Sport Arena – A Key Player in Changing Mentalities in A Community

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Abstract. Football represents a universal leisure activity – being spread all over the world and thus becoming the king of sports. This game brings together families, communities, but also strangers eagerly supporting their favourite – local or national – team. Such a sport gives rise to both friendships and rivalries between supporters. Yet, the partially justified association between football and hooliganism led, implicitly, to new problems that reflected upon the architectural object as well. The stadium can, beside resolving the problem that raised from hooliganism, be the very starting point in a process of image changing through the impact it has at a social scale – equally through its representativeness inside a locality and through the role the accommodated spectacle plays. In this paper, we shall present different ways in which the built space of a sport arena can become a helpful instrument in the process of moulding the mentality of the community, ascertaining the fact that the legislative measures having the same scope are not always sufficient or efficient on a long term. Thus, sports arena can become more than just a space dedicated to performing sports competitions. It can become a space which facilitates social and cultural negotiations, it is an urban landmark and symbol that can improve the action of a community (this feature is perhaps most visible when the arena accommodates other events besides sports events like concerts, fairs etc.). Its transformation from a space dedicated solely to football into a space with multiple services can lead to a permanent use and could draw a heterogeneous public (by including services like: museum, cinema, mall, administrative community space etc.). The proposal for designing multi-sportive and multifunctional modern arenas combines several principles together, satisfying multidirectional social needs: the needs of the users (of recreation, relaxation, entertaining and so on), and the needs of the institutions involved (political, economic needs etc.). The variety of services that can be accommodated into such a space can have a great social, economic, cultural impact etc. The modern sports arena must be the result of much more in-depth understanding of the communities (of fans, users, nearby community etc.), of their current practices, needs and desires. The role of the architect, in this context, is not only that of conceiving the architectural object, of making it functional, but also of linking different elements thus making a building which responds to various needs without considering the arena a boundary.

1. Introduction
The urban spaces of today have become “mega malls” of buildings, some of them striking us through their aesthetics, others through their innovative design and approach. The ingenuity put to work by the design teams has the end scope of attracting more and more visitors. In this context, perhaps one of the most neglected, uninteresting and even cold for different reasons building is the sports arena. Mainly due to hooliganism, over the years it has been pictured in many newspapers as a place of violence, of...
violent group domination, almost never as an open, accessible space despite its potential for being used more than it is now. Most sports arenas have their surrounding green spaces used regularly and valued while the building itself opens its doors to the public usually only in the days dedicated to sports competitions. The large amount of time left between competitions is the one that must be addressed, creating the premise for adopting other solutions to animate them.

At this point, the sport arena remains associated with, tributary and dedicated to the king of sports – the football – which represents a beloved universal leisure activity – being spread all over the world and making new followers each day. This game brings together families, communities (local or from other regions), but also strangers eagerly supporting their favourite – local or national – team. Such a sport gives rise to both friendships and rivalries between supporters. Yet, the partially justified association between football and hooliganism led, implicitly, to new problems that reflected upon the architectural object as well. The stadium can, beside resolving the problem that raised from hooliganism, be the very starting point in a process of image changing through the impact it has at a social scale – equally through its representativeness inside a locality and through the role the accommodated spectacle plays. A society cannot function if the basic needs of its members are not satisfied – those referring to food, shelter etc., to safety, love and belonging, self-esteem [1]. Sports arenas could contribute to providing some of these needs.

In this paper, starting from the aspects highlighted so far, we shall identify some of the domains towards which sports arenas could be directed in order to speak of them as key players in changing the mentalities of various groups and people directly or indirectly interacting with them. Among the possible levels of actions, we name: the level of the supporter (from simple supporters to hooligans), the level of legislation and building codes, the level of services offered (diversification of these services and identification of possible related functions), actions specific to sustainable development (from project implementation and use of specific solutions to related awareness programs).

It cannot be neglected the fact that at this moment football is a business – a business that generates profit and rewards for the owners of football teams and stadiums. Though, as large part of the stadium was built from public funds, we shall not care only about recovering the initial investment, but also about introducing, as part of the design, aspects referring to public education and cultural enlightenment, aspect we took into consideration in this article. Architectural objects must, in addition to meeting the requirements of the architectural program, become a symbol, an iconic element of the community in order to express the identity, features and aspirations of the community, in order for the community to be able to appropriate it.

Anyway, even when addressing the financial issues, we can also identify positive outcomes. First of all, the sports teams (which financially support further the arenas they play in) can make direct gains from television rights, advertising contracts, sale of players etc.) or indirect gains (from growth in the number of supporters, transfers etc.). Adding new non-sport related spaces to arenas can become an important source of income drawn not necessarily from supporters, spaces which can become the forefront of creating new ways of thinking about the arena and its place inside a city, into a community etc.

2. The level of the supporter (from simple supporters to hooligans)

The role of a design team, composed of specialists from as many fields as needed (from architects to sociologists), is essential in the way of thinking and designing arenas, as well as of analysing the effects an arena has upon an individual in time.

We need to keep in mind however that the interaction between sport and space differs depending on age: the teenager can find on the stadium his own way of expressing himself and a way of freeing himself from his parents, while for the adult it can be a way of relaxation, recreation, a way of disconnection from daily worries and of recharging with energy. We must design according to the needs and expectations of every user in order for the building to satisfy its main purpose and then secondary aims,
but which have great social, cultural, educational importance, specific to the given context, thus mandatory to be thought of beginning with the design phase.

A little boy, brought on the football field by his father, starts shaping his own ideas about what is good or bad under the guidance of his father. The relationship between the two leaves behind impressions, feelings, emotions that do not disappear but “they deposit, crystallize, taking the shape of previous experiences which, if necessary, will be reactivated and reused” [2]. Under these conditions, the lessons learned at the stadium should not be understood exclusively as sports lessons, but rather as an indirect means of accumulating other necessary skills in life.

The indoor and outdoor space specific to a sports arena must not be thought of only through the idea of direct financial gain, but considering a long-term architectural and psychological thinking that facilitates the interaction between sport, the sports arena, and the child – the adult – his family. As long as the interior space becomes a space dedicated to masculinity and only for men between the ages of 18 and 25, the sports arena will not be able to exceed the state of a place where sports competitions unfold.

The design team’s understanding of such conducts is closely related to place and time, the age itself becoming a key element in spreading the phenomenon (easily happening especially among teenagers). In this context, the built space can become a helpful instrument in the process of moulding the youth, ascertaining the fact that the legislative measures having the same scope are not always sufficient or efficient on a long term. The inclusion of crime prevention measures in the current legislation had a moderate effect, violent actions or show interruptions due to some supporters still having place. Thus, the dimensions of the sports arenas emphasize the important role played by the architect, as he needs to design a space that would best answer to the (ever changing) needs of the end user. At the same time, the architect has to help and continue, through the architecture of sports arenas, the process of eliminating communication barriers, the whole spectacle being, however, setup in a way that would facilitate and even make desirable the communication and socialization between spectators. Football, and sports in general, managed to become a true catalyst for society, contributing to the achievement of a strong relationship between participants and to the constitution of dedicated communities.

3. The level of legislation and building codes

Over the past 20 years, the stadium has undergone important (architectural, functional, etc.) transformations following the measures proposed in a long series of reports made in England as a result of tragic incidents, the latter being The Hillsborough Stadium Disaster Inquiry Report (known as Taylor Report) [3]. The main purpose of this report, commissioned after the accident at the Hillsborough Stadium in 1989, was to discover the causes of its production and to propose general safety measures to be implemented within the existing or newly proposed stadiums.

Building codes are designed to enforce minimum requirements that the design and construction team must respect in order to improve the experience of the football performance (whether we discuss about the space – the actual playing area – or issues related to spectators). In Europe we have two representative documents which are the UEFA Guide to Quality Stadiums [4] and a Guide to safety at Sports Grounds [5].

The drafting of a law is the result of actions (such as those outlined above), of events that show the need for regulation and alignment to accepted rules in society. Implementing laws, is a way of preventing future incidents and imposing sanctions in case of non-compliance.

The limits of the law are, however, far too flexible and cannot anticipate and/or take over the changes that may arise, for example, in the case of supporter groups organization and action. These groups are characterized by a constant change and adaptation of behaviour due to the unconditional support offered to their favourite team [6]. The laws are general in nature and do not distinguish between different types

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1 Out translation, original text: “se sedimentează, se cristalizează luând forma experienței anterioare care, în funcție de necesități, va fi reactivată și refolosită”
of supporters: eager supporters, ultras, hooligans or supporters who are included in one of these categories only because of the place they currently occupy in the stadium.

There is a lack of legislative framework that would require the accomplishment of related functions to compensate for the dead times between the game days and a loss of interest for an efficient use of this space (which would generate a greater profit and shorten the recovery time for the investment). Also we must add that the toughening of the minimum requirements imposed by the legislation does not create a qualitative leap from one construction to another.

As Sanger clearly stated, “Architects and landscape designers are criticised for being only concerned with «appearances» not with «practicality», leaving such matters to be fixed up by the householder later. Everybody involved in design must become aware and then respond positively.”, [7].

4. The level of services offered

The stadium has an important role at the scale of a city. It is a landmark no matter the percent of its users related to the population of the city. Thus, as a space which can accommodate a large number of spectators (simple supporters, eager supporters, even ultras, or hooligans), the sports arena has the opportunity to address them, but also other users precisely through auxiliary functions (which are weakly developed at this time). The sports arena is more than a space dedicated to performing sports competitions. It is a space which facilitates social and cultural negotiations, it is an urban landmark and symbol. This feature is perhaps most visible when the arena accommodates other types of events than sports (concerts, fairs etc.).

Due to its capacity, the stadium is currently used sometimes also as:

- a venue for political meetings (an activity started around the 1900s – if we are to refer only to the arenas hosting the football games, otherwise we can go toward the antiquity). For example, on September 20, 2014, on National Arena in Bucharest, 70.000 party members attended the presentation of a Romanian presidential candidate.
- a venue for music concerts, from rock (we name December 07, 1986, Queen concert on Wembley Stadium, 72.000 spectators) to classical music (June 11, 2011, Andre Rieu concert on Amsterdam Arena – 85.000 auditors)
- shelter in case of emergencies like natural disasters (e.g. in 2005, after Hurricane Katrina, the Louisiana Superdome sheltered the refugees).

Based on this information we have to consider the design of such a space, from the beginning, as a multifunctional space, the diversity emphasizing the idea of a modern sports arena as outlined in this paper – an arena adapted to the new requirements and needs of the modern/contemporary man. Its transformation from a space dedicated solely to football into a space with multiple services can lead to a permanent use and could draw a heterogeneous public (by including services like: museum, cinema, mall, administrative community space etc.). In this regard it is worth mentioning that the interaction with other age groups, social groups etc. has an important role in crime prevention by practicing social acceptance, by relating to the other, by indirect control and so on.

Present-day society takes pride in its openness towards information and knowledge sharing, towards informal activities and more than that towards leisure activities that are not meaningless or aimless. Sports arenas can become places where learning, sharing, socializing take place, the sport being the trigger but also being able to socially engage its public.

5. Actions specific to sustainable development

Sustainable development must now accompany any kind of intervention and action, being a present-day demand and responsibility (Our Common Future [8], Europe 2020 [9]). Communities must be helped and encouraged to implement sustainability into their lives. In the context of this paper we highlight the need for reducing the use of non-renewable resources and the challenge represented by the production and use of renewable energy.
The proposal for designing multi-sportive and multifunctional modern arenas combines several principles together, satisfying multidirectional social needs: the needs of the users (of recreation, relaxation), and the needs of the institutions involved (political, economic needs etc.). The variety of services that can be accommodated into such a space can have a great social, economic, cultural impact etc. In this context, we note the importance of a sports arena as a space where the principles of sustainable development can be implemented and where the spectators can be educated in this regard. Through its dimensions it becomes a representative space that can be equipped to produce renewable energy. The principles of sustainable development must be included in an integrated building system that would transform the sports arena not only into a producer of electrical/thermal energy, but also into its own consumer. The integration of production equipment and of consumers that would use the energy continually produced throughout the day in the space of the sports arena limits the losses generated by the state of current transport lines and substations. A next step would be the energy production for the community (and there are, already, several such examples worldwide).

Beside implementing, in sports arenas, as many sustainable systems as possible to be seen, understood, analysed and used by the community, we note another important impact that the sports arena can make upon the community it serves which is the transmission of information and results (between simple citizen and between community members and the academic community). The use of an integrated system of "live demonstrations" of what Sustainable Energy and what Sustainable Communities are should become a priority. Based on the large number of people who are crossing the threshold of this building, a new, specific method of interacting and presentation should arise in order to make the best of what the space itself has to offer or can be used to offer.

The stadium has the potential to become a true power-generating hub, but also a socio-cultural hub that can bring together different aspects of society.

Small steps towards this direction have already been made. We name, for example, Za(greb) 2012 stadium [10], Qatar Foundation Stadium sport complex [11] or sport arenas that are at least starting to produce energy like Lincoln Financial Field, USA; Le Nouveau Stade de Bordeaux, France; Estádio Governador Magalhães Pinto, Brazil and so on.

A very good example is Kaohsiung World Stadium by Toyo Ito & Associates, built between 2006 and 2009 in Kaohsiung, Taiwan. This stadium, which houses 40,000 seats, is covered by 8,844 solar panels (on a surface of 14.155 m2) and can produce enough energy to cover 80% of the Neighbourhood Energy Needs [12] – about 1.14 million kWh per year [13]. At the times when the stadium is not being used, the energy produced is sold, providing a continuous cycle to reduce the production of 660 tons of carbon dioxide [13]. In addition to being the world's largest solar power stadium ([12], [14]), it is worth noting the exclusive use of recyclable building materials, all produced in Taiwan.

6. Results and discussions

It can be identified so far various aspects which can transform the arena into a key element that can help communities in various ways. Sustainability proved to be a key concept that links all the other aspects. It cannot be declared sustainable development (including the design of multipurpose buildings and the reach towards a larger public) without referring to the strategy Europe 2020 [9] which encourages a more sustainable use of human or natural resources. Building upon the statements of this strategy we believe it is necessary to achieve a direct connection between producer (based on the production equipment, as: photovoltaic panels placed on the building envelope) and users (through different services inside the sports arena which consume electric energy: bars, cafés, sports equipment shops and other shops that can be included as related/complementary services – art galleries, museums, cinemas, commercial centre). The complex space resulting from summing up all the new spaces, although it would require a major starting investment, due to the work programme throughout the entire week (contrary to the sports arena that functions only in the football game days), would bring profit to the owner of the sports arena, thus reducing the investment pay-off period. In terms of crime prevention, considering that football games usually start around 18:00 (the plays with reduced importance), the work programme of the related activities can be interrupted to avoid potential conflicts between fans and
ordinary visitors. At a local level, these new services implicitly generate new work places, some of them requiring higher education personnel, thus falling within the recommendations of the Europe 2020 strategy to reduce unemployment in the European Union. Also, implementing the requirements at the level of sports arena can be a challenge, but this is a space with a great capacity for adaptation to major changes and for the assimilation of new solutions. The main difficulty in implementing new solutions are economical, but this very element is the one that dictates, even more so, the need for a fundamental change in the design process of arenas. Investing in various, revenue-generating services is very important because of their role for the community. Addressing various social issues, inside a space with symbolic meaning like a sports arena highlights a sustainable way of thinking, exceeding the function itself.

The design work must not ignore the importance of the community, its engagement having the potential of becoming a key element in crime prevention. Granting it a vote in the decision making regarding the architectural object can lead to place attachment, to a more facile appropriation of the object, to the generation of a feeling of belonging as the architectural object also becomes the project of the community. An attachment towards it can lead to the reduction of violence/vandalism on the stadium as this would mean destroying its own building. Such an attachment can also imply a reduction in the number of law enforcements necessary for the sports event which, indirectly, would translate into optimizing the costs borne by the owner.

7. Conclusions
The way the services provided by the sports arena are being designed and set up must take into account the role of the individual and of the group within the complex working mechanisms. Offering quality services, in the contemporary society, becomes mandatory, solely presenting a sports events being not enough in order to draw more spectators towards the stadiums. The spectator must be immersed into a space that satisfies his needs, that raises up to contemporary standards, in the same time anticipating a series of scenarios which go beyond the main role of the arena as a leisure space. Thus, the sports arena becomes a space that brings together different elements (having their own features, their own sphere of action, their own needs etc.), each one of them having an important role in complementing and amplifying the football show. These elements, which revolve around the space itself, are: the sport (in our case the football), the supporter and the club team.

The modern sports arena must be the result of much more in-depth understanding of the communities (of fans, users, nearby community etc.), of their current practices, needs and desires. The role of the architect, in this context, is not only that of conceiving the architectural object, of making it functional, but also of linking different elements thus making a building which responds to various needs without considering the arena a boundary.

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