack of long term care policies cast doubt over the medical model, which could not comply with de-institutionalisation approaches. The approach that succeeded the medical model became known as 'care in the community' (Ekdawi et al 1994). Under the community care prism, the hospital was accused of cultivating institutional behaviors and preventing the social reintegration of the mentally ill. Thus, although the medical model opened up an important perspective for the care and treatment of the mentally ill and indeed removed some of the stigma placing mental health back into the premises of socially accepted institutions, such as the general hospital, it gradually presented limitations on dealing effectively with mental illness.

Gradually, once the limitations of the medical model appeared, paramedical services, such as the services of psychologists and social workers, started to be accepted as an essential component of care (Edwards 1975). The inadequacy of the general hospital to deal effectively with the whole spectrum of mental illness, and especially the long term and relapse episodes, created a web of experimental residential facilities located in the community. These, started to host functions previously attributed to the hospitals (Muijen

1993). However, as de-institutionalisation presented striking variations even within the same country, it would be very difficult to describe it as a model of care (NAHA, WHO and WONCA 2008). Despite the fact that it constituted a global trend, it affected each context in a different way according to the role of the hospital in provision of services: from central to redundant.

Purpose

The variety of approaches for the treatment and care of mentally ill, hindered the progression from experimentation to an evolved model of care. This happened to a great extent because this wide variety of care options was combined with the inadequate funding for the architectural research of mental healthcare. To this added the fact that the building stock tends to adapt far more slowly than organizations (Brand, 1994). There was also insufficient experience of those involved in the planning and architects' inexperience in patients' experience (Norman, 2002). Subsequently, architects could not refer to evidence-based guidelines or adequate briefing documents on the part of the healthcare providers. Anecdotal evidence, assumptions and 'personal' references were the basis of most of the architectural literature on the subject (Chrysikou 2011). As a result, occasionally even newly built facilities had to be demolished and replaced because of the severity of the problems due to inadequate knowledge and planning (Elderfield 2002).

The aim of the research was to create a methodology for designing mental healthcare facilities in a form of a flexible model that could follow all the design process, from briefing to evaluation. The researched questioned the prevailing thinking for designing for mental health, which was normalisation theory, as a borrow that did not sufficiently cover the needs of psychiatric facilities.

Normalisation theory was imported from the field of learning disabilities in the late 1990s to compliment care in the community as a response to the lack of direction, even though normal as a desirable spatial quality appeared earlier in architectural discourse for mental health (Goodman 1976, Garety 1988, Weller 1993). For normalization theory the optimum milieu for care were those that bore references to the equivalent structures of a normal life in the community. Regarding accommodation, for example, the optimum solution was the one closer to that of the home. The metaphor of an environment with domestic references for facilities that provided accommodation was a fundamental part of the paradigm shift. However, a more precise definition was missing (Chrysikou 2012). Under the strong influence of normalization theory, the term that is most often used in the literature – architectural and healthcare related—referring to the spatial qualities of psychiatric facilities that provide accommodation is that of 'domesticity'. To a certain extent, domesticity expresses the shift towards community-based options and differs from its meaning when

applied to family housing. In short, it tends to describe psychiatric environments that offered alternatives to institutional references.

The two frameworks, care in the community and normalization theory, constitute the major theoretical concepts in current use, and especially community care has not yet been seriously questioned in respect of the planning and design of mental health facilities.

Methodology

The research grouped together past and current thinking on facilities for mentally ill people in order to create an integrated model of approaching design that would incorporate all major axes relevant to the illness. Criticizing normalization theory, one could claim that domestic environments might compromise the true needs of acute mentally ill people and counter the serious implications that mental illness causes to several aspects of life. Instead, these environments might exclude people from therapy. Indeed, during the first decade of the new millennium, as the normalisation theory model was increasingly tested in practice by everyday experience, its inadequacies started to appear. That was more apparent in the UK, where limitations with respect to safety reached the media headlines, after assaults committed by patients that should not have been discharged from secure environments.

The imposition of domesticity in every environment related to the care of mental health might compromise the therapeutic outcome in the name of a so called return to a 'home'. To identify the limits that should be set to domesticity, the research revisited the concept of domesticity as it has been interpreted within psychiatric environments for the acute mentally ill, as opposed to designs that have an institutional origin. This was done in a critical and independent fashion, through evidence based, empirical research.

To develop a methodology that fits mental healthcare architecture, a three-dimensional, comprehensive, theoretical model has been created. The methodology puts together the dialectics behind mental healthcare: the idea of dangerousness that includes the danger of harm and self-harm, the idea of disability as a result of the illness itself or as an effect of institutionalization and the idea of social reintegration as expressed by clients reclaiming their role in decision making.

Regarding the first parameter of **safety and security**, risks include harm and self-harm, violence and abuse, vulnerability, substance abuse, self-neglect and noise (Royal College of Psychiatrists 1988). In acute wards, the risk of harm towards other patients or staff had been estimated at 1:20 and the risk of self-harm at 1:8 (Sainsbury Centre 1998). Safety and security of psychiatric buildings could be of significant importance, as part of the system component (Dickerman et al, 2008).

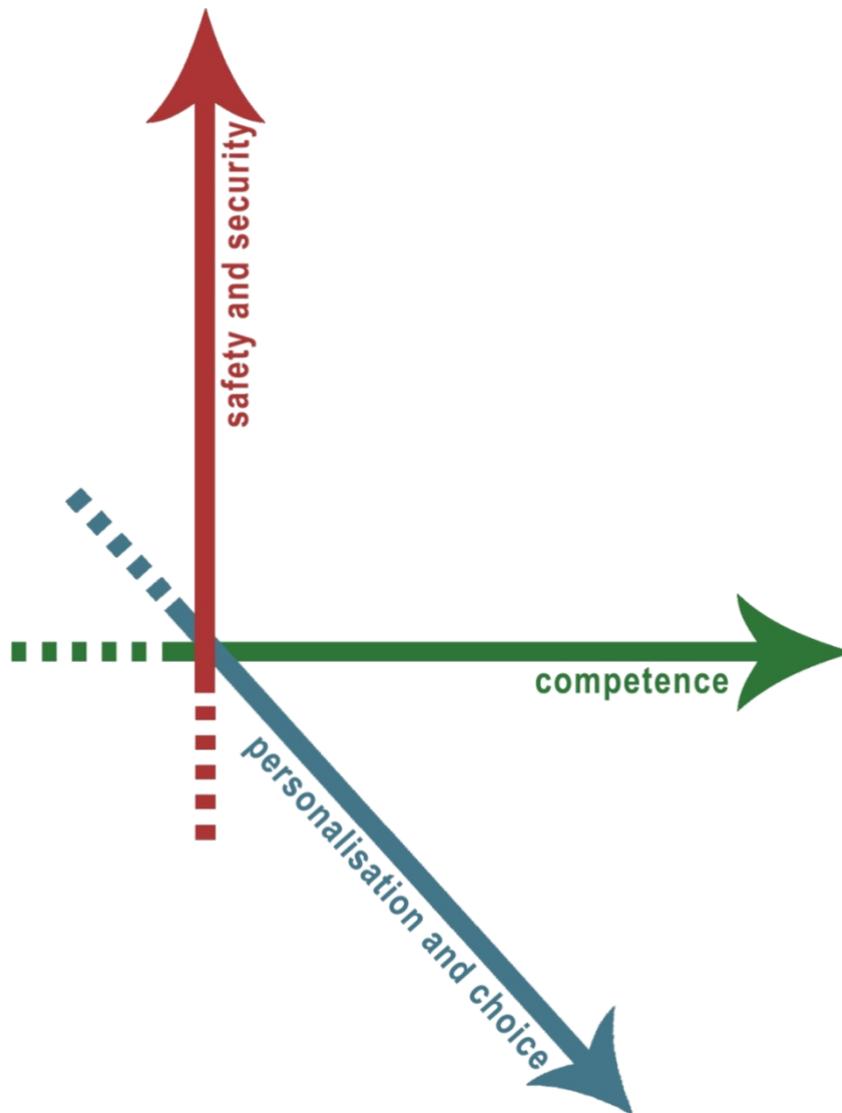
Competence-wise, mental illness has implications for the practical aspects of clients' life, some of them with disabling effects. Competence referred to the clients' ability to retain a

degree of independence in terms of sustaining oneself both physically and socially, with capability for independent living being the optimum. With regard to the disabling effect of mental illness, Osmond in 1957 made a grouping of issues regarding perception and Davis et al (1979) made an extensive list of deficiencies stemming from that illness.

Also poor resources, could increase boredom or 'incapacitate' clients (The Audit Team 2005) indicating the interactive aspect of designing for safety and the importance that enhancing clients' competence might have for more benefits than merely increasing their wellbeing (Norman 2002, Dickerman et al, 2008).

Personalisation and choice, the third parameter, refers to the degree of freedom that the client can achieve inside a facility. Both were limited in the institutional environments of the past but have gradually increased in recent years. Staffing levels and training, stigma, resources and design could interfere with the clients' interaction with the facility. The personalisation and choice umbrella and its relation to the reduction of stigma covered also issues related to clients' personal life. These included privacy and territoriality as well as clients' socialisation as expressed by the opportunities for interaction with other clients, staff or even people from the community, inside or outside the facilities.

The three parameters formed a theoretical framework that could serve as a grid for research. To test the model a research questioned the direct transfer of normalization theory to mental health (Chrysikou, 2012). It was empirical, synchronous and comparative. It questioned normalization theory as a linear loan that lacked the complexity to address the needs of mental healthcare: linear, as it shifted mainly between the two poles of institution and home, ignoring many of the dimensions of a patient's life that were not necessarily connected to either of these poles and loan as it did not address the particularities of the illness itself following its transfer from another field. Data were collected and triangulated from community mental health facilities from two very different European contexts, the UK and France, via architectural auditing of 10 buildings, the development of a detailed checklist and 50 staff and 65 client interviews. Yet, it is beyond the scope of this paper to go into detail in the details of the fieldwork.



Findings

The ineffectiveness of normalisation theory regarding the needs of mentally ill patients was raised. Instead, the research resulted in a fit for purpose model for viewing the design of mental health care facilities. The model acknowledged the fact that not necessarily everything domestic in the environment is positive for the care and treatment of the mentally ill people. Regarding windows for example, the fieldwork indicated that windows opening without any restrictions (domestic) might have been safe for mentally ill clients once they have stabilised but were not safe enough for people at the acute stage of their illness. Thus, this decision about the design of the windows relates to decisions on the desired level of safety for a particular client group and care model (acute vs stabilised and open vs closed facility). In short, at the planning stage the team can decide where about in the safety axis (positive-domestic or institutional-negative) to place the red lines. On the competence axis, for instance, there might be a decision to be made for the presence, the type and the use of the kitchen(s). It might be better for patients to be able to use a

domestic kitchen with or without a cooker when they have the motivation or willingness and there is enough staff to supervise, instead of eating reheated food from a trolley. On the same example, the planning team might reflect on the option of a domestic kitchen (domestic) against clients even using a full professional kitchen (institutional) under staff supervision to prepare meals for the ward. Also, the presence of a domestic kitchen next to a professional one that is accessible only to staff, might not be a standard homelike feature, yet it might add to the quality of life of the clients and might be in alignment with the care program compared to an oversimplistic option of a domestic kitchen that remained locked because there is no staff to supervise and food came with a trolley from elsewhere. Regarding personalisation and choice for example, an OT room for art therapy might not be found in a typical family home, or might not be necessary in open facilities where clients follow individual therapy programmes elsewhere, yet it might prove important for clients that were wardbound (sectioned clients) or because there was not enough staff to escort them or even because there was not such a network of activities in the vicinity. Thus, the planning team of the facility can decide where on the personalisation and choice access of the diagram will shift the priorities, i.e., closer to institutional that might allow for some more choice and options of services or to domestic where specific OT rooms would not be included in the facility.

These three different examples indicated that a 'domestic' choice is not necessarily the best option for all patient groups and this could depend on the stage of the illness, the care program and the staff resources or even the rest of the network resources in the community. On the other hand there might be institutional elements that do not serve patients best interests, such as the lack of a dining room in the facility or even the presence of a toilet in the middle of a shared bedroom. Again, it is through the use of the SCP model as an evaluation and decision making tool, that priorities can be placed in a more systematic manner and all design elements evaluated and discussed, so that the minimal amount of decision is made through a black box procedure and the more amount of decision is according to the care program philosophy and closer to user's needs. That way, each individual facility might occupy its unique space on the three dimensional grid according to those priorities that allow evaluation and provide a basis for comparison.

That model was named the SCP model from the acronyms of the main design issues –safety and security, competence and personalization and choice. The SCP model addressed the relation of the facility to the individual in terms of the ability of the facility to cater for clients' needs, as those are expressed by the jurisdictional, medical and psychosocial models of care the mental health services historically incorporated and which still play a dominant role to the mental health care regime and mental health architecture. These parameters correspond also to a model of needs, with most basic the need of surviving an acute episode (safety and security), then once this is satisfied, the need to reduce the disabling effects of the illness (competence) and finally when all previous is met, the need for psychosocial wellbeing (personalization and choice).

It is not unusual for community mental health facilities even if they have been praised by the architectural press or awarded to perform poorly in terms of patients' social re-integration and to develop institutional environments. When evaluated using the SCP methodology awarded buildings performed badly in the purpose-administered checklist and at the same time received negative comments from staff and clients (Chrysikou 2008). These buildings had been designed with the best of intentions in mind and from architects that dare to be innovative and invest a lot of thinking in their architectural solutions. Similar was the case of the social housing in the previous century around the world, where architectural innovation and confidence but also lack of knowledge of how space operates lead to buildings that generated a series of social problems (Hanson, 2001). Hanson also states, that the most vulnerable the user group of the buildings the more severe the consequences can be and thus the stronger the need to develop knowledge-based design tools.

In short, there might be spatial qualities that favour institutional practices that might not be apparent from the use of the SCP model. The model could depict the quality and of the institutional environment as well as the consequences to patients life because of it, but could not go deep into the reasons and methods that created it. For that purpose, a more elaborate spatial methodology might be more suitable to uncover the social dynamics of space and therefore, the reasons behind the institutional environment generators when all design intentions aimed otherwise. The model, however, could not cover the social relations of people, and the social logic of the psychiatric space, that could play a significant role for the social context of these facilities and their ability to integrate in the community.

Finally, because mental illness was not regarded as life threatening in the same way as coronary heart disease or cancer, since the Great Recession the shortage of government funding took its toll on the efforts to establish new standards in mental health care and in implementing the new frameworks in European countries. Thus, although there have been changes in the last ten years, they have not been as dramatic as they would otherwise have been or taken the directions they would have done if there was less shortage of funds. In that respect, many of the issues explored by the research, which would shift the focus if had been presented here, are of substantial relevance -- not only for countries like Greece or the Balkan countries, that lagged behind in its psychiatric revolution -- but also to the UK and France.

References

BRAND, S., 1994, *How Buildings Learn: What Happens After They're Built*. New York: Viking Press.

CAYLA, J., 1992. La loi du 30 Juin 1838 et l'organisation des soins aux malades mentaux. *Soins Psychiatrie* 142/143, Aout-Septembre: pp63-66.

CAVADINO, M., 1989. *Mental Health Law in context*. Hants: Dartmouth.

CHRYSIKOU, E., 2008. Parameters of effective design for mental health, from the perspective of psychosocial integration, Poster in: *4th Panhellenic Congress on Management, Economics and Health Policy*. Athens, Hilton. 3-6 December 2008. Athens: NSPH

CHRYSIKOU, E., 2011., *Architecture for the mentally ill: analysis of therapeutic spaces for clients with severe conditions*, PhD, Bartlett School of Graduate Studies, University College. London, London.

CHRYSIKOU, E., 2012. From Normalization theory to a 'Fit for Purpose' architecture for the mentally ill, *World Health Design*, 5(3), pp.72-80.

CHRISTENSEN, C. M., GROSSMAN, J. H., HWANG, J., 2009. *The Innovator's Prescription*. New York : McGraw-Hill, p161

DAVIS, C., GLICK, I., and ROSOW, I., 1979. The architectural design of a Psychotherapeutic Milieu. *Hospital and Community Psychiatry*, 30 (7) July: pp:453-460.

DICKERMAN, K., BARACH, P., and PENTCOST, R., 2008. We shape our buildings, then they kill us: why health care buildings contribute to the error pandemic. *World Health Design*, April pp: 49-55.

EDWARDS, A., 1975. *Mental health services*. 4th ed. London: Show and Sons.

EKDAWI, M., and CONNING, A., 1994. *Psychiatric rehabilitation*. London: Chapman and Hall.

ELDERFIELD, G., 2002. *The Sevenacres story –with patients in mind* presentation in "With Design in Mind" in RIBA in 19/06/02. London: Isle of Wight Healthcare NHS Trust

FOUCAULT, M., 1961. *Folie et déraison - Histoire de la folie à l'âge classique*. Paris: Plon.

GARETY, P., 1988. Housing, In: A. Lavender and F. Holloway, eds. *Community care in practice*. John Wiley and Sons.

GOODMAN, H, 1976. Architecture and Psychiatry: What has been achieved. *World Hospitals*, 12: pp 75-79.

GOFFMAN, E., 1961. *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates*. The United States: Anchor Books.

HANSON, J., 2001. Morphology and design: reconciling intellect, intuition, and ethics in the reflective practice

of architecture. In: (Proceedings) 3rd International Space Syntax Symposium. Atlanta. 7-11 May, 2001, pp. 06.1-18.

LIAKOS A, 1990. Brainstorming on the dangerousness of the psychotic, In: P. Sakellaropoulos, ed. 1990. *Dangerousness and Psychiatry*. Athens: Papazisi. pp.89-92.

Muijen M, 1993. Mental health services: what works? In: MPI Weller and M Muijen, eds. 1993. *Dimensions of community mental health care*. London: W.B. Saunders Company, pp.62-81.

NAHA, 1984. *Community Care: NAHA's position on Community Care* (mentally handicapped and mentally ill people), July: NAHA NORMAN DA ,2002. *The design of everyday things*, NY: Basic Books

ROYAL COLLEGE OF PSYCHIATRISTS (1998), *Not Just Bricks and Mortar, Council Report CR62*, Royal College of Psychiatrists, London.

OSMOND, H., 1970. Function as the basis of Psychiatric Ward, (slightly condensed version from *Mental Hospitals*, 8, April 1957:pp 23-30). In: Proshansky et al (eds) *The environmental psychology: man and his physical setting*, NY: Holt, Rinehart and Winston.

SAINSBURY CENTRE FOR MENTAL HEALTH, 1998. *Acute problems: a survey of the quality of care in acute psychiatric wards*. London: Sainsbury Centre for Mental Health.

THE AUDIT TEAM, 2005. *The National Audit of Violence (2003-2005) - Final Report*. London: The Royal College of Psychiatrists' Research Unit.

Tucker, I., 2010. Mental health service user territories: Enacting 'safe spaces' in the community. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, 14(4), pp. 434-448

VAVYLI, F., 2003. *Designing for mental health*. Thessaloniki: University Studio Press.

WELLER, M., 1993. Where we came from. ,In: Weller and Muijen, eds. 1993. *Dimensions of community mental health care*. London: Saunders.

WHO, WONCA, 2009. *Integrating mental health into primary care: a global perspective*. Switzerland: WHO Press.