

Placemaking as an approach for enhanced healthy life in the cities: Case study of Sarajevo

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Abstract

This work primarily aims to encompass and analyze the impact of “healing gardens” within local communities and their significance in facilities that provide users with necessary assistance during their treatment. The research is predominantly based on “healing gardens” for children with cancer and has been applied in practice through a case study at one of the facilities in Sarajevo where the Parents’ House for children with cancer is located. The research also included another case study implemented in one of the residential areas in Sarajevo, the Grbavica neighborhood, through which the needs of its residents for the arrangement of communal green spaces were presented. The work aims to provide guidelines for further design of “healing gardens” within local communities to most beautifully and effectively influence the psycho-physical condition of their users.

Key words: *placemaking, healing gardens, healthy life, green public space, landscape design, landscaping, landscape architecture.*

1. Introduction

As a comprehensive idea and practical approach to improving the appearance of public green spaces in cities, creating green spaces inspires and encourages people to collectively design public spaces as the heart of every community. Strengthening the bond between people and the spaces they share, placemaking refers to the collaborative process through which we can shape open spaces to draw attention to, and elevate the importance and communal value of, the space itself. The value lies not only in better urban design of the space. By creating such spaces, we facilitate creative patterns of green space use, paying attention to the physical, cultural, and social identities that define the city and influence its continuity in development.

The concept of “healthy” design is one of the most important and favored models that highlights the importance of a healthy environment, society, and their users. It is rooted in the planning and design profession of landscape architects and has long been one of the most significant models in landscape architecture design, particularly in the segment of “healing gardens.” Previous research has shown that the term “healthy communities” evokes the notion of communal medicine and public health. Hence, the Ottawa Charter for Health Promotion (WHO, 1986) provides ample space for planners and designers to balance ecosystems, sustainably use resources, and promote social justice and equity (Harpham and Allison, 2000). The accumulation of various “unhealthy” conditions signals that planners should take on the role of “better rehabilitation” for individuals affected by various health limitations and their healing needs.

In exploring a joint spatial-planning project extended by the idea of “healthy cities” and “healing gardens” (Barton and Tsouros, 2000; Boarnet et al., 2003), the public health rule by the local community represented the primary prerequisite for integrating the health impact assessment (HIA) approach. It answered questions about how existing or planned space use, designed communities, projects, and programs affect public health. The concept of “healthy cities” influences the psycho-physical condition of people and the standard of living in cities. Understanding and actions for the sustainability of modern cities should be of primary and crucial importance for every local community, where everyone has the right to a healthy life and to spaces that will enable all users to more easily and healthily navigate their days during treatment.

This work aims to demonstrate the significance and solutions of “healing gardens” for local communities and cities. Two case studies were presented in the city of Sarajevo, where we also applied

practical aspects with users. The first case study was conducted with parents and children residing in the Parents' House for children with cancer in Sarajevo. The facility is surrounded by green areas on all sides, including a terrace, green roof, and children's park. The second case study was conducted with the local community in a residential neighborhood of Grbavica, where we organized a green space arrangement action with children and residents. The program of this action included activities through cleaning, arranging, playing, and fundraising - donations. The results of both projects showed positive outcomes and concluded that such projects are crucial for the cities in which they are located, as well as for local communities and users during their most challenging days. Such green spaces represent a quality image for the urban matrix of the cities in the future.

2. Green public spaces and health

Public gardens also play a crucial role in improving air quality. Plants absorb harmful substances from the air and produce oxygen, thereby reducing pollution levels in urban areas. Numerous studies analyze various factors including the distance of parks from homes, the size of parks, and their amenities. For instance, a study conducted by the Public Health Institute in Croatia on people's movement habits in urban environments showed that people with easier access to green spaces, such as parks, are more likely to spend time in nature, whether walking, exercising, or simply relaxing. Furthermore, the study highlighted the positive characteristics of access to natural environments on mental health. People who have easier access to parks and green spaces are often less stressed and have lower levels of anxiety, which can motivate them to spend time in nature.

Many studies (Boarnet et al., 2003; Ošljaj, 2000) have shown that after a stressful event, images of nature quickly produce a calming effect. Within three to four minutes of looking at greenery, blood pressure, breathing rate, brain activity, and stress hormone production decrease, and mood improves.

In recent years, there has been a significant increase of interest in therapeutic gardens, or "healing gardens." These gardens are specifically

designed for various uses in healthcare, rehabilitation, and other therapeutic environments. Hartig et al. (2006) explained that it also represents a place, a process, and their intertwining. A "healing garden" is an environment where plants dominate, interacting positively with other natural elements. Interactions can be passive or active, depending on the garden design and the needs of the users. There are many subtypes of healing or therapeutic gardens, including healing gardens, rehabilitation gardens, meditation gardens, etc.

Basic characteristics may include wide and gently graded accessible entrances and paths, raised beds, planting beds, sensory elements, and plant selection focused on color, texture, and fragrance, as well as outdoor playsets. The characteristics of therapeutic gardens were originally developed in 1993 by the American Horticultural Therapy Association (AHTA) working team based on best practices and principles (American Horticultural Therapy Association, 1995).

These research results indicate that the availability of green spaces in urban areas is key to encouraging people to spend more time in nature. Creating and maintaining parks and green spaces can have a positive impact on the health and well-being of the local community. Greenery in urban areas is not just a luxury, but an important segment that contributes to better health, happiness, and quality of life for all who live in those areas. Creating and maintaining these green spaces should be a priority for all urban planning to build healthier and more sustainable communities for present and future generations.

Positive characteristics of healing gardens:

- Plants promote healing - Living plants can offer a place of peace and refuge, a place shown to boost patient morale.
- Plants reduce stress - Specially designed green oases create a calming environment where guests, employees, and patients can benefit from lower blood pressure and stress levels.
- Plants have been shown to increase productivity for those working in such facilities and caring for patients.
- Plants also improve the sense of sound - adding water features can reduce hospital noise (American Horticultural Therapy Association, 1995).

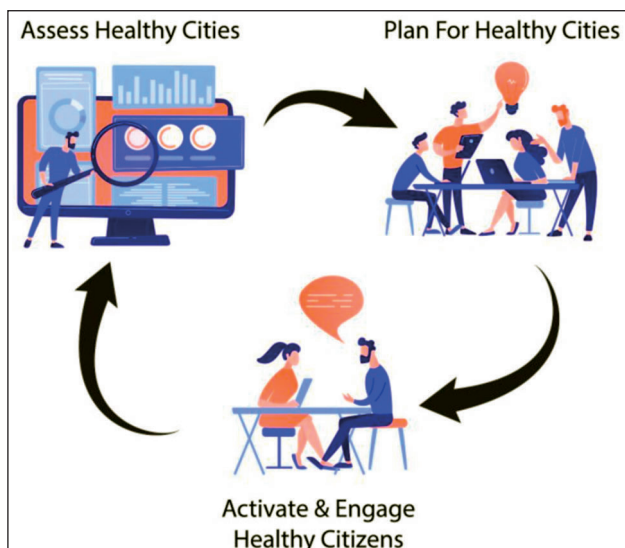


Figure 1. Positive impacts of green placemaking and its connection to urban planning (URBACT, 2022)

3. Placemaking

The term *placemaking* was first used in the mid-1990s, gaining popularity in the 1960s when urbanists Jane Jacobs and William H. Whyte introduced revolutionary ideas about designing cities for people, not just for cars and shopping centers. Their work mainly focuses on the social and cultural significance of neighborhoods and connecting public spaces: Jacobs encouraged ordinary citizens to take ownership of streets through the now well-known idea of “eyes on the street,” while William H. Whyte (URBACT, 2022) laid out key elements for creating social life in public spaces. Applying the wisdom of these urban pioneers, since 1975, the “Project for Public Spaces” has gradually developed a comprehensive approach to city planning.

A place diagram is one of the tools that the “Project for Public Spaces” developed to help local communities assess places. The inner ring represents the key attributes of a place, the middle ring its intangible qualities, and the outer ring its measurable data. The city planning approach in the “Project for Public Spaces” can be a springboard for the revitalization of local communities. Placemaking through this public space project is defined as: Community-driven, Visionary, Function before form, Adaptable, Inclusive, Focused on creating destinations, Context-specific, Dy-

namic, Trans-disciplinary, Transformative, Flexible, Collaborative, *Sociable* (Project for Public Spaces, 2007).

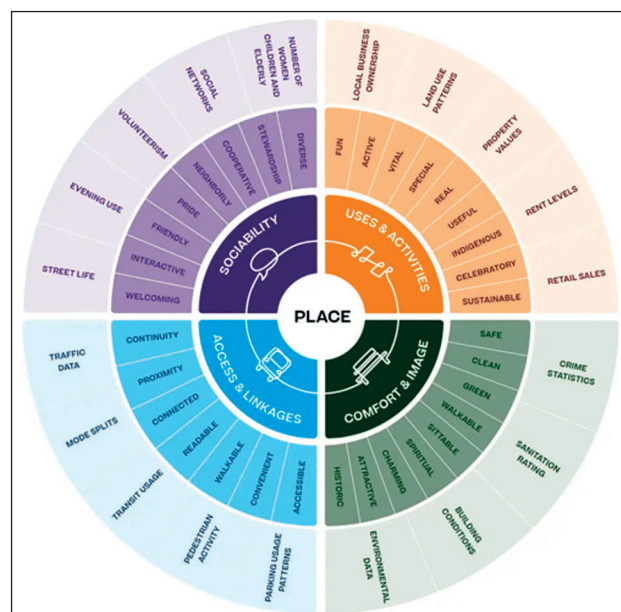


Figure 2. Diagram of place (Project for Public Spaces, 2007)

Today, the term “placemaking” is used in many environments—not just by citizens and organizations dedicated to improving the local community, but also by planners and designers who use it as a “brand” to imply authenticity and quality, even if their projects do not always fulfill that promise. However, using “placemaking” concerning a process that is not actually rooted in the public loses significance for its potential value. Placemaking is not the same as designing a building, designing a square, or developing a commercial zone. As more local communities engage in creating places and more professionals call their work “placemaking,” it is important to preserve the meaning and integrity of the process. A large public space cannot be measured solely by its physical attributes; it must also serve people as a community resource where function always exceeds form. When people of all ages, abilities, and socio-economic backgrounds can not only access and enjoy a place but also play a key role in its identity, creation, and maintenance, then we see true placemaking in action (Project for Public Spaces, 2007).

4. Approach to enhance public health in Sarajevo

The current state in Sarajevo is still in the “awakening” phase regarding the awareness of the significance of such projects within local communities. For the city of Sarajevo, these projects are extremely important considering the ongoing struggle each year to address the issue of air pollution that the city is suffocating in.

By implementing such green spaces and using suitable plants that have been proven to purify the air, the concentration of unhealthy particles would be reduced within these facilities, providing refuge for their users on the most challenging days.

4.1. Case study 1, residential area Grbavica

Sarajevo, as an already defined longitudinal city, has experienced longitudinal expansion during various periods. The zone analyzed in this pilot project is an area that began to be treated differently during the Austro-Hungarian period due to the railway, where residents from the entire Austro-Hungarian Empire who were oriented towards the railway settled. This structure of the city, which is the most picturesque cross-section of two civilizations, Eastern and Western, is manifested in this area, characterized by family houses and residential villas, which had not existed as characteristic buildings of the Austro-Hungarian period. Only residential buildings in blocks existed at that time. This construction certainly requires and opens up new possibilities for the development of private open spaces that were shaped differently due to the culture of life.

The aim of this pilot project was not only to create a model for the protection and restoration of private open spaces but also to enable the return of traditional values and to create interest of local communities in Sarajevo in using future guidelines for designing private open spaces.

During the restoration and protection of the Grbavica residential area, it was necessary to precisely define the exact framework within the private open spaces, which includes:

- The position of private open spaces in relation to the building and urban matrix, which primarily refers to the orientation

and access to the private open space from the terrain, so as not to disrupt the entire ambiance.

- The new private open space should not exceed more than 50% of the surface area of the building with which its implementation is planned.
- By researching and analyzing greenery (low and high vegetation), we concluded that its presence in private open spaces should not exceed approximately 70%, with seasonal flowers occupying 23.78%, perennials between 15-40%, potted plants up to 6.09%, and tall vegetation around 35%.
- The materialization of private open spaces should be from natural, authentic materials such as stone, wood, and cobblestone. Cobblestone is the most dominant element of the private open space and plays an extremely important role in the overall appearance of the space.



Figure 3. Existing condition on Grbavička Street (Krpo, 2015)



Figure 4. The first cleaning action, Grbavica, (Krpo, 2015)



Figure 5: Game program, Grbavica, (Krpo, 2015)

This action was implemented through four programs: cleaning, landscaping, playing games and fundraising for the implementation of landscaping. The work program served as a platform for promoting and developing entrepreneurial initiatives. The aim was to create a sufficiently large group of young people with diverse knowledge and skills who would collectively address the problems and needs of local communities. The fundraising program was a collective effort aimed at gathering and diversifying various sources of funding, providing education, counseling, and assistance in the creation and implementation of ideas. Through all these programs, we managed to achieve a positive outcome of the action and gift the local community and its residents with a beautifully landscaped green area where youth programs for play and education flourished.

4.2. Case study 2, The Parents' House for Children with Cancer in Sarajevo

The aim of developing this pilot project was to create a model of a "healing garden" for children with cancer and their parents during their stay at the Parents' House in Sarajevo, and to define guidelines for the future design of similar projects within local communities.

The design process itself represented a significant responsibility. It was necessary to research the impact of plant material, their effects on patients with compromised immune systems, and to investigate the characteristics of plants that cause allergic reactions.

The Parents' House for children with cancer is located in Sarajevo. The goal was to provide its users, both parents and children, with a positive environment during their treatment and stay at the Parents' House. The preparatory work and activities spanned a month, during which parents and children collaborated with us to design and organize the garden.

The action proved to be a very positive example for their psycho-physical state during those days. The project involved landscaping all green areas with diverse plant colors, which further enriched the ambiance and green oases of the Parents' House. The project also included details of urban outdoor playsets, decorative paths, and the design of a canopy for the seating area in the garden, which directly connects to the house's living room, providing users with an "extended stay" connected to the outdoor green space where they can enjoy pleasant days.



Figure 6. Action 'A Plant for a Smile of Parents and Children' (Association Srce za djecu, 2024)



Figure 7. Action 'A Plant for a Smile of Parents and Children' (Association Srce za djecu, 2024)



Figure 8. Action 'A Plant for a Smile of Parents and Children' (Krp, 2024)



Figure 9. Action 'A Plant for a Smile of Parents and Children' (Krp, 2024)



Figure 10. Action 'A Plant for a Smile of Parents and Children' (Krp, 2024)



Figure 11. Action 'A Plant for a Smile of Parents and Children' (Association Srce za djecu, 2024)

5. Discussion and Conclusion

The significance of the human-nature relationship only became apparent when it was disturbed. This underscores the tendency for humans to acknowledge the value of their connections only when they are threatened, including their bond with nature.

Maintaining nature is not a profession but a philosophy. This perspective is part of a unique interaction where we encounter various excavations, symbols of birth, labyrinths of memory, gardens of life, traces of love, shadows of hope, and paths to healing. In modern times, humans, understood as subjects, change the relationship between humans and nature. No longer seen as someone who

needs to harmonize with nature, humans are now perceived as capable of determining its rhythm. For them, nature becomes an object of study, planning, and use, making humans its rulers. The original harmonious relationship disappears, replaced by the subjugation of nature to human will. Our space encompasses nature and the external world, where cherished objects and memories reside, which we call our “living space” – nature and “healing gardens.”

Unlike typical gardens, healing gardens are sanctuaries specifically designed to promote better mental and physical health. They usually include spaces for walking and sitting, with elements added to have a calming effect on mental health.

Based on current research and practice (Moodscapesdesign, n.d.), we can conclude that these gardens offer multiple benefits, including the following:

Advantage 1: Stress and Anxiety Reduction

The term “stress” has become commonplace in the modern, fast-paced world. Workplaces and contemporary home life tend to create high levels of anxiety, and doctors have found that such factors lead to numerous health issues. By establishing “healing gardens,” we create a space where we can escape a range of common stressors. Research has shown that these gardens can be beneficial to individuals suffering from post-traumatic stress disorder (PTSD). The soothing solitude helps these individuals temporarily avoid potential triggers. They also have a therapeutic effect on many other anxiety disorders.

Advantage 2: Escape and Inspiration

The main advantage of “healing gardens” comes in the simple escape after a hard day’s work. Even in an urban setting, a garden provides separation from the world. Rhythmic sounds like flowing water create a focus for the mind. Additionally, fresher air in the garden helps improve overall health. Healing gardens thus provide a place for meditation, allowing individuals to limit unwanted mental stimuli.

Advantage 3: Environmental Impact and Medicinal Plants

Like all gardens, “healing gardens” help reduce carbon dioxide. Greenery also aids in purifying the air of pollutants, while larger plants also provide shade.

The involvement of local communities and future users creates a sense of belonging to the spaces, and thus responsibility for maintaining these spaces in the future. Collaborative efforts and support for such projects are crucial for maintaining the continuity of implementing “healing gardens” in cities.

Therefore, humans must change their exploitative relationship with nature and strive to overcome alienation from nature and establish a direct relationship with nature as nature in its essence, rather than nature as an object of exploitation.

“We abuse land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect.” - Aldo Leopold

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