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# Sanat ve Şifa: Antik Mekânlardan Modern Terapötik Tasarıma

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**ÖZET**

Sanat, mimarlık ve şifa arasındaki ilişki tarih boyunca sürekli gelişim göstermiş; antik kutsal mekânlardan günümüz terapötik çevrelerine kadar uzanan önemli bir araştırma ve tasarım alanı hâline gelmiştir. Bu çalışma, mimarlığın ve doğanın farklı tarihsel dönemlerde şifa süreçlerine nasıl katkıda bulunduğunu ve bu yaklaşımların çağdaş sağlık mimarlığında nasıl yeniden yorumlandığını incelemektedir. Antik şifa merkezleri; Mısır tapınakları, Mezopotamya kutsal alanları, Yunan Asklepionları ve Roma hamamları gibi örnekler aracılığıyla fiziksel, ruhsal ve sosyal iyileşme süreçlerini bütüncül bir yaklaşımla bir araya getirmiştir. Orta Çağ ve Rönesans dönemlerinde ise manastır bahçeleri, revirler ve hastaneler; simetrinin, doğal ışığın, mekânsal düzenin ve tefekkürün fiziksel ve duygusal iyilik hâli üzerindeki terapötik etkisini vurgulamıştır.

Günümüzde biyofilik tasarım yaklaşımı, bu tarihsel sürekliliği sürdürerek terapötik mekânlara doğal sistemler, bitkilendirme, gün ışığı, su öğeleri ve duyusal deneyimler entegre etmektedir. Maggie's Centres, Khoo Teck Puat Hastanesi ve Eden Project gibi çağdaş örnekler, doğa ile bütünleşen mimari yaklaşımların bireylerin psikolojik ve fizyolojik sağlığı üzerinde olumlu etkiler oluşturduğunu göstermektedir. Çevresel psikoloji, nöroestetik araştırmalar ve kanıta dayalı sağlık tasarımı çalışmaları doğrultusunda bu makale, terapötik mimarlığın yalnızca işlevsel bir sağlık altyapısı olarak değil, aynı zamanda stresi azaltabilen ve bütüncül iyileşmeyi destekleyebilen deneyimsel bir çevre olarak değerlendirilmesi gerektiğini savunmaktadır. Çalışma, geleceğin sağlık yapılarında doğa, duyusal tasarım ve insan odaklı mekânsal yaklaşımların bütünleşik biçimde ele alınmasının uzun vadeli iyilik hâli, duygusal konfor ve dayanıklılık açısından önemli olduğunu ortaya koymaktadır.

**Anahtar Kelimeler:** Şifa Mimarisi, Terapötik Mekânlar, Biyofilik Tasarım, Nöromimarlık, Duyusal Tasarım, Sağlık Yapıları Tasarımı

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# Art and Healing: From Ancient Spaces to Modern Therapeutic Design

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**ABSTRACT**

The relationship between art, architecture, and healing has evolved continuously throughout history, extending from ancient sacred environments to contemporary therapeutic spaces. This study investigates how architecture and nature contributed to healing practices across different historical periods and how these principles continue to influence modern healthcare design. Ancient healing environments such as Egyptian temples, Mesopotamian sanctuaries, Greek Asklepions, and Roman bath complexes integrated physical, spiritual, and social dimensions of healing through carefully organized spatial systems (Gesler, 1992). During the Medieval and Renaissance periods, monastic gardens, infirmaries, and hospitals reinforced the therapeutic role of symmetry, natural light, spatial order, and contemplation in promoting physical and emotional well-being (Gesler, 1992).

In contemporary architecture, biophilic design extends this historical continuity by integrating natural systems, vegetation, daylight, water elements, and sensory experiences into therapeutic environments (Kellert et al., 2008). Case studies including Maggie's Centres, Khoo Teck Puat Hospital, and the Eden Project demonstrate how nature-integrated architecture contributes positively to psychological and physiological health (Tekin & Gutierrez, 2023). Supported by environmental psychology, neuroaesthetic research, and evidence-based healthcare design, this paper argues that therapeutic architecture should be understood as an experiential environment capable of reducing stress and supporting holistic recovery (Nanda et al., 2009). The study concludes that future healthcare environments should integrate nature, sensory design, and human-centred spatial approaches in order to promote resilience, emotional comfort, and long-term well-being.

**Keywords**: Healing architecture, therapeutic spaces, biophilic design, neuroarchitecture, sensory design, healthcare design

# ART AND HEALING: FROM ANCIENT SPACES TO MODERN THERAPEUTIC DESIGN

## INTRODUCTION

Architecture has always shaped human experience beyond its purely functional role. Throughout history, societies recognized that built environments influence emotional states, behaviour, spirituality, and physical health (Gesler, 1992). Spaces associated with healing were therefore designed not only to accommodate medical practices but also to create psychological comfort, sensory engagement, and spiritual balance. Ancient civilizations incorporated water, gardens, ritual, light, and symbolic architecture into healing environments long before the emergence of modern healthcare institutions (Ulrich et al., 1991).

Contemporary scientific research increasingly validates many of these historical intuitions. Studies in environmental psychology and evidence-based healthcare design demonstrate that built environments significantly affect stress levels, emotional recovery, cognitive performance, and patient outcomes (Kaplan, 1995). Ulrich (1984) demonstrated that surgical patients with views of natural landscapes recovered more quickly and required fewer pain medications than patients whose rooms faced brick walls. Kaplan's Attention Restoration Theory similarly argues that natural environments restore mental fatigue and improve cognitive functioning (Kaplan, 1995). More recent studies in neuroaesthetics suggest that aesthetically stimulating environments positively influence emotional regulation and reduce stress within healthcare settings (Nanda et al., 2009).

At the same time, modern healthcare architecture increasingly acknowledges that hospitals and therapeutic environments should support not only physical treatment but also emotional resilience and psychological well-being (Tekin & Gutierrez, 2023). This shift has encouraged the development of biophilic and human-centred design approaches that reconnect individuals with nature through architecture (Kellert et al., 2008).

This paper examines the continuity of healing architecture from antiquity to the present. It first investigates ancient healing spaces in Egypt, Mesopotamia, Greece, and Rome before examining Medieval and Renaissance healthcare environments. It then explores contemporary therapeutic architecture through case studies such as Maggie's Centres, Khoo Teck Puat Hospital, and the Eden Project. Finally, the paper discusses theoretical frameworks including environmental psychology, phenomenology, neuroaesthetics, and neuroarchitecture in order to demonstrate how architecture continues to influence human well-being through sensory and spatial experience (Higuera-Trujillo et al., 2021).

## 2. HISTORICAL SURVEY OF HEALING SPACES

### 2.1. Ancient Egypt and Mesopotamia

In the earliest civilizations, healing practices were closely associated with sacred architecture, ritual, and environmental symbolism. Ancient Egyptian healing temples dedicated to Imhotep, later deified as a god of medicine and wisdom, functioned as environments where spiritual and physical healing were integrated (Gesler, 1992). These temple complexes frequently included sacred pools, ceremonial chambers, incubation spaces, and areas for herbal medicine preparation. Healing was understood not merely as the treatment of bodily illness but as a holistic process involving spiritual purification, emotional balance, and harmony between the human body and cosmic order (Higuera-Trujillo et al., 2021).

Similarly, Mesopotamian civilizations developed temple-based healing sanctuaries connected to deities associated with medicine and protection. Priests and healers employed rituals, incantations, herbal remedies, and sensory elements such as incense, water, and controlled atmospheres to establish

therapeutic environments (Gesler, 1992). Medical cuneiform texts suggest that architecture, symbolism, and environmental control played essential roles in healing practices, reflecting an early understanding of the relationship between space and well-being (Higuera-Trujillo et al., 2021).

In both Egyptian and Mesopotamian contexts, architecture functioned as more than physical infrastructure. Therapeutic environments were carefully designed to create emotional reassurance, symbolic protection, and sensory harmony. These early healing spaces established a historical foundation for later therapeutic architecture by recognizing that built environments could significantly influence psychological and spiritual conditions (Gesler, 1992).

### 2.2. Greek Asklepions and Roman Baths

The Greeks institutionalized healing through Asklepions, sanctuaries dedicated to Asclepius, the god of medicine (UNESCO World Heritage Centre, n.d.). These therapeutic complexes represented some of the earliest organized healthcare environments in architectural history. The Sanctuary of Asclepius at Epidaurus integrated temples, theatres, dormitories, baths, gardens, and treatment spaces within a unified landscape (UNESCO World Heritage Centre, n.d.). Patients participated in rituals such as incubation, during which dreams were interpreted by priests and physicians as part of healing practices (Gesler, 1992).

The architectural organization of Asklepions emphasized landscape integration, movement, balance, and sensory calmness. Natural surroundings, fresh air, water, and social interaction were considered essential therapeutic components (Ulrich et al., 1991). The inclusion of theatres and communal areas reflected the belief that emotional and cultural experiences contributed to physical well-being (Gesler, 1992).

Roman bath complexes expanded these therapeutic ideas into large-scale urban public architecture. Thermae and balnea functioned as social and healing environments combining bathing, exercise, relaxation, and social interaction (Gesler, 1992). Bath complexes often included libraries, gardens, massage rooms, hot and cold pools, and exercise courtyards. Water, acoustics, spatial sequence, and communal interaction collectively contributed to holistic well-being (Ulrich et al., 1991).

Roman baths demonstrated that architecture could simultaneously support public health, social cohesion, and emotional comfort. Their sophisticated integration of environmental conditions and sensory experience influenced later healthcare and recreational architecture throughout Europe (Gesler, 1992).

### 2.3. Medieval and Renaissance Healing Architecture

During the Medieval period, monasteries became important centres of healing and care. Monastic infirmaries were commonly connected to cloisters, gardens, and chapels, emphasizing silence, contemplation, and spiritual recovery (Gesler, 1992). The St. Gall Plan illustrates how medieval healthcare environments integrated herb gardens, treatment rooms, kitchens, and spaces for prayer into coherent therapeutic systems (Higuera-Trujillo et al., 2021).

Gardens became especially significant therapeutic elements during this period. Medicinal plants were cultivated for physical treatment while enclosed gardens also provided psychological calmness and opportunities for reflection (Ulrich et al., 1991). Nature was increasingly understood as both spiritually symbolic and physically restorative (Kaplan, 1995).

During the Renaissance, healthcare architecture reflected broader humanist ideals emphasizing symmetry, geometry, proportion, and visual harmony (Gesler, 1992). Hospitals were organized around courtyards and open circulation systems that improved daylight access, ventilation, and hygiene. Architects and patrons believed that beauty and spatial order positively affected emotional and spiritual well-being (Higuera-Trujillo et al., 2021).

Decorative elements such as frescoes, sculptures, and landscaped courtyards contributed to creating environments intended to comfort and reassure patients. Renaissance healthcare environments therefore reinforced the historical idea that architecture and aesthetics could actively contribute to healing processes (Gesler, 1992).

## 3. CONTEMPORARY BIOPHILIC DESIGN AND THERAPEUTIC ARCHITECTURE

### 3.1. Biophilic Design and Evidence-Based Healthcare

Contemporary therapeutic architecture increasingly integrates biophilic design principles that reconnect individuals with nature through built environments (Kellert et al., 2008). Biophilic design is based on the understanding that human beings possess an inherent psychological affinity for natural systems (Kellert et al., 2008). In healthcare settings, this approach incorporates daylight, vegetation, water features, natural ventilation, sensory materials, and environmental diversity into spatial design (Tekin & Gutierrez, 2023).

Research strongly supports the therapeutic effects of nature-based environments. Ulrich et al. (1991) demonstrated that exposure to natural settings accelerates stress recovery and reduces physiological indicators of anxiety. Kaplan (1995) further argued that natural environments restore cognitive attention and mental clarity. Neuroaesthetic research additionally suggests that aesthetically stimulating environments positively influence emotional states and reduce stress within healthcare contexts (Nanda et al., 2009).

As a result, healthcare architecture increasingly emphasizes emotionally supportive and patient-centred environments rather than purely clinical spaces (Tekin & Gutierrez, 2023).

### 3.2. Maggie's Centres

Maggie's Centres in the United Kingdom represent one of the most influential examples of contemporary healing architecture. Founded by Maggie Keswick Jencks in 1996, these centres provide emotional and psychological support for cancer patients and their families (Tekin & Gutierrez, 2023).

Unlike conventional hospitals, Maggie's Centres intentionally reject institutional aesthetics. Each centre is designed by internationally recognized architects such as Frank Gehry, Zaha Hadid, and Foster + Partners. The buildings emphasize domestic atmospheres, natural light, gardens, warm materials, fireplaces, and communal kitchens (Nanda et al., 2009).

Research indicates that users experience reduced anxiety, emotional reassurance, and increased feelings of comfort within these environments (Tekin & Gutierrez, 2023). Tekin and Gutierrez (2023) identify Maggie's Centres as paradigmatic examples of human-centred therapeutic design due to their integration of biophilic principles and emotionally supportive spatial organization.

The success of Maggie's Centres demonstrates how architecture can actively contribute to emotional resilience and psychological recovery by creating humane and sensory-rich therapeutic environments (Nanda et al., 2009).

### 3.3. Khoo Teck Puat Hospital

Khoo Teck Puat Hospital in Singapore represents one of the most comprehensive examples of biophilic healthcare design within a dense urban environment (International Living Future Institute, n.d.). Completed in 2010, the hospital integrates vegetation, rooftop gardens, water systems, natural ventilation, and biodiversity throughout the complex (International Living Future Institute, n.d.).

The building organizes patient wards around a large central courtyard functioning as a "garden

hospital." Vegetation extends vertically across façades, terraces, and interior spaces, while naturally ventilated corridors and water features create continuous sensory connections with nature (Tekin & Gutierrez, 2023).

Post-occupancy evaluations revealed significantly higher levels of patient satisfaction, emotional comfort, and perceived well-being compared to conventional healthcare facilities (International Living Future Institute, n.d.). The project demonstrates how biophilic design strategies can improve both environmental sustainability and therapeutic quality within contemporary hospitals (Tekin & Gutierrez, 2023).

Khoo Teck Puat Hospital illustrates the growing recognition that healthcare architecture should support emotional and psychological well-being alongside medical treatment (International Living Future Institute, n.d.).

### 3.4. Eden Project

Although not designed as a medical facility, the Eden Project in Cornwall represents an important example of therapeutic environmental architecture (Eden Project, n.d.). Designed by Grimshaw Architects and opened in 2001, the project consists of large geodesic biomes containing immersive ecological environments (Eden Project, n.d.).

Visitors experience vegetation, humidity, daylight, spatial enclosure, and environmental diversity through multisensory interaction (University of Oxford, 2026). The project emphasizes reconnection with nature while simultaneously producing calming and restorative psychological effects (Kaplan, 1995).

Recent collaborations between the University of Oxford and the Eden Project further investigate how interaction with natural environments affects mental health and emotional well-being (University of Oxford, 2026). The Eden Project therefore demonstrates how architecture can function as a therapeutic landscape capable of supporting psychological restoration through environmental immersion (Kaplan, 1995).

## 4. THEORETICAL FRAMEWORK

Healing architecture can be understood through several interconnected theoretical perspectives. Environmental psychology explains how spatial conditions influence emotional states, stress levels, and cognitive restoration (Kaplan, 1995). Ulrich's Stress Reduction Theory and Kaplan's Attention Restoration Theory both emphasize the therapeutic importance of natural environments (Ulrich et al., 1991).

Phenomenological theories of architecture further suggest that healing environments operate through multisensory and emotional experience. Pallasmaa argues that architecture should engage all human senses rather than privileging visual perception alone (Higuera-Trujillo et al., 2021). Norberg-Schulz similarly emphasizes the emotional and existential significance of place and atmosphere (Higuera-Trujillo et al., 2021).

Recent developments in neuroarchitecture attempt to quantify neurological responses to architectural environments through physiological and cognitive measurements. Sternberg and Wilson (2006) argue that architecture and neuroscience together can explain how spatial qualities influence emotional and physiological conditions. Collectively, these theoretical frameworks reinforce the idea that architecture significantly shapes psychological and physiological well-being (Nanda et al., 2009).

## 5. DISCUSSION AND IMPLICATIONS FOR FUTURE DESIGN

Historical and contemporary healing environments reveal remarkable continuity in their therapeutic principles. Across different periods, healing spaces consistently integrated nature, sensory richness, spatial harmony, social interaction, and emotional reassurance (Gesler, 1992). Ancient temples, monastic gardens, Renaissance hospitals, and contemporary biophilic environments all demonstrate the enduring relationship between architecture and healing (Ulrich et al., 1991).

Contemporary healthcare environments should therefore prioritize human-centred design strategies that support emotional comfort in addition to medical functionality (Tekin & Gutierrez, 2023). Natural light, vegetation, water elements, multisensory materials, and flexible social spaces can significantly improve psychological well-being and recovery experiences (Kaplan, 1995).

Future healthcare architecture will likely continue integrating research from neuroscience, environmental psychology, sustainability studies, and architecture (Sternberg & Wilson, 2006). Evidence-based and biophilic approaches increasingly suggest that therapeutic environments should actively participate in healing processes through environmental and sensory experience (Nanda et al., 2009). The growing recognition of mental health, emotional resilience, and environmental sustainability further reinforces the importance of therapeutic and human-centred design approaches in future healthcare environments (Tekin & Gutierrez, 2023).

## 6. CONCLUSION

The relationship between architecture and healing has persisted throughout history, evolving from sacred ancient environments to contemporary therapeutic architecture (Gesler, 1992). Across civilizations and historical periods, healing spaces consistently integrated nature, sensory experience, social interaction, and spatial harmony to support human well-being (Ulrich et al., 1991).

Contemporary research in environmental psychology, evidence-based healthcare design, neuroaesthetics, and neuroarchitecture validates many historical healing principles by demonstrating that built environments directly influence emotional states, stress levels, and recovery processes (Kaplan, 1995). Therapeutic architecture therefore extends beyond functional healthcare infrastructure and becomes an active participant in healing itself (Nanda et al., 2009).

Future healthcare environments should continue integrating natural systems, sensory richness, and emotionally supportive spatial strategies in order to promote holistic well-being, resilience, and long-term human health (Tekin & Gutierrez, 2023).

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