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HEALING ARCHITECTURE: HOW SPACES SHAPE OUR MIND AND HEALTH

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Abstract. *People often perceive architecture as a simple box in which they live or work. A home protects us from rain, heat in summer, or cold in winter. It creates a sense of safety and comfort. An office provides a place to carry out professional duties, while a hospital exists for treatment and recovery. Consequently, every building has its assigned function.*

However, beyond these utilitarian purposes, architecture plays a much deeper role. It shapes our inner state and feeling. For instance: walls can either confine or inspire, light may heal or exhaust and the layout of a space can influence not only how we behave ourselves, but also how healthy we feel. Additionally, a building that seems comfortable to one group may at the same time be inaccessible to people with disabilities. Even the colors chosen for an interior subtly affect our mood, feelings and emotional balance. This article examines the relationship of psychology and architecture, and their impact on human health.

Key words: *Healing architecture, colors, disabled people, environmental psychology, health, therapeutic design, inclusive design, human-centered architecture.*

Introduction. In contemporary life, individuals spend nearly ninety percent of their lives indoors: at home, in the workplace, at school, in hospitals, or countless other built environments. These environments continuously affect us on physical, emotional and psychological levels. Thoughtful design can alleviate stress and promote balance, whereas poorly conceived environments may generate discomfort or even harm. For example, natural light is recognized as restorative, while insufficient lighting often results in fatigue and irritability. Open and spacious interiors are commonly associated with freedom and ease, while confined or narrow areas may trigger unease or even phobic reactions.

Consequently, architecture must be understood as more than the construction of walls and roofs. It functions as an active force that shapes patterns of behavior, influences social interaction, and contributes directly to human well-being. To recognize and explore this connection is an essential step toward improving the quality of everyday life.

Discussion:

Phycology of space: The human brain is unique and highly sensitive to space. Everything that surrounds us is perceived in different ways. The psychology of space shows, for example, that high ceilings are often associated with freedom and easier breathing, at the same time low ceilings may create a sense of confinement. Darkness is also feared by many people, due to the unknown.

Some individuals experience specific phobias, like claustrophobia that is the fear of enclosed spaces like elevators, train carriages, or narrow corridors. For those people, moving through tight spaces is a stressful experience that trigger anxiety *(Dr. Alina (2024))*.

Even colors carry psychological meanings. Green is known to reduce stress levels; blue supports concentration and focus. On the other hand, red stimulates and raises blood pressure, making it difficult to stay in such an environment for a long time. This is why schools often use yellow and orange tones to encourage activity and communication, whereas medical institutions prefer soft pastel shades to help patients feel safe and calm *(Nikita Dhumal (2021))*.

Architecture as therapy: There is a growing field known as healing architecture, which explores how the built environment can shape both physical and mental health (Lawson, 2010). In recent decades, more hospitals have been designed with an emphasis on natural light, access to greenery, and inviting communal spaces. Research suggests that patients with a view of gardens or nature tend to recover faster than those whose windows face nothing more than a blank concrete wall (Franklin, 2012).

Yet the relationship between architecture and health is not a modern discovery. In ancient Greece, healing temples dedicated to Asclepius were carefully planned with courtyards, gardens, and baths to encourage both physical and spiritual recovery. After centuries, medieval monasteries offered quiet cloisters and green spaces for reflection and restoration. Even in the 19th and early 20th centuries, sanatoriums for tuberculosis patients were built with wide terraces and large windows to maximize fresh air and sunlight. These examples remind us that throughout history, architecture has often been viewed not only as a means of shelter, but also as a form of healing.

Case study: A notable example can be found in the network of Maggie’s Centers in the United Kingdom. Designed by renowned architects specifically for people undergoing cancer treatment. These spaces deliberately escape the sterile and impersonal atmosphere associated with hospitals. Instead, they incorporate natural materials such as wood, abundant daylight and open layouts. The aim is to create an environment where people feel less like patients and more like guests in a warm and supportive home.



Figure 1. Maggie’s Manchester Centre, designed by Foster + Partners. Source: WikiArquitectura.



Figure 2. Maggie’s Manchester Centre, designed by Foster + Partners. Source: Nigel Young

Nature as an Architect’s Ally: Another significant contemporary design is the integration of nature into the urban environment. Vertical gardens, green roofs, parks, and ponds situated directly within residential blocks that serve not as decoration, but as a form of medicine for the mind and body. In Japan, there is the practice named (森林浴) “*shinrin-yoku”*, which translates as “forest bathing”. It has become widely recognized as a therapeutic way to restore balance through the nature *(Clarke, F. J., Kotera, Y., & McEwan, K. (2021))*. Inspired by this concept, architects have introduced another idea like *Healing Gardens*: specially designed spaces in clinics and cities that promote meditation, relaxation, and recovery through interaction with the natural world *(Mazuch & Stephen (2005))*.



Figure 3. “Shinrin-yoku”. An image of the forest. Source: Geneviève Latour

Space and Personality: Architecture also plays a subtle yet powerful role in shaping personality and social behavior, since every country has its own climate, culture, and history. Open-plan offices may encourage collaboration and communication, though they can simultaneously heighten stress levels *(Chelsea Levinson)*. Small, confined apartments often contribute to feelings of isolation, while spacious homes with panoramic windows tend to foster openness and connection with the outside world *(Elyse Warner (2019))*. A striking cultural example can be found in my own city - Uzbekistan, where traditional *mahallas* were historically constructed with homes positioned close to one another. This design encouraged frequent interaction and maintained close ties between neighbors. Therefore, architectural space does not simply serve as a neutral backdrop to life. It actively participates in shaping who we are and how we relate to others.



Figure 4. An illustration of old Uzbek mahallas. Source: Gazeta.uz

Accessibility and Inclusion: *Healing architecture* is not only a matter of aesthetic value. However also of equity and social justice. A space that appears “comfortable” for one individual may be entirely inaccessible or even hostile to another types of people. Inclusive design emphasizes the integration of ramps, wide corridors, tactile surfaces and visual contrast to ensure that people with disabilities can navigate and participate with dignity *(Mazuch & Stephen, 2005).* Moreover, universal design principles argue that environments should be functional and healing for all regardless of age, ability, or medical condition. A truly therapeutic space is not selective, but holistic. It provides equal opportunities for restoration and well-being *(Simonsen, Sturge, & Duff, 2022).*

The Role of Materials and Sensory Design: In addition to layout and lighting, the materials and sensory details of a space strongly influence how people experience architecture. Natural elements such as untreated wood, stone, or clay are often linked with warmth, authenticity and a sense of closeness to nature. Studies suggest that these materials help reduce stress and support mental balance through biophilic responses *(Kaya & Arslan Selçuk, 2018).*

Sound also plays an important role. Rooms with soft, sound-absorbing finishes usually make people feel calmer and more focused, while places with sharp echoes or constant noise can easily increase stress and discomfort *(Lawson, 2010).* Touch and even smell matter as well: the texture of wood or the scent of natural fibers can create positive associations, helping people feel safe and comfortable. In this way, the careful choice of materials becomes not just a design preference, but an important part of evidence-based healing design.

Conclusion: Architecture is more than walls or roofs. It is a constant presence in human life, shaping mood, thought, and health in subtle but powerful ways. The concept of healing

architecture demonstrates that design decisions are can support well-being or contribute to stress *(Codinhoto, 2017).*

Looking ahead, the role of architecture in health will only become more important. The COVID-19 pandemic has shown the need for open spaces, natural ventilation, and flexible layouts. Technology is also entering therapeutic design: smart buildings can regulate light, temperature, and air quality, while virtual reality can bring nature to patients who cannot go outdoors. In addition, trauma-informed and age-friendly design approaches show that healing architecture must include vulnerable groups, from children to the elderly.

The future of healing design, therefore, lies in combining timeless principles — light, nature, inclusivity — with new technologies and social awareness. Architects of tomorrow will not only build structures but also carry the responsibility to create environments that truly support human life and health.

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