### URBAN PARKS AND PLAYGROUNDS BETWEEN QUALITY OF LIFE, PARTICIPATORY DESIGN, AND OUTDOOR EDUCATION

### I PARCHI URBANI E GLI SPAZI GIOCO TRA QUALITÀ DELLA VITA, PROGETTAZIONE PARTECIPATA E OUTDOOR EDUCATION

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### ABSTRACT

The progressive increase in population in cities over the past 15-20 years has highlighted the critical issues typical of urban human settlements, such as environmental pollution, sedentariness, lack of urban green spaces, and the difficulty of managing increasingly frequent emergencies. The study of the relationships between the quality of the man-made environment and psychophysical wellbeing, both individual and collective, represents an increasingly decisive challenge, not only in the fields of architecture and urban planning, but also for the human and social sciences, including the sciences of education and pedagogy. In terms of design, research shows that the involvement of end-users in the process of creating an environment can respond more adequately to the needs of the users themselves, ensuring greater democratic and less resistance to change in the living and working environments that are to be created.

Il progressivo aumento della popolazione nelle città, negli ultimi 15-20 anni, ha messo in evidenza le criticità tipiche degli insediamenti umani urbani come l'inquinamento ambientale, la sedentarietà, la mancanza di spazi verdi urbani e la difficoltà di gestire emergenze sempre più frequenti. Lo studio delle relazioni tra la qualità dell'ambiente antropizzato e il benessere psicofisico, sia individuale sia collettivo, rappresenta una sfida sempre più decisiva, non solo in campo architettonico e urbanistico, ma anche in quello delle scienze umane e sociali, incluse le scienze dell'educazione e la pedagogia. In termini di progettazione, le ricerche dimostrano che il coinvolgimento degli utenti finali nel processo di creazione di un ambiente può rispondere in modo più adeguato alle esigenze degli utenti stessi, garantendo una maggiore democraticità e una minore resistenza al cambiamento degli ambienti di vita e di lavoro che si andranno a realizzare

#### **KEYWORDS**

Urban parks, Playgrounds, Participatory design, Outdoor education, Parchi urbani, Spazi gioco, Progettazione partecipata, Educazione all'aperto,

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### Introduction

"The future of cities should reflect to varying degrees the challenges and opportunities that cities face." (World Cities Report 2022)

According with the World Cities Report 2022, the level, pace, and processes driving urbanization are uneven across the world. The process of urbanization is much advanced in the developed regions of the world where 79% of the population (1 billion people) reside in urban areas. This trend will continue, albeit slowly, as 87% of the population (1 billion 120 million people) is expected to be urban by 2050. While the level of urbanization in developed countries is high, the rate of urban population growth is low, declining and even negative in some countries. Urban population is expected to grow at 0.46% annually between 2020 and 2025 and 0.40% between 2030 and 2035 (UN-Habitat, 2022). The gradual increase of population in cities over the past 15 to 20 years has highlighted the critical areas typical of urban human settlements. These include environmental pollution, water pollution, delayed adaptation of public services and infrastructure, sedentariness, lack of urban green spaces, and the difficulty of dealing with increasingly frequent emergencies (such as climate change or epidemics) in a timely manner. These problems directly affect people's quality of life and, increasingly, pose a major threat to the pisco-physical and mental health of urban residents (Zhang et al., 2021). From adopting the New Urban Agenda (UN-Habitat, 2017) to reviewing progress six years after its adoption at the Habitat III Conference in Quito, sustainable urban development planning and development has revealed its potential to address or reverse many of these negative trends. The New Urban Agenda 2022 contains recommendations and commitments that can enable governments around the world to combat inequality by achieving equitable urban transformations with low or no environmental impact and improving the quality of life for all. (UN-Habitat, 2022).

# 1. Theoretical framework: Quality of Life and Participatory Design

Studying the relationships between the quality of the man-made environment and psychophysical well-being, both individual and collective, represents an increasingly decisive challenge for the human and social sciences, including education sciences and pedagogy. The humanization of urban fabrics, central and peripheral, cannot be separated from the support of careful and conscious design, functional to the well-being and dignity of all people. Maurice Halbwachs (2008), taking up Durkheim's sociological reflection, at the turn of the 1920s and 1930s insisted on the need to study the forms of social groups starting from an analysis of the cultural and relational substratum on which they, from time to time, had developed. The French philosopher believed that we must thoroughly understand the nature and configuration of the relationships and motivations that bind people to different living and working contexts. In this perspective, human-environment integration also determines the most favorable conditions for living and working, enhancing both the physical, cognitive, and emotional dimensions of the different actors involved (Schalock & Verdugo-Alonso, 2002). Guy Debord wrote, in this regard, that the quality of life in a neighborhood depends not only on geographic and socioeconomic factors but also on the representations of the neighborhood by its inhabitants and those of "neighboring neighborhoods", by the ambiance and lifestyle dominant in its streets and squares (Vasquez, 2010).

Social pedagogy also considers context analysis a useful tool for reading and interpreting social fabrics, which starts precisely from the observation of the nature and configuration of relationships between people and places to arrive at a community profile. From the point of view of educational intervention in the territory, context analysis represents a fundamental tool to understand not only *in* and *for* which places roles and functions are exercised but also *in* and *for* which spaces (Santelli Beccegato, 2001). If we delve into the specifics of educational practice, we will see, for example, that the street education phase of *mapping* – a snapshot of the territorial reality from the geographical, demographic, economic, institutional and service points of view – represents one of the most important steps in delineating the boundaries within potentially design and develop an educational intervention aimed at informal groups of young people: especially if they are in situations of marginality, vulnerability or distress. Intervening locally and from an ecological perspective is possible, and it is the first step toward recovering a harmonious relationship between people and their living and working contexts.

Now, from the perspective of urban design, a methodological premise is necessary: the strong interdependence and complexity of the social phenomena of our time determine that a problem can no longer be approached from only one point of view. The ever-increasing number of questions today must be matched by many answers. These can only be provided by multiple approaches deputed to the design, production, and transmission of knowledge. From this point of view, the new models of sustainable cities, as foreshadowed in the *World Cities Report 2022*, work only to the extent that they can generate what Edgar Morin calls "thought reform". Thinking that isolates and separates should be replaced by thinking that

distinguishes and unites. Disjunctive and reductive thinking should be replaced by thinking of the complex in the original sense of the term *complexus*: which is all together (Morin, 2000). Here then, design becomes a social practice, in which the procedures of architectural making cannot help but measure and codify themselves in relation to the wide range of social phenomena. It is necessary to widen one's gaze, in ecological and systemic terms, to the set of narratives, conflicts and negotiations that define and characterize a context: housing, work, recreation, public or private. There is a need to "fight", as Bourdieu argued, against the compartmentalization of expertise that contributes to the creation of false frontiers and artificial divisions (Paolucci, 2009).

From this point of view, the use of consultation in the design-architectural field and methodological approaches curved, from time to time, to the potentialities of territories and contexts, is borrowed from the theories on participatory design developed between the 1960s and 1980s by urban planning disciplines and computer engineering, particularly in the United States and Northern Europe. The starting point is the involvement of end users in the process of creating an environment. On the one hand, the aim is to respond more adequately to the needs of the users themselves, through the emergence of different viewpoints and sharing of knowledge and skills. On the other hand, the goal is to ensure greater democratic and less resistance to change in the living and working environments that will be implemented. Furthermore, participatory design (or participatory planning) is a process that is strongly dialogically connoted, as it uses forms of representation that enable two-way (and not one-way) communication to be established-between end users and stakeholders (Spinuzzi, 2005). To be involved in the process are both technicians, officials and representatives of institutions, and the community. Thanks to this methodology, it is possible to focus both on the overall project vision and the changes and spillovers that will result from it. Most importantly, this happens not only on the technical-organizational level but also on the level of meeting cultural and social needs.

## 2. Urban parks, playgrounds, and the Outdoor Education framework

Speaking about social needs and urban planning, we must say that the general increase in population density in urban areas calls for a design that is attentive to the characteristics of different contexts. Cities of the future should aim to enhance all those activities that ensure adequate absorption of density, while providing important public amenities such as parks, plazas, sports fields, and cultural venues, as well as good transportation infrastructure, to ensure citywide and regional connectivity (UN-Habitat, 2022). These public spaces play a vital role in making

density work. Pandemic, from this perspective, has highlighted how quality public spaces play a key-role in ensuring walkability, safety, and increased accessibility to services. All these features require responsive urban and land use planning that effectively anticipates and addresses the demand for city expansion. Within this framework is the – broad and sensitive – issue of urban-community parks and playgrounds: places where people can train and exercise, but also relax experiencing nature. The objective of this section is to highlight how public parks, if designed considering also the conceptual and methodological framework of Outdoor Education, today, are very important tools to help solve the problem of the poor quality of the living environment present in many urban areas and the insufficiency of sports and leisure spaces due to the rapid development of cities (Bortolotti, 2020). In other words, the need to consider design according to the relationship between the development of the person and his or her environment, without forgetting the importance of the body, movement, and the senses, in the perspective of a "natural education" set as a reference horizon, is strongly suggested. Outdoor Education, from this point of view, can be considered a different learning mode than, for example, the traditional school method of frontal lesson. Its goal is to reconcile the time of learning with the time of experience, considering outdoor space as a natural learning environment. The outdoor environment is ideal when it is enjoyed at the stages of human development when a sense of self-confidence, curiosity, initiative, and autonomy are built (Bertolini & Farné, 1978).

According to Olmstead (1999), parks should be built as places where the inhabitants of a city can experience the beauty of nature, breathe fresh air, and have a place to carry out recreational activities of both the receptive-entertainment type (such as festivals, concerts, exhibitions, installations, etc.) and the executive type (sports, games, tournaments, etc.). In addition to their recreational function, public parks also serve an important social function. They are places where people meet, bump into each other, hang out, escape from domestic routine, and so on. This fact has great value from a pedagogical point of view when the age at which people hang out and meet is adolescence: the period of life of maximum personal development in terms of emotional-expressive, relational, and creative potential. This is why welldesigned public parks can also prevent hypo stimulating or deprived environments or places where the social fabric has disintegrated – from transforming natural adolescent tension into discomfort, alienation, and marginalization (Author, 2020). When we think about childhood and pre-adolescence, moreover, urban parks and play spaces, if connoted from a naturalistic point of view, are also places in which to develop what Gardner (1987) considered the *naturalistic intelligence*. This ability can be fostered through observation, collection, classification, and discussion activities. The playful-recreational dimension among peers, on the other hand, represents an equally important tool for structuring social reality, with its rules, orders, and hierarchies, thanks to elements of corporeality, expressiveness, symbolism, mimesis, ostentation, and performativity (Wulf, 2014).

Finally, in terms of combating sedentariness and promoting a healthy and active lifestyle, at all ages, urban parks can play an equally important social role, also enhancing the dimension of inclusion. Scientific studies, in fact, have shown that residents in urban areas who have low incomes or belong to ethnic minorities use public parks and urban playgrounds more than gyms or recreation centers for physical activity (Cohen et al., 2007; Zhang et al., 2021). More generally, the data collected show that urban parks, when they are easily accessible and have diversified facilities and equipment within, have positive effects on the subjective well-being of residents. From this point of view, at the design stage, it's very important to plan and incorporate a wide variety of facilities (play, sports, recreational) to increase their versatility. To ensure an increasing level of social equality, moreover, it is necessary to plan the construction of parks in terms of convenience, accessibility, and spatial distribution, instead of excessively pursuing large-scale construction. At the same time, the needs of independent age groups should be considered during construction to meet the sports and recreational needs of different age groups.

From the perspective of visual ergonomics, it is also useful to make some considerations. For example, let's think about the importance of conscious and competent use of color in public spaces. When we observe color in the built environment, we perceptually respond not to just one color at a time, but to many colors in combination. This combination has an influence on people's physiological, psychological, neuropsychological, and psychosomatic spheres. This is because color is an integral element of our world, not only in nature but also in the human-built environment and has always played a role in the evolutionary process of humankind. According to Frank Mahnke (1996), the use of color and light, in urban regeneration experiences, have not only an aesthetic-decorative impact but, above all, psychological, communicative, informative and, therefore, also on perceptual processes, judgment and the feeling of well-being experienced by people.

# 3. Case histories in Denmark, the Netherlands, and Ireland

At this point, it is considered useful to briefly present some virtuous examples of urban park design and implementation, carried out in the last 10 years in three northern European countries. Denmark, the Netherlands, and Ireland are at the forefront of participatory design and implementation of urban systems that integrate public green spaces, recreational spaces, and cultural activities. The selected case histories, all concern projects that have received major awards in urban planning and have in common inclusive design, focusing on the real needs and quality of life of local communities, enhancing the cognitive, emotional-relational, social, and cultural experiences of citizens.

# Superkilen – Copenaghen

Among the finalists in the 2013 edition of the Mies van der Rohe Prize, along with the *Metropol Parasol* in Seville, designed by Jürgen Hermann Mayer, the Superkilen urban park was built in 2012 in Nørrebro, a Copenhagen neighborhood characterized by the strong coexistence of different ethnic groups and cultural traditions. It covers an area of 30.000 square meters, running diagonally through the neighborhood. The designers' goal was to create a city park that promotes integration. For this reason, the residents of the neighborhood were invited to take part in the design process, exposing their needs, desires, and concerns. This experience of participatory design, which is still considered a pilot project with few equals in Europe, represented a real process of redefining functions around the diverse needs of the inhabitants, synthesizing differences and cancelling cultural and ethnic barriers. At the beginning of the project, a massive communication campaign in newspapers and through radio and the Internet involved citizens, asking them to suggest functions and items of street furniture for the future public park.

As much appreciated as criticized, according to Daly (2019), after Superkilen project «it is necessary to better understand what role urban design plays/should play in shaping intercultural encounters in public space» (p. 4). Nevertheless, the strategy of cutting and pasting objects also «pursued at least three purposes: showed physically the cultural diversity of the neighborhood, transformed Superkilen in a new 'lighthouse' for Nørrebro, and improved the social integration of neighbors» (Pallarés & Castellanos, 2016, p. 214). From participatory planning, in fact, came the idea of bringing together pieces of urban histories and realities from around the world in the new park: each of Nørrebro's 57 ethnic communities was represented within the park by at least one object, style of layout or distinctive feature.

The park was designed from a division into three areas, each marked by a color: green (the *Green Park*), black (*the Black Market*) and red (*the Red Square*). Each area has different surfaces and functions, and the colors were used in such a way as to form a new and dynamic environment for everyday

objects. The citizens were unanimous in their desire for a strong presence of natural elements, satisfied through a significant increase in vegetation and plants throughout the neighborhood, arranged as small islands of different types of trees, bloom periods, colors and, of course, provenance, which corresponds to that of the surrounding everyday objects. In terms of sports and outdoor activities, Red Square is designed to offer numerous recreational alternatives. In fact, the large space in the center of the red section allows residents, and especially children and young people from different ethnic and cultural backgrounds, to come together, not only through physical activity and play but also through open-air movies or sport presentations.



Fig. 1. Superkilen urban park plan. Credits: CC BY 2.0

## Into the Wild – The Hague

Commissioned by the municipality of The Hague and built in 2015 by international landscape architecture and urban planning firm Openfabric, the *Into the Wild* urban park is a good example of participatory design targeting children and adolescents. Winner of the *City & Brand Landscape Award 2016*, this project aims to integrate the natural and man-made environments by empowering children to constantly move between one and the other while learning through play. Indeed, at the heart of the project is the Piagetian sociopedagogical assumption that, for children and the younger generation, play is a means of social adaptation (Piaget, 1972). However, one can play both in a built environment and amid nature. Hence, the desire to juxtapose an outdoor part of the park, characterized by structured and orderly sports and play

environments, and a "wilder" indoor part, where children are encouraged to play in full freedom to build, deconstruct, and modify their play spaces using natural materials. The relationship between the natural and man-made worlds, according to the designers, is the essence of sustainability. Understanding this dialogue through participatory play and creative interaction is an essential experience that, currently, young people do not have the opportunity to experience in many urban areas.

The project is also of particular interest from the perspective of participatory planning and the integration of new digital technologies into planning processes. Integrating 3D modeling and virtual reality (VR) as new means of involving citizens in the planning process, in fact, the co-design of the *Into the Wild* urban park included moments of voting and choice, using 3D rendered versions of competing projects. In the co-design process, 3D modeling tools were key in enabling citizens to negotiate design decisions, discuss the quality of the designs with experts, and make collective decisions (van Leeuwen et al., 2018).



Fig. 2. Into the Wild urban park plan. Credits: dmau and Openfabric

# Cork City Walks – Cork

The latest project presented was carried out and promoted in 2020 by the Cork City Council's Sports and Sustainability Area with the Department of Transport, Tourism & Sport, to support not only the recreational activities and active lifestyle of the citizenry but also the knowledge and appreciation of the local cultural heritage and the preservation of the environment and urban area. For this project Cork City Council earned the annual Chambers Ireland Excellence in Local Government Awards 2021 for its "creativity and determination" in facing Covid-19 pandemic. The aim was "re-opening a more resilient Cork City", making the city more inclusive, safer and a pleasant place and experience for residents, shoppers and visitors while supporting local business and culture. The Cork City Walks project was developed from an assessment of the land morphology as a function of citizens' sport and leisure activities. In fact, the Irish city of Cork has a rather compact and flat urban development, especially in the historic center, where it is very easy to get around on foot or bike. At the same time, it is also a city rich in culture and history.

The municipality, therefore, has devised four pedestrian-cycling routes connecting heritage sites, landscaped areas (including the river park of Lee River) and buildings throughout the city, creating in effect a widespread urban park: from the steps and steeples of Shandon to the archaeology and art of South Parish, from the medieval to the modern city center, and the academic environs of University College Cork. The aim of the sustainable urban mobility routes is to enable citizens and visitors to explore the city by being active, thus combining physical and cultural activity. Each walking route has a different duration and level of difficulty and is designed as a self-guided walking tour. For this reason, the municipality has produced and made available on the website guides for each route, with directions to points of interest, descriptions, and historical information as well as a detailed map.

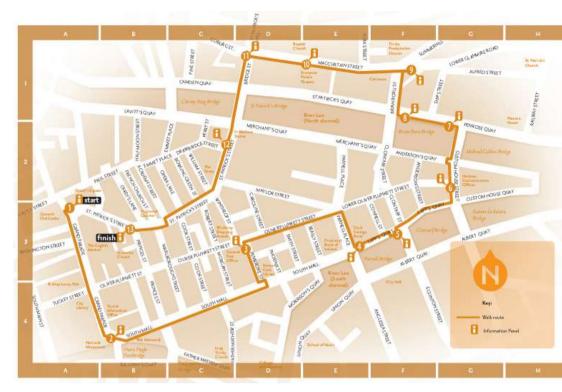


Fig. 3. Cork City Centre Island Walk. Credits: Cork City Council

# Conclusion

The reflections proposed in this article are intended to insist on the need for humanization of urban fabrics and how this, in the face of the current challenges of humanity, cannot be separated from the support of careful and conscious design, functional to the well-being and dignity of all people, especially the young, the elderly and the most fragile. Today, increasingly, a comprehensive analysis of the variables and determinants, both individual and social, that refer to the characteristics of the living environment is essential. Not only in terms of the design quality of housing, schools, and workplaces, but also in terms of the presence of facilities, entities, services, legislative supports, and attitudes that can significantly influence the quality of life and levels of citizen participation (Schalock & Verdugo-Alonso, 2002). In this sense, co-designed areas dedicated to sports, leisure and contact with nature within cities are increasingly necessary. Coping with the ongoing process of urbanization today means imagining places where people particularly, younger generations – can devote time to their own well-being but, above all, to the quality and quantity of interpersonal relationships that can be experienced, the social supports that can be enjoyed, and a full and active participation in community life.

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