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# Technological Imagination in the Green and Digital Transition

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# Chapter 86 Tools and Strategies for Health Promotion in Urban Context: Technology and Innovation for Enhancing Parish Ecclesiastical Heritage Through Sport and Inclusion



#### Francesca Daprà, Davide Allegri, and Erica Isa Mosca

**Abstract** The relationship between the built environment and health is an increasingly important issue in the planning and regeneration of the contemporary city. The contribution reflects on the impact of sport and social inclusion on the population's health and well-being, moving from the results of a research experience. The project involves the parish ecclesiastical heritage. It proposes methods committed to its regeneration and innovation, aiming to enhance the *oratorio* sports facilities in a multi-generation, inclusive, and health education perspective. The definition of a multidisciplinary and analytical tool is based on a set of qualitative and quantitative criteria, for assessing the structures in different aspects, to reconsider the pre-existing sport facilities, and suggesting strategies for the renovation and innovation of their spaces and services. The application of the tool to the parish facilities brings extensive reflections on the importance of promotion of physical activity and of the creation of accessible social environments, suggesting strategies for more liveable and healthy community spaces; moreover, it contributes to the definition of systemic strategies and scientific tools for the enhancing of built heritage in the urban context.

**Keywords** Ecclesiastical Heritage · Social Inclusion · Healthy Communities · Physical Activity · Sport Facilities

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#### 86.1 Introduction

The current research considers the importance of the relationship between the built environment and health promotion, as a key factor for urban development and regeneration. The study reflects on the impact of sport and social inclusion on the population's health and well-being, moving from the results of an experience—the Research Project "SPèS—Sport è Società", funded by PoliSocial Award 2019.

By collocating sport as a driver for social inclusion, the research analyzed the parish ecclesiastical heritage—best described by the Italian word *oratorio*—highly consolidated and diffused in the urban context. Such a system demonstrated its power and potential as a collective infrastructure to be re-discovered and integrated with the proximity service system, especially concerning sport and health promotion. Despite its great potential, there is no systematic strategy for *oratorio* facilities planning and renovation: often, the initiative for the redevelopment and innovation of their structures, services, and activities takes place in a non-structured and informal way.

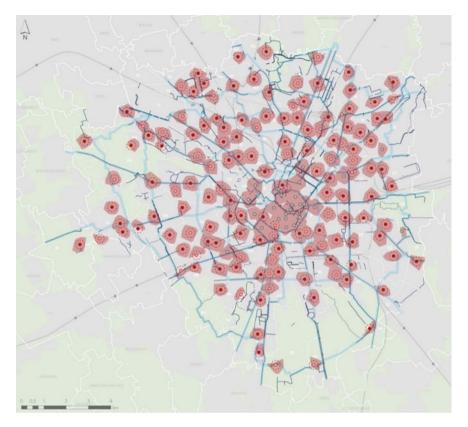
The project proposes methods committed to the regeneration and innovation of such heritage in the city, aiming at enhancing the parish sports facilities in a multigeneration, inclusive, and health education perspective.

# 86.2 Built Heritage and Health Promotion in Urban Regeneration Processes

The contribution deals with the topic of built heritage within the processes of urban and social regeneration, concerning redevelopment practices able of promoting health and well-being in the urban environment.

During the last years, more and more studies highlighted that physical inactivity impacts people's health (WHO 2014) and that sports and exercise can lead to the prevention of different diseases, promoting physical and mental well-being for various ages (WHO 2018). Therefore, strategic actions aimed at transforming urban settlements and programmatic actions focused on Public Health and urban quality promotion are needed (Capolongo et al. 2018). In this regard, initiatives aimed at promoting physical and sport activity are constantly increasing (EU Physical Activity 2008; WHO 2010).

In this panorama, the collective structures devoted to sports in the urban context are passing through processes of transformation, due to the renovated needs of the social system and the changing in urban structure and livability (Vettori 2020), even more, after the pandemic period which raised the attention for health and accessibility to urban services (Capolongo et al. 2020). For these reasons, the transformation of existing facilities becomes a relevant issue, considering the non-consumption of soil trends and the urgency of improving the resilience of existing artifacts (Allegri and Vettori 2018).



**Fig. 86.1** Map of the *oratorio* system and its accessibility in the city of Milan (by foot, by public transport, and soft mobility). Map developed during Project SPèS, Marika Fior, 2021

The emerging concepts of the "city of proximity" lead to the reconsideration of systems under-used and under-valorized (Duany and Steuteville 2021), reflecting the importance of the transition from the centrality of "hard" sport infrastructure to "soft" ones, capillary diffused and present in public spaces where physical activity, leisure, and socialization become more horizontal and inclusive (Faroldi 2020; Vettori and Cognigni 2020) (Fig. 86.1).

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# 86.3 The Oratorio System in the Urban Context: Collective Infrastructure for Sport, Inclusion, and Health

The sports facilities in the *oratorio* present as real "educational agencies" open to all, where there are no limits of age, gender, culture, and nationality (Tassani 1997) and they are an important factor in the promotion of health, both physical and psychological.

The practice of grassroots sport in the *oratorio* meets the ever-increasing need for places of identity and integration and accessible multi-generational services in the city (Vettori and Cognigni 2020). Nonetheless, over the years, the attractiveness of sports in the *oratorio* has been limited to some groups (school-age children), excluding other types of users.

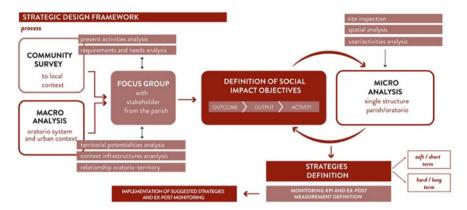
Such heritage represents a large system to be recovered as services for communities: this process could lead to increased social inclusion, meant as the possibility for everybody to participate in the activities and services, through facilities and public spaces accessible and usable in an equal way by a wider range of users (Mosca and Capolongo 2020). Together with the rearrangement of the spaces, the enhancement of the parish system could stimulate a behavioral change in communities concerning sustainability and health and produce social innovation.

Therefore, tools and methods are needed to support the regeneration of parish facilities, guiding stakeholders in the decision-making process through frameworks able to analyze quantitative and qualitative features of the environment that impact users' well-being, considering both spatial and social factors (Rebecchi et al. 2019; Mosca and Capolongo 2020).

#### 86.4 Technology and Innovation for the Parish System: A Methodological Setting

The research set as the main objective the definition of a methodology to "enhance" and innovate the assets of the *oratorio* sports facilities in a multi-generational, inclusive, and educational perspective on health. The project developed a *Strategic Design Framework* (SDF) as the final output: a multidisciplinary analysis tool capable of identifying the current and potential characteristics of the structures, concerning their urban and social contexts.

The articulation of the SDF derives from the objective of the research and from the multidisciplinary competencies of the research group (urban analysis, multi-criteria analysis, social impact evaluation, and strategic design). The methodology was set to achieve an organic and synthetic analysis of three scales through four specific tools: (I) Macro-analysis of the urban context (urban); (II) Micro-analysis of the facilities (architectural); (III) Analysis of social context through a Social Impact Evaluation (social); and (IV) Tool Report.



**Fig. 86.2** Scheme of the elements of the *Strategic Design Framework* and its process of application. Scheme developed during Project SPèS, Francesca Daprà, 2021

The process of application of the tools was guided by the necessity of relating and putting in sequence the actual state of the context and the community (through community survey and macro-analysis) and the issues and needs that emerged from the dialogues (Focus Group) with the analysis of the building considered and its physical potentialities (micro-analysis). The matching of these data enables the definition of social impact objectives, from which the final strategies suggested derive (Fig. 86.2).

The application of this tool allows the definition of strategies both for the physical and organizational regeneration and social reactivation of the areas considered. The SDF has been applied simultaneously to five pilot cases in the city of Milan, for a few months, involving both remote actions and data analysis, both on-site analysis, data collection and activities. The surveys to the communities involved more than 850 people (in a range distributed from 100 answers per parish up to 250 in other cases), while the Focus Group held with the communities up to 12 people per parish. Following is a description of the four tools composing the SDF.

#### 86.4.1 Macro-analysis of the Urban Context

The first element of the tool consists of an analysis of the relationship between the parish system and urban context, carried out through GIS tools. The objective is the definition of relevant elements for the *oratorio*-city relationship and their systemic reading, to evaluate possible synergies with local contexts, and the definition of key elements for their regeneration. The analysis maps specific indicators from the urban context, such as the system of city sport services and the parish one, other social and aggregative services, environmental and infrastructural factors.

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Macro-area	Criteria
Urban and architectural character	1.1 Recognizability and identity
	1.2 Context
	1.3 Reachability
	1.4 Usability and accessibility
	1.5 Maintenance
Technological-functional-spatial character	2.1 Indoor and outdoor sport spaces
	2.2 General spatial features
	2.3 Additional spaces
	2.4 Sport space quality
Organizational- management character	3.1 Users' characteristics
	3.2 Sport spaces' use

**Table 86.1** Structures and criterion of the tool for the microanalysis

#### 86.4.2 Micro-analysis of the Structures

The second element considers the building scale through a panel of quantitative and qualitative indicators for its evaluation. The objective is a detailed analysis of the physical space of the parish hall and its activities—focusing on sport—to define physical and organizational—managerial regeneration strategies for the regeneration of the oratorio. The tool considers three macro-areas with related criteria (see Table 86.1).

## 86.4.3 Analysis of Social Context and Social Impact Evaluation

The third element considers the social framework and defines the social impact objectives for the territorial context (both parish and neighborhood/district). The methodology set a *Community-Based Survey*: a participation tool composed of a "Community Questionnaire" and "Focus Group". The objective is the involvement of the community and the collection of the needs and wishes of the parish and the local context, to propose strategies that improve the social impact of the parish facilities.

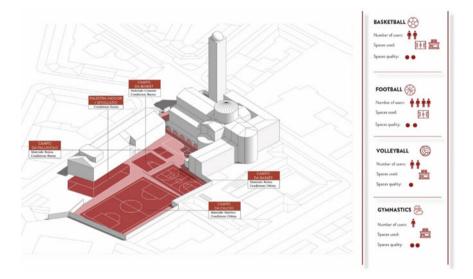
The Focus Group, conducted by a group of experts, consists of a meeting with some parish community members and stakeholders, representing different categories of the parish population and responsible. The Community Questionnaire is administered to a broader spectrum of users, to obtain a heterogeneous panel of responses, intercepting both those attending the parish and inhabitants of the neighborhoods of reference.

#### 86.4.4 Tool Report

The final report intends to highlight all the outcomes from urban and social analyses and inspections. In addition, the report returns some strategic elements that indicate some medium or long-term regeneration actions for the assets considered. This document is conceived as an address to the projects that local contexts will be able to implement, providing scientific support, and some guidelines for the definition and planning of interventions (Fig. 86.3).

## 86.5 Results and Strategies for Health Promotion in the Urban Context

Through the application of the tools, the project results highlighted some common risks and potential of the parish system concerning the topics considered: the main issues can be described as follows.



**Fig. 86.3** Extract from the report that describes the spatial characters and the sport offer of the parish *San Luigi Gonzaga* in Milan. Scheme developed during Project SPèS, Francesca Daprà, 2021

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# 86.5.1 The Potentiality of Increasing Users from a Multi-generational Perspective

The *oratorio* developed an offer that intercepts a narrow range of sport users both in terms of age (range 6–18) and proximity to the structure. The strategies proposed are oriented toward a larger involvement of different age groups, favoring generational exchange phenomena and meeting the potential demand for sport and aggregative activity.

#### 86.5.2 The Possibility of Improving Social Inclusion Through Sport

The sporting activity represents an important moment of cultural integration in the parishes: the tool suggests the involvement of various fragile categories, lacking specific services for their needs in the analyzed context. In this way, the parish would provide social services within the neighborhood and contribute to improving the living conditions of the citizens.

# 86.5.3 The Rehabilitation of Structures in Terms of Accessibility and Usability

In most of the structures, the presence of a variety of spaces—both indoor and outdoor—for different sports offered is accompanied by maintenance problems and obsolescence. The sports areas, in some parishes, are poorly visible, accessible, or enhanced, while they could represent an important landmark for the community. Moreover, they often lack support spaces and services, leading them to be less competitive than other services in the district.

# 86.5.4 The Enhancement of Physical Activity Through Facility Accessibility

The localization of these structures, often accessible and well connected with public transport, concurs to promote soft mobility and physical activity to reach them. The revitalization of the spaces' facility, together with the empowerment of the system of soft mobility and safe pedestrian routes in the proximity of the structures, would support a correct and healthy lifestyle also for other people.

# 86.5.5 The Enhancement of Outdoor Spaces as "Public Spaces"

In most cases, the structures have important areas of outdoor relevance, which are not always exploited to their full potential, and barely accessible and visible from the districts. Such spaces represent a huge potential for the proximity context, to promote physical activity and social meetings.

# 86.5.6 The Exploitation of the Heritage in a Systemic and Synergic Way

The main activities in the parishes are held in the afternoon and night, leaving free spaces during the mornings. Innovation in the management system and the proposal of activities for different users, as well as the creation of new synergies with the city (e.g., with schools in the neighborhood), would represent an opportunity to implement the space use, and consequently, its maintenance and profitability.

#### 86.6 Conclusions

The increase in demand for grassroots sport, urban health conditions, as well as the pandemic effects reinvigorated the importance of proximity services and healthy and active lifestyles. In this sense, studying the *oratorio* in this delicate period for cities was an opportunity to intercept social and urban issues and systemically review the phenomena.

As demonstrated by the study, sport in the parishes can represent a powerful driver for health promotion and social inclusion, improving well-being, intercultural relations, and the overall cultural and social level.

The unique and "tailor-made" qualitative and quantitative analysis tool developed for ecclesiastical structures represents a contribution to scientific research and the practices of analysis and evaluation of built heritage. The application of the *Strategic Design Framework*—applied to the Milanese territory—could be replied in the rest of the national territory, and on other properties, of similar characteristics, which need decision-support guidance for the facilities' regeneration.

The planned redevelopment of the enormous built heritage—linked directly or indirectly to sports activities—is now an unavoidable action, acquiring relevance in the Italian context, and becoming a strategic asset of the post-pandemic recovery, also in relation to exceptional financing instruments recently implemented by nations (such as Italian PNRR). Such trends require innovative tools and technologies, capable of governing the complexity of these transformations and integrating social, architectural, health, and economic values and needs.

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