

Restoration and Promotion of Sports Facilities: A Project of Urban Renewal

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Abstract: Sports facilities represent a crucial node in the development of social connections, in opposition to the alienation and isolation that nowadays are constantly encouraged by the use of technology. Sport activities seem to be the last resort to face a series of lazy and indolent behaviors that increasingly belong to sedentary young people. The planning phase, aimed at the restoration and promotion of those infrastructures, becomes significant in order to stimulate not only physical activities in teams but also socialization on a larger scale. For this reason, the Architecture Department of University of Florence has started a project with ANCI Toscana for researching and validating hot spots all around the city first, and creating new ones later on.

Key words: urban renewal, sports facilities, restoration

1. Sociality in the Contemporary City

“We are an extraordinary and beautiful country, but at the same time very fragile. The landscape is fragile and cities are fragile, especially the suburbs where no one has spent time and money on maintenance. But it is precisely the peripheries that are the city of the future, the one where human energy is concentrated and the one that we will bequeath to our children. [...]”

(Renzo Piano, 2014)

The term city, from the Greek *polis* to the industrial revolution, could be considered synonymous with continuity and homogeneous growth. The enormous transformation that has taken place since the early nineteenth century has fundamentally reversed this concept: we are no longer able to imagine an expanding nucleus because we have lost the idea of border. The contemporary city is shapeless, representable only as a set of territories linked to each other by displacement

systems now more technological than physical. The speed of the processes of change, which have been going on in recent decades, is such that they cannot be absorbed by the pre-existing historical and social conditions. As a result, we find ourselves encased in undefined spaces, of which it is possible to identify only the original nuclei and whose stratification and expansion are gradually less readable and continuous. Therefore, it seems necessary to investigate new and different methodologies for the analysis and understanding of the present city, in order to indicate the critical and crucial nodes for the territory and its social relations. The walls, which defined the towns while connoting them from a physical and cultural point of view, have renounced in favour of a very different perimeter, an urban landscape with an indefinite shape, within which, however, a precise architectural approach finds expression — from place to place. While, in the past, cities grew along an expansive logic of necessity, connecting private spaces to the public ones, today the urban frame reveals voids and seams in marginal areas. But can we truly speak of margins, given the aforementioned loss of boundaries

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and definitions? More than spatial margins, we should talk about social conditions, with their own identity and with certain economic, cultural and development perspectives. These areas appear isolated not only from a local point of view (we speak of suburbs: from the Greek *periphéreia* “circumference”, derivative of *periphér*’s “port around, turn”¹ [1]), but above all from that of architectural commitment. They seem to be born randomly, in absence of design and, therefore, of connection between the parties. Their seemingly weak and now compromised state makes them perfect scenes for the study and development of quality contemporary architecture. Since the fabric on which they insist appears free from the archaeological and spatial limits imposed elsewhere, the periphery represents the ideal place to experience architecture. Here we have an openness to change, which is lacking for obvious historical reasons, in the ancient housing units. The suburbs are, therefore, the future of cities, because of the number of their inhabitants and their inherent potential: the great urban voids that make them islands today, could tomorrow be bridges, constituted by public, relational and social structures. We need an architecture of redevelopment and sharing, which could enrich with functions and cultural baggage the well-known areas of urban degradation.

2. Design Enhancement

If the industrial revolution has upended the organization and shape of our cities, with the technological revolution we were all led to believe that we have no limits and boundaries. Computers, smartphones and tablets have substantially increased the speed and quantity of daily actions, allowing us to create an additional and more extensive work and relational network. The imposition of computer technology in communication, however, can also lead to the alienation of the individual from the group: this is particularly the case of the last generations, who are most involved. Architecture, in this sense, can become

a decisive and fruitful tool for peripheral areas that lack connective and collective urban fabrics. A hypothesis of an all-round redevelopment of degraded areas may be exemplified by the design of architectures for sport. In fact, sports activities seem to be able, in their wider beneficial sense, to help with a series of deviant behaviours that are often found in sedentary young people. If in a general comparison the term sport is usually employed to identify only competitive or professional contests, this is not the case for the “European Charter of Sport” of 1992, which defines it as: “(...) any form of physical activity which, through organized participation or not, is aimed at the expression or improvement of physical and mental condition, the development of social relationships or the obtaining of results in competitions of all levels.” Sports practice is, therefore, to be understood as a right for a healthy lifestyle and a balanced psycho-physical development. This is a significant moment especially for young people who, through sports, learn civil confrontation and begin to establish the first interpersonal relationships, understanding the principles of commitment, respect and fair play. The European Commission (February 2013) has set out a number of goals, including the removal of economic, physical and cultural obstacles, in order to ensure that all children can participate in recreational, sporting and recreational activities, also outside of school. The planning for the recovery and enhancement of sports facilities is therefore of considerable importance, as it becomes essential for the development of wide-ranging socialization processes, i.e., not exclusively limited to sports activities.² The architects in charge of the structures have the task of conceiving spaces of social life, in which the sporting, ethical and civil identity of the athletes will be promoted in the future. Sport also

¹ The definition is taken up by the dictionary of ancient Greek.

² “The Italian Government has established the Sport and Suburbs Fund, which allows construction work for sports equipment to be carried out. In particular, the fund is used for recovery and redevelopment projects of existing plants. Among its aims, in a social way, is the development of the culture of sport at a competitive level. I think it is at <http://www.sporteperiferie.it/>.

gathers its educational and cultural value from the buildings and environments that host it. Therefore, it is necessary to give these spaces the right design attention and an appropriate social investment, in order to encourage relational and growth exchanges. An opening of this kind can be found in the works of the engineer Nervi³ [2] who has distinguished itself in the field of sports architecture for his innovative ability, aesthetic taste and social sensitivity. It is worth reflecting, in particular, on its extraordinary contribution to the structural challenges posed by sports facilities from the first stadium built in Florence in 1929 to the Kuwait Sports Centre in 1968 (Fig. 1).

The scientific, technical and systematic research of Nervi begins with the project of the Florentine stadium Giovanni Berta (1929-1932) and develops finding its apex in the three ribbed domes of the Palazzetto dello Sport in Rome (1956-1959), the Palazzo dello Sport at EUR (1955-1959) and the Cultural and Convention Center in Norfolk, Virginia USA (1965-1971)⁴ [3]. Despite the conceptual and physical grandeur of Nervi's works, there is the



Fig. 1 Model for the Kuwait Sports Centre, 1968, Nervi.

³ Pier Luigi Nervi (1891-1979) engineer, entrepreneur and academic specializing in civil construction.

⁴ Among the many facilities designed by Nervi, three in particular have close structural similarities between them: the Eur Sports Palace, the Norfolk Scope Arena (Virginia-USA) and the Palazzetto dello Sport in Rome.

possibility of failing to protect them and therefore not being able to pass them on. This is because sports architectures are excluded from historicalization processes and are often unknown. Understanding their cultural value and scientific innovation is the first step for their diffusion and protection. Nervi was preceded and joined by another great Florentine personality, the Marquis Luigi Ridolfi (1896-1958)⁵ [4]. Although little discussed today, the importance of the role of architecture in sports venues had not escaped Ridolfi, who was the promoter of veritable avant-garde initiatives, allowing the city to develop a remarkable implementation from the point of view of sports equipment. He is credited with the construction of the Berta Stadium and the Federal Technical Centre in Coverciano.⁶ The latter was born precisely to manifest the link between the sporting and cultural dimensions, and it employs architecture as a tool to achieve the goal. Its distribution, expertly developed by architects Tiezzi and Degli Innocenti⁷ [5], was conceived so that the different users could find there adequate spaces to create sharing and connection networks. The center, in addition to its important technological innovations,⁸ embeds some areas specifically dedicated to the education of athletes and trainers. The architecture, well integrated in the surrounding context by appropriate material choices, is conceived on a human

⁵ Luigi Ridolfi Vay da Verrazzano (1896-1958) was an esteemed politician and entrepreneur. In the 1920s he pioneered sports at all levels, from Tuscan to national and international.

⁶ The Department of Architecture of the University of Florence conducted analyses and surveys at the Federal Technical Center of Coverciano, collected in the thesis work "The Federal Technical Center of Coverciano an architecture for sports education" produced in the 2018, on the occasion of the sixty years since the founding of the Centre, by La Placa S. and Martini B., rapporteur Prof. S. Bertocci S. and arch correspondent M. Ricciarini.

⁷ The architects Tiezzi and the Innocenti were students of the best-known Michelucci: their works are characterized by sharp and clean lines and a strict functionalism.

⁸ Luigi Ridolfi donated the Technical Center of the most avant-garde technologies of the time: official drawings (available at the State Archives of Florence) and oral testimonies (thank you Dr. Fino Fini, former doctor of the national team and current Director of the museum Coverciano Football) explain the attention to detail for the instruments present in the Magna Hall and in the Center's Medical Center.



Fig. 2 Nuvola di punti del Centro Tecnico Federale di Coverciano, 1958, Tiezzi e Degl'Innocenti.

scale and it is studied in detail in order to fit the perspectives and arrangements of its different functions.

In the light of excellencies from which to benefit and get inputs, such as those mentioned above, sport architectures seem to make themselves more than ever a quality tool for a point-based redevelopment of our suburbs. Therefore, it would be desirable to define a program of interventions aimed at rebalancing the most recurring shortcomings and promoting the development of sports activity in areas of greatest socio-cultural degradation.

3. Sports Equipment Development Projects

In Tuscany, but also at the national level, there are numerous requests for the improvement of sports facilities,⁹ which is why the Department of Architecture of the University of Florence has been promoting and supporting, for some years now, research projects related to sports. In the belief that the architectural discipline is capable of contributing to the study, analysis and overcoming the current difficulties of this sector, the Department of Architecture has encouraged the experimentation of a particular and innovative procedure, with the primary objective of generating social change, as well as improving the facility and its equipment. This is how the research project “Kick Away Spaces of Tomorrow” was born, project which saw the Department working in synergy

with Italian cycling federation of Tuscany and Italian football federation of Tuscany. In order to obtain a suitable level of quality of amateur centres, first it was considered necessary to activate a path of awareness aimed at workers in the world of sport, in order to be able to know and deal with critical issues in a systematic way. The work has therefore dealt, in a systematic way, with the following issues:

- First, the multiple cultural, historical, economic and architectural dynamics related to sport were evaluated, in order to delineate clearly and briefly the technical evolution of sports equipment. This procedure was necessary to understand the importance these places have nowadays;
- On the basis of spatial and management characteristics, the division of sports facilities into two broad categories was established: those related to amateur associations or societies, and those structured for professional athletes;
- Twenty regional amateur sports facilities¹⁰ were then identified and analysed, working with data management programmes (Filemakers) to obtain and file information on geographical framing, orientation, safety, savings energy, sustainability, functions carried out, auxiliary services, structural types, materials used, state of the art and use of each complex;
- In addition, the integrated survey methodology was then used by laser scanner and photographic tools.
- Through the use of post-production programs (Cyclone, AutoCAD) and from the clouds of laser points it was possible to return a series of two-dimensional and three-dimensional works;

⁹ See the FIGC's “Football Report 2,000 Seventeen” and the “First Report on Sport in Tuscany” of the Regional Social Observatory in 2018.

¹⁰ The twenty sports facilities analyzed are collected in the research work of architect Ricciarini M. entitled “The design for sport. Analysis strategies for the development of projects to support sports equipment” in 2018.

Similarly, data from photogrammetry (3Dflow, Photoscan) were developed.

The documentation collected was not only used to assess the actual state-of-the-art of these facilities, but also as a preparatory basis for a series of redevelopment projects undertaken by some of the sports clubs involved. The process that has been triggered underlines the social dimension of “Kick Away Spaces of Tomorrow” and the idea that places of growth must make an important contribution to the definition of quality.

Today, more than ever, it is necessary to qualify the new and diverse function of sports centers spread throughout the territory, ensuring that the facilities do not perform only mere service function but are reconsidered for their social value. Architecture is a plausible and effective tool to achieve this goal, making new interactions possible. It should also be considered that a sports facility is a very impressive reality, which lives not only at the architectural level, but also extends its purpose to an urban scale. It is in this order of magnitude that it is thus necessary to evaluate a possible design, but above all, a suitable redevelopment which puts the economic, constructive, functional and social aspects at the forefront. Studies and analyses carried out in the early stages of the project revealed the great weight of relations and symbiosis with the environment in assessing the quality of a sports facility. If exchanges and positive feelings are generated within it, these contribute significantly to the enrichment and improvement of the individual; if negative, they hamper its growth. This gives us the merits of a complete relief, which allows us to know a place physically but also to analyze it on a psychological level (behavioral relief, architectural psychology). Working with the importance of the latter means working with attention to the environment and in parallel with the mental and relational attitudes among the individuals who attend it, with the aim of creating and presenting the best conditions for a person-environment relationship balance. In sports,

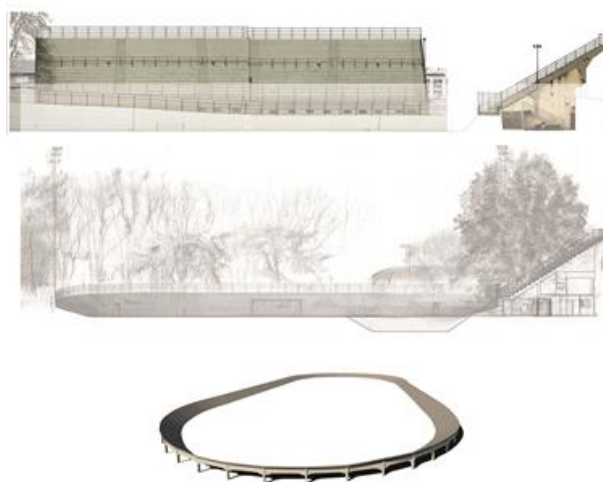


Fig. 3 Velodrome of the Cascine in Florence, during the sportsmanship phase of the city of Florence in the late 1800s was one of the symbolic places.

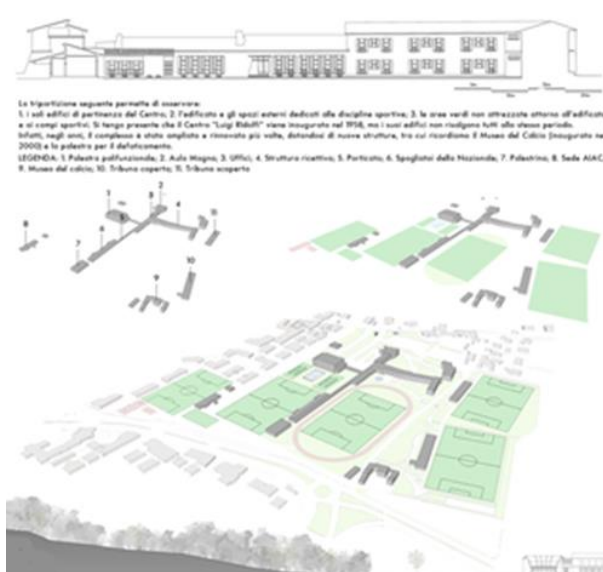


Fig. 4 Federal Technical Center of Coverciano, 1958. Analysis of the volumes and activity spaces of the sports facility.

this would result in the construction of a place capable of positively influencing both the performance of the professional athlete and the psychophysical development of the growing young person. This situation can be found in the sports center of excellence of Coverciano, first mentioned, and also analyzed by the Department. Again, the operational methodologies followed have seen the use of diversified tools both in the study and understanding of spaces (Filemaker),

both in the field of analysis (laser scanners and photographic equipment) and in the process of (Cyclone, 3Dflow, AutoCAD). The aim of the research was to demonstrate the importance of the connection between architecture and places of sport and therefore of social interactions. The diffusion of the result achieved may be a starting point for amateur centres that wish to pursue high quality levels.

To date, the Regional Social Observatory Sport of the Tuscany Region, ANCI Tuscany and the Department of Architecture of the University of Florence are jointly engaged in the activation of an additional research project. The architectural heritage of sports facilities, from large stadiums, to arenas to small swimming pools and suburban campsites, is owned by the public administrations. These, through specific agreements, give the management of the plants to different companies operating in the territory.

The split between the administrator and the manager of the asset has in fact led, over time, to a decreasing architectural and environmental quality of these places. It is intended to enable the resolute proposals suggested to address the inadequacy that is often found at the functional and architectural level in sports facilities. All this in light of the enormous imbalance to be fixed between the quality of the facilities and the massive use that children, teens and even adults make of them.

Sports facilities are a key place for the community; however, at the expense of their social value, they find themselves forced into an absolutely inadequate architectural heritage that deserves more attention both structurally and from a urban point of view.

Therefore, in view of the need for systematic and urgent interventions, this experimental and innovative project in support of public administrations was born, in the belief that their safety and modernization is a priority for the social purposes of the Tuscany Region.

Another aim of this project is to promote modern design lines for sports facilities, characterised by

innovation in the fields of energy saving, safety and removal of architectural barriers.

The project will involve all interested amateur centres present in Tuscany, but priority will be given to those with obvious major deficiencies.

When completed, the local administrations will be able to take advantage of an analysis — carried out by the Department of Architecture — on the de facto status of the structures that they consider strategic and functional for the territory, so that they can be supported in the verification. Local administration will thus be able to jointly activate an evaluation path for the adaptation and redevelopment of the same centres. This will be all the more valid for those sports facilities of historical importance; the analysis and development of these centres will allow to create a “pilot” program suitable for the regeneration of other spaces.

4. Conclusion

The objective of peripheral regeneration, in social, urban and architectural terms, is a necessity: it is necessary to update the housing model if we want to respond to new corporate needs. The projects activated by the Florence Department of Architecture for the redevelopment of sports facilities make a contribution and allow a reflection on the plausible methodologies of intervention. Starting from an accurate analysis of the problems and needs it is possible to restore full dignity to the city's tissues as well as modernize the country. We need to focus on social gathering spaces in order to restore lifeblood to brownfield areas and to relaunch services; It is also appropriate to design with the right focus on aspects of sustainability and energy efficiency.

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