WELLNESS A SPORTOVNÍ BROWNFIELDY

Miloš KOPŘIVA

Abstract: Negative civilization effects on humans health require preventive physical and psychological compensation. It's necessary to change the lifestyle in accordance to wellness principles. In cities are negative influences intensified by big mass of people on small area. It means to transform the city sport infrastructure. It's impossible to extensive occupy other areas, it's necessary the inner transformation, change current social priorities, in practice change of proportions planned surfaces for sport in favour of wellness. Sport brownfields, especially for their position and size, means for future wellness transformation the biggest reserve.

Keywords: Brownfield, wellness, urbanistic and architectural context, environmental protection, natural values, transformation, long-term urban planning, extensive land occupation, individual movement activities, seasonal areas, moveable lightweight structures

1 Introduction

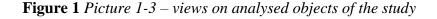
Wellness is a highly contemporary and relevant topic within the field of sports, both specifically as well as contextually. The urbanistic and architectural context of wellness is fundamentally changing existing trends in the planning of sport area facilities. Contrary to earlier approaches, where newly planned buildings and outdoor sport fields organised by some clubs or sport units – using terms like "civil constructions" or "civil sport equipment" – were planned in the place of their living area, civil sport equipment like wellness, which is accessible for everybody without difference, should be localized in a different way.

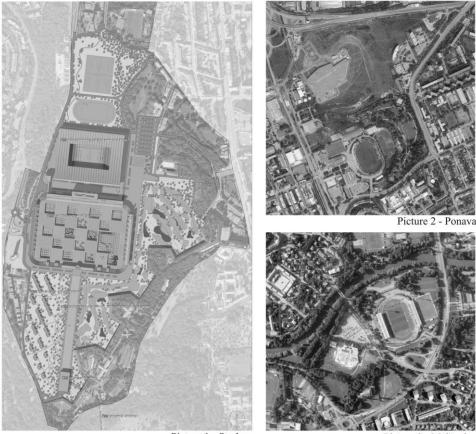
Before we go into any detail of the present discussion on the need to transform sports brownfields into wellness areas, it is necessary to point out that in my opinion, the export of numerous practices from the USA to Europe didn't have nor will have a positive influence for the way of life nor the specific environment. In the field of urbanism this primarily concerns the devastation of traditional structure of smaller urban commercial network, which is substituted by supermarkets, fastfoods with excess of advertising and others. From the architectural and urban point of view there are unsuitably unifying the public space, in particular negating regional originality of city centers, as well as the quality of buildings in the periphery.

The theme of Wellness – the philosophy of healthy lifestyle – seems to me quite different. Paradoxically we got used to the culture of hamburgers, and now we negate it by consuming healthy food in case we want to live in a healthy way.

From the global point of view we simply must respect the limits of our planet, because the unrestricted free behaviour of democratically controlled part of the world, starts to be very close to these limits. The expansion of society fascinated by consumption, cannot be borderless. Take for example the notion of individual holiday recreation transport planning. The infrastructure of some countries cannot cope with the amount of car transfers to touristic destinations – to the sea destinations in the south in summer and in winter to the mountains.

Additional effects of this process like wild privatization, loss of national financial support and undirected sport education are leading causes that especially big sport areas with rich former sport tradition became brownfields. In Czech republic well-known are Strahov in Prague, Ponava in Brno, Malšovice in Hradec Králové among many others.





Picture 1 - Strahov

Picture 3 - Malšovice

2 **Objective**

The aim of presented paper is importance of brownfields as a reserve for planning of sport facilities reconstruction with preferred wellness component is augumented by the fact that these areas are often located in a very close proximity to a catchment area of a city center or concentrated residential areas.

The additional aim is to analyse 3 objects of sport brownfields in Czech Republic.

3 Methodology (project characteristics)

Plan analyses

Strategic and land use plan developments can significantly influence the future environment, also with regard to the lifestyle of next generations. This is pre-eminently the role for politicians, especially municipal ones. In a market-driven context health prevention will never be a primary consideration to improve condition, because in comparison to other types of business it doesn't have a quick economic payback. This is the reason, why sport brownfields came into existence. The name brownfield is internationally used for not well used locality, which have lost predominant function, fell into disrepair and became an urbanistic problem. Sport brownfields are typical for countries in central and east Europe.

The environmental protection of these favoured destinations require set limitations in the future, in order to save local natural values. This does not solve however the fitness problem of the present population, because it doesn't compensate for the absence of periodical movement required for health. To improve the society's physical condition strategic planning of movement activities close to the residence or work areas is necessary, more precisely inside the transit areas of permanent residence of potentional visitors. From this point of view, the wellness philosophy of healthy lifestyle is appropriate and it is necessary to apply it in city developing plans.

4 Results

Sport brownfield at Strahov

The Strahov complex is located on an artificially modified hill above the city of Prague. The area of the sport facilities was created 80 years ago by levelling of quarries then located at Strahov. There is a similar sport complex at Montjuic in Barcelona, where the Olympic games took place in 1992. The major problem of these and similar locations is a difficult transportation access and also a significant concentration of a visitors movement to a sport stadium in a short time. If we would consider a conversion of the initial spectactor

function into another kind of a sport utilisation, the site would benefit from a balanced and lighter traffic load with a higher share of the city public transportation.

For Strahov location, an improved accessibility by means of the public transportation will become an important factor, mainly because a portion of target users of wellness facilities would not use a motor vehicle.

Directly in this location, there is an accommodation for five thousand persons who are also potential wellness users, the students who live in dormitories of the Czech Technical University of Prague, located in a close proximity of the biggest stadium in the world.

The big stadium (Sletovy stadion) that served for mass gathering of the Czech sport organization Sokol, hosted during its fame (between 1930 and 1948) up to 180, 000 spectators. The transformation of this stadium (with the central area of 6 hectars) to a wellness facility would easily balance the current deficit of public sport facilities for the entire capital city of Prague. For this location, there is a plan for a stadium which is called "National Football Stadium" with a capacity of 40, 000 spectators, however, its utilisation for public sport activities would be zero.

Sport brownfield Ponava in Brno

50 years ago, the central stadium in Luzanky sport complex used to be visited by almost 50, 000 spectators. Dreams about similar high numbers of regular visitors can not be currently realistically achieved. In spite of this, there is a plan to build in the brownfield, with the planned main revitalisation element and draw, a giant single function football stadium for 30,000 - 35,000 spectators, multiple cinemas and shopping centrum. This plan falls into the category of buildings which are called internationally "white elephants". It can be any investment which lacks rational chance for utilisation in periods between peak venues. The original function of brownfield had all atributes of the socialistic performance sports, such as concentration of single function facilities in one complex and a complete absence of sport opportunities for non-organised public physical activities. In this case, more suitable option for this location is use of a gathering form complemented by multifunctional utilisation of spectator stands for several sports or aquapark with complementary elements of wellness, and wide range of activities accessible to the public (climbing walls, skate area, zip lines, etc.), not only a swimming pool for competitive events.

Sport brownfield of Malsovicky stadium in Hradec Kralove

Hradec Kralove with its superb transportation infrastructure, planned by architect Gocar during the "first" Czechoslovak Republic, has its brownfield area morphologically delineated by a ring road and the river Orlice. The current reconstruction plan represents the worse possible transformation scenario for a territory of sport brownfield. Almost half of the Malsovicky sport complex would be replaced by a supermarket store. In order to free the space for the supermarket, it will mean to relocate the stadium into a sport leftover area. The public and its physical activities in this territory will be represented by a function of a summer swimming pool which is normally utilised only a few tropical days a year.

The irreversible damage to the genius loci of today's "stadium with popsickles", how it is being called by the public, might be reversed by the city political oposition at the last minute.

Discussion

The program of transforming sport brownfields to civil wellness facilities is a long-term investment in the area of health insurance. Improving the average population health condition is economically advantageous from the point of view of health care investments. A priority is to build wellness centers for wide range of the public in not well used sport places and at least securing temporary effective sport brownfields protection for sport and freetime.

Potential of transit areas

The support of wellness healthy lifestyle implies change of the current urbanistic relationships in indicators of sport and freetime areas. Currently defined areas in the zoning plan are directed towards rather different sports activities. This leads to discrimination of general public needs for individual movement activities. Contemporary wellness services aren't sufficient and prefer commercial management principles. In the society-wide wellness services accessibility, there are more private investment of expensive wellness keepers than municipal ones with state or village support. When evaluating sport equipment of areas it is necessary to pick areas suitable for concrete future wellness localities. The potential size of transit areas for wellness is also determinated by the amount of attendees that can safely occupy these areas. The graphic structure for wellness activities and needs of primary schools is almost identical. In many cases it is possible to integrate outside areas into one unit with similar usage for wellness. The potential of transit areas is derived from the number of inhabitants and full-time working people in the area, reduced by requirements from preschool

and school children and performance-related registered athletes. The maximal basis reduction for calculation will be something like 26-30%, which leaves 70%. For this number of users wellness centers should offer services minimally 4 hours per week. The design is based on recommended regularity of active movement minimally two times of two hours weekly. This will result in plan that aims to meet users potential satisfaction. On the other hand it is also necessary to limit the time occupancy of individual activities in wellness centers. The possibilities of particular locations suitable for wellness is necessary to assess individually. The seasonal difference of area usage between winter and summer should not play a dominant role. In the current condition winter usage of outside activities is much lower than in summer period. There is a big reserve of all-year using outside surfaces. The movement outside in natural environment takes an important place in choosing a place for wellness. The amount of reserved area for top level sport cannot escape reduction, it will be necessary to replace the surplus of such areas with wellness needs. This concerns first and foremost the future of big sport brownfields.

Building of integrated wellness centers

Financial devices for building of complex equipped wellness centers in city gradient zones is necessary to plan and project purposefully. Big savings of built-up spaces we can expect by integration of operation with different users into one collective unit. In long-term horizon there is an exception for moving the centre of movement activities into a space with artificially regulated microclimate. We remind in this case of the vision of Buckminster Fuller or Frei Otto and Buro Happold and their case studies of microclimatic separation of a city parts from unheathy, permanently damaged environment (Dome above Manhattan, Arctic city).



Manhattan

Figure 2 Dome above Manhattan – example to future

Picture 5 – Arctic City

Figure 3 Artic City – examples to future

Scientific progress in combination with the inventiveness of architects and engineers, committed in experimental projects, changes continuously the materialistic basis of buildings for wellness. Traditional building procedures in wet zones are supplying plastics on the basis

of extruded polystyren, and to the realisations are now also introduced novel membrane and foil structures, which allow movement and interaction of the buildings. Moveable lightweight structures allow to find creative and unexpected solutions inspired by the tradition of bathing and skating in natural environment. The climatic character of the four seasons in present doesn't guarantee stable weather conditions which are suitable for sport as it was in past. Recreational use of natural swimming pools or skating on natural water surfaces will become unavailable for future generations. Currently multi-purpose utilization of bath water surface is under investigation, which can react for temperature changes in the various seasons. Membrane components allows controlled changes of using natural water surfaces. By membrane movement on the boundary of water surface it is possible to use the water for three different seasons.

Experimental projects from SMA (Studio Membrane Architecture) by CTU in Prague are working with mobile membrane components in architecture. This is supporting the above mentioned idea about all-year applicability of outside sport fields. Some projects have been submitted or have already been granted protected designs.

5 Conclusions

The wellness lifestyle began to be popularized first in the USA. Its increasing influence, connected with the development of necessary devices and equipment is highly specific in various continents, mainly in west European countries. The urbanism of European cities basically evolved differently than cities in the USA, which doesn't have a historical context. In west European countries, especially in Switzerland, wellness is considered as a part of normal life. The principle of placing civil wellness facilities in transit areas is becoming a standard in west European cities. It is not based on the condition of car commuting as practised for example in the USA. Localities are placed in most of the cases in nearby parks inside compact settlements. Fiscal advantages for entrepeneurs who work with seniors, are a manifest sign the support of state and communal support in developed countries. Indeed, central and eastern European countries also have this support and wellness public education, but the main problem is the lack of opportunities.

Commercial management of smaller grade wellness centers are not very interesting for entrepeneurs due to lower purchasing power; the huge wellness centers are usually targeted for the higher income middle class. The communal and state sector keeps to the former concept of sport facility development and prefers top level and high performance sport. In developed countries however, financial support in state and communal finances for top level sport is separated from planning. Specific problem in central and eastern European countries are sport areas brownfields, which under market pressure are transformated to other functions. Long-term urban planning time horizons and strategic priorities should react to this, especially when we want to keep sport functions in brownfields. Czech republic does have in recent history an example of state and communal support for sport buildings (Sokolská obec), which took place shortly in between the twenty years of independent state existence (1918-1938). State sport facilities grounded at that time still constitute in Czech republic important sport areas in cities and in villages, but also sport brownfields. Unfortunately however, in many cases they are underutilized. The size of these facilities are very attractive for speculators and developers, however for different functions than sport. The state and the villages, who are mainly the owners of these properties and estates, should not give up keeping there sport functions. Reducing the space for sport, particularly in the urban structure of inner cities built up by other functions, is non-returnable and irreplaceable. The opportunity to transform city sport brownfields for sport wellness areas will never repeat. The extensive land occupation will soon be a geopolitical problem of planet Earth, so it's necessary to avoid it in a preventive way. Currently functional sport and recreational systems have enough space in the cities, it is however necessary to transform and use these spaces more effectively.

6 References

Le Cuyer, A. (2008) *Technology and design*. Berlin: Birkhauser Verlag AG
Llorella, A. (2006) *Stadium Design*. Köln: Daab.
Hargreaves, G. (2009) *The Alchemy of Landscape Architecture*. London: Thames and Hudson.

Sheard, R. (2000) Sports Architecture. London: Taylor and Francis.

7 Contacts

Assoc. Prof. Ing. arch. Miloš Kopřiva, PhD. ČVUT Praha, FSv, Department of architecture Letohradská 10/711, 170 00, Praha 7, Czech republic Email: kopriva.milos@gmail.com