



EXPERT INTERVIEW

## Better for everyone: A healing environment

The impact of architecture and design on health and healing is a central focus for the young architect Mena Theißen-Helling – as a researcher at the Technical University of Berlin. She argues that the importance of the “healing environment” will only grow in coming years.

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## Better for everyone: A healing environment brings benefits for patients, personnel and posterity

Dipl.-Ing. Architect Mena Theißen-Helling cites a striking statistic in explaining her interest in the complex of topics grouped under the heading “Healing Environment”: **It is increasingly common for people to spend upwards of 90 percent of their lives in enclosed spaces.** Indeed, in many developed societies around the world, one speaks now about the “indoor generation”.

Given that many of the spaces in which people spend the preponderance of their lives are poorly designed and anything but healing in their overall impact, Theißen-Helling maintains that there is much to be done in raising awareness and creating better interior environments in which we can spend our time.

This applies to all kinds of architecture and living environments, but is a particularly urgent issue in respect to healthcare, where the whole purpose of the spaces that are built is to promote health and overcome illness.

### More than an institutional concern

Theißen-Helling explains that in earlier times the architectural mission in healthcare was perceived principally from the institutional perspective of the healthcare establishment. The role of architecture was simply to provide a space where physicians could do their jobs, while the needs of the patient were not included as an explicit factor in these considerations.

The empowerment movement of the 1960s, however, brought a new perspective to these issues, and by the 1980s there was a growing awareness of the needs and requirements of individuals in connection with healthcare – of patients certainly, but also of healthcare personnel. These needs and their multifarious implications have shaped the continuing emergence of the “healing environment” as a defining topic in healthcare architecture to the present day.



Dipl.-Ing. Arch. Mena Theißen-Helling

### The hospital as an inherently stressful setting

Theißen-Helling does not try to disguise the basic nature of what happens inside a hospital: “It is a place where a confrontation with disease and death is taking place all the time – which means that some degree of stress will always be present.”

Stress, however, is a basic enemy of healing, and therefore the aim has to be to reduce its causes as much as possible and to provide ways to compensate for stress when it does inevitably occur.

Theißen-Heiling identifies four factors that impact significantly on stress levels in the hospital experience for both patients and personnel.

**Noise:** “With hospital architecture, the first aim has to be to avoid or minimize negative influences – which above all means avoiding noise,” she explains. Increased levels of noise are generally associated with higher levels of stress. “Noise sources are shaped by individual circumstances, of course, but there are general possibilities for reducing noise levels – through the surfaces that are used, through room constellations and floor plan organisation, and through facades.”

The noise environment of the ICU requires particular attention. There the omnipresence of medical devices and the noise that they produce can have a negative impact on patients’ sleep, which in turn affects healing possibilities. “As much as possible the technical devices should be set back from the patient and integrated in such a way that they are hidden.” Excessive noise levels not only have a negative impact on patients’ sleep but also can impede communication between physicians and patients, a key factor in successful management of treatment. And there is a further negative effect, namely on communication among medical personnel themselves, which likewise leads to disruptions in information exchange and higher levels of stress.



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**Light:** Again in respect to the healing environment of the ICU, Theißen-Helling reports that it has been found that improved management of ICU lighting possibilities has positive effects on intensive care patients’ sleep behaviour, both on sleep activity and quantity. In patient rooms and in public spaces on the other hand, designing environments where there is good access to natural light sources tends to improve feelings of well-being.

**Control:** In speaking about lighting, Theißen-Helling also identifies a third design factor that has a significant impact in many areas – and that is choosing design options that make it possible for patients and personnel to regulate ambient conditions themselves whenever possible – whether that be light or noise or room climate. “Architecture should not necessarily be fixated on providing a maximum or a minimum of particular environmental conditions (such as light or noise),” she explains, “but also should focus on giving patients and personnel the chance to control these factors themselves.” When individuals are able to influence the conditions of their own surroundings in the hospital, this tends to reduce stress. Stress reduction also comes from well-designed public spaces such as gardens, cafeterias, lounges or spiritual spaces that let persons relax in settings that are “not defined by a single architectural element” but where they can benefit from a general “feel-good atmosphere” where they are not in conflict with their surroundings.

**Ergonomics:** When medical work spaces are well designed this also helps to reduce stress and facilitate healing. According to Theißen-Helling, improved spatial arrangements around the patient bed and in the intensive care unit lead to reduced rates of treatment errors and incorrect drug administration. Bad ergonomics in such critical areas “make it less feasible for medical processes to be carried out with the desired level of effectiveness and efficiency.”



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## A more healing environment: The management view

Analysing the specific factors which affect patients and healthcare personnel is one way of understanding the case for integrating a healing environment perspective into hospital design decisions. But Theißen-Helling also points to a set of larger issues that are likewise at play.

The whole point of addressing healing environment issues is to establish better basic conditions for promoting the essential aim of healthcare – which, of course, is healing. As stress factors in the hospital are mitigated through improved management of the physical environment, nurses and physicians can do their jobs better and the recuperative capacities of patients are optimised in multiple respects.

These positive effects then have an impact on a range of economic and business issues that are becoming increasingly important from a management perspective, according to Theißen-Helling. She explains: “More and more there is a positive understanding that things will and indeed must change, because healing environment improvements allow for overall increases in effectiveness and efficiency. The question of

costs is always there in the background, and this becomes a top priority, for example, in connection with safety in the hospital – the avoidance of medication errors, the avoidance of accidents.” The reductions in stress achieved through implementing a more healing environment in the hospital can raise safety levels and improve the quality of care – desirable effects in themselves, which also have a clear impact on costs.

## Employee and patient satisfaction and the healing environment

A further management issue impacted by healing environment improvements is the ability of hospitals to attract and retain skilled medical personnel. As Theißen-Helling explains, the driving force for improvements in a hospital’s healing environment is typically the staff who are working there, as they are the ones suffering from stress day in and day out in poorly designed hospital settings. If changes are not made, medical personnel will go elsewhere.

Theißen-Helling describes this competition for well-qualified medical personnel in stark terms: “How can I retain the best personnel after they have been hired? There’s competitive

pressure to do this and one way to handle that is through architecture, is through the healing environment. Because at some point this competitive struggle to get and keep personnel is going to have an impact on efficiency and effectiveness in overall hospital performance."

And Theißen-Helling is quick to point out that one thing leads to another in this area. The effect of the hospital environment on staff also impacts how patients react to a hospital, which in turn is reflected in evaluations that are recorded and become part of the public record. "This is a factor that in the next years will become more and more important – evaluation portals, the publication of evaluations. These are factors that impact hospitals and force them to pose the question 'How can I promote my hospital as a hospital manager so that these aspects will be seen positively?'"

## Sustainability: A healing environment for the present and the future

A still broader perspective regarding healing environment design decisions goes beyond the current moment of use and endeavours to also accommodate the requirements of future generations. The idea is to build in accordance with flexible standards that perhaps do not precisely meet the wishes of the current owners or users but which will more effectively allow for new use scenarios as times change and technologies evolve.

Theißen-Helling explains: "Sometimes it is difficult to make specific stakeholders understand that a building will exist beyond this current time and to establish an awareness for the value of flexibility in design to achieve better sustainability and longevity of use... Finally, we want to be designing for a building life cycle of more than 50 years when possible." In this broader perspective, the healing environment also includes a view of the larger social and ecological context in which a building will be used over time.



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