

Sport in the City

Research on the relation between sport and urban design

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Sport as an urban meeting point. Martikel No 8, Copenhagen. Photo: Daniel Casas Valle, 2011.

Abstract

Sport in the city is a design research on the spatial possibilities of sport in a multifunctional, compact and urban environment. The research explores the spatial integration of sport facilities and the mixing of sport with other functions. Is it possible to reinforce sport inside urban environments, instead of pushing it's away because of large space utilization or no attractive investment reasons? Aim is to understand how sport can be integrated physical in cities and urban environments, to give an overview of inspiring examples, and the spatial and programmatic relation of the sport facility with its direct surroundings. What can be learned from successful examples from sport? What is spatially possible? What organizational aspects are essential for this purpose? How to apply the results by new and renewal projects?

In five European cities, a numerous amount of sport projects are analysed on spatial, programmatically and organizational aspects (Amsterdam, Berlin, Copenhagen, Porto and Valencia). These cities represent a range of different sport typologies and spatial solutions. All cities have a distinguish sport policy at a municipal level, which defines conditions for sport projects. All sport examples are visited and analysed on the spot, where sport experts and/or persons to local sports services has been spoken to research the background and policy framework. Simultaneously, literature study is done on all specific sport examples, as well on the sport policy of each city.

Lessons of the various sport projects are translated into a design and planning toolbox which consists of spatial, programmatically and organizational aspects. This toolbox can be used to improve the existing situation or for new assignments (design and policy) where the main goal is to integrate sport physical and programmatic with its urban environment.

Introduction

By the enormously growth of the urban population in combination with a longer life expectancy, the daily urban quality gets under pressure. Since the Athens Charter (The Functional City), different urban programs as housing, working, mobility and recreation are present in various spatial planning systems. Organizing different programs separated from each other, as often in zoning plans are organised, has consequences on economical weaker functions as sport and green areas.

The importance of sport in social, economic and spatial terms is increasing. Government and social institutions highlight the positive effect of sport on health and the importance of sport for social cohesion. Actual healthy research programs, like Healthy Ageing research emphasize the importance's of balanced physical activity on regular base (Ruimte voor Gezondheid 2012). Sport as a specific physical activity, with precise requirements for space, participants and time, becomes for more people a normal weekly or monthly activity.

By continuous urban development and densification of the existing city many sports facilities get under pressure spatially (Van der Ploeg 2010, Bosch 2009 pp. 44-53). This results in translocations of sport fields toward city edges, because of building construction opportunities. Parallel, the spatial quality of many sports facilities is often bad and ugly (Van der Linden 2009): no proper spatial planning, mono functional, unattractive and anonymous architecture, badly embedded in the neighbourhood, hidden behind closed green areas, little or no relationship to public space; sport (parks) are often isolated from its urban surroundings.

Sports are for most city councils of secondary importance. "*A major problem in the planning of sports is that it is seen as residual or unprofitable ground*"¹, Jelle Zwart (sport policy maker at the city of Groningen) says, about the limited impact of sport in the city. And: "*Sport specialists inside municipalities are mostly not a party when it comes to urban planning and major city decisions*". In the nineties, Vinex districts were planned (national policy of urban residential development areas in the Netherlands), sport was sometimes even absent (Boeijenga & Mensink 2008). Sport was disconnected from urban planning, which is a missed opportunity to create space for sport and for daily movements/physical activities. In particular in the scope of actual health problems as obesities and social integration problems.

Sport changes

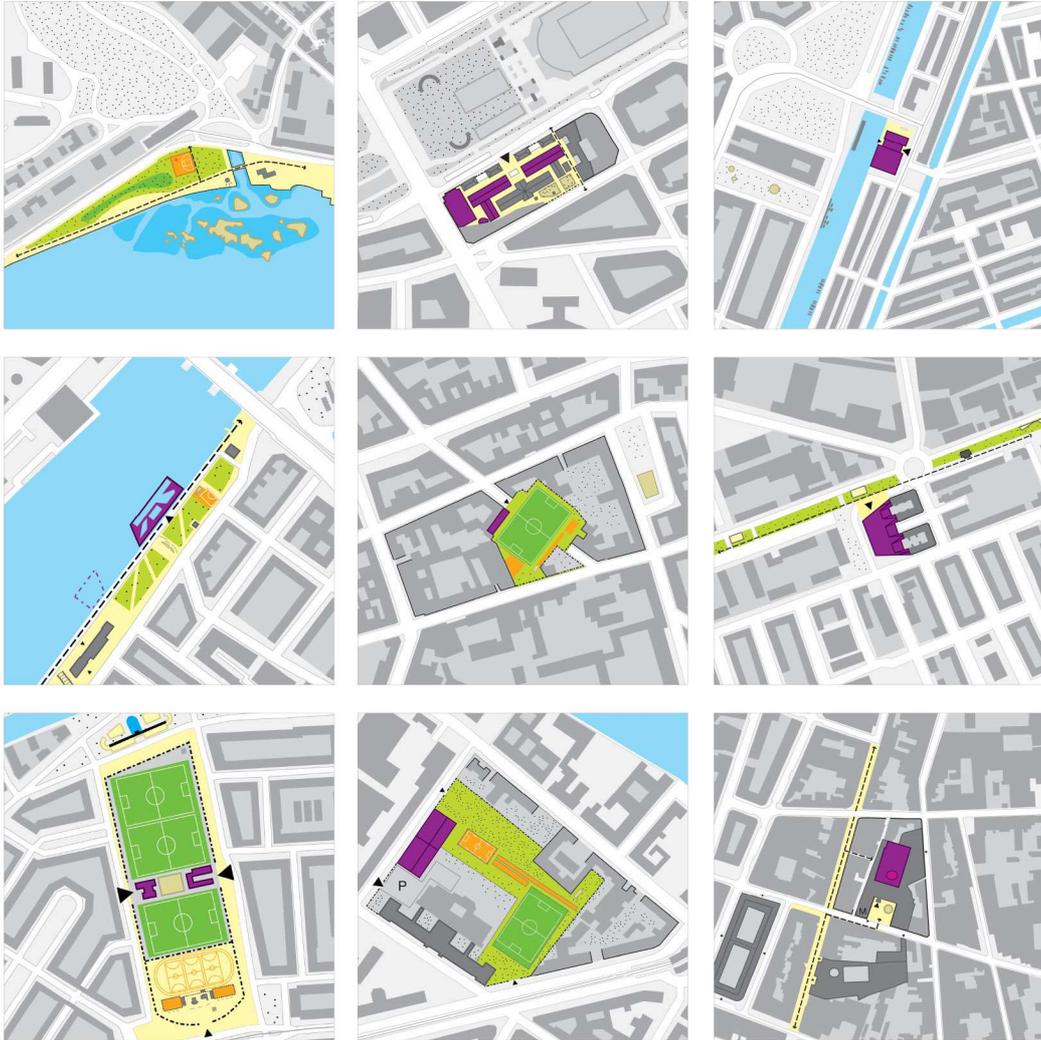
Nowadays, sport is integrated in the modern life style of our urban society. Sport is multiple-sided and constantly changing. Since the fifties, there is a constant grow in sport participation in many European countries. In some countries growth has stabilized (Van Bottenburg, Rijnen & Van Sterkenburg 2005). This had an effect on urban planning, by construction of various sport facilities and open (sport) parks in many cities. In the last decades, a few changes did have an effect in the relation between sport and city:

individualization has led to a reduction in participation in sport clubs. Sport becomes more and more individual. Sport does not take place at sports complexes on the outskirts of the city or in enclosed anonymous sports facilities only, but also in fitness studios in city centres and at crowded places in public space. The city itself serves as a stage for major sport events and as sport space for individual and not organized sports as jogging, biking and parkour. The importance of urban space for sport is increasing.

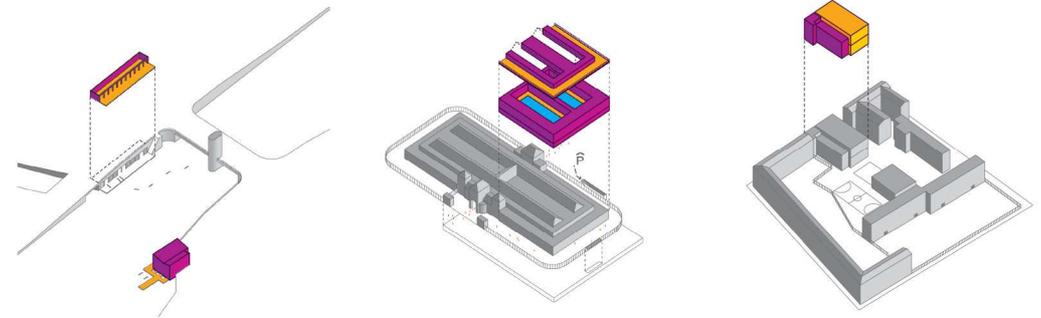
Our contemporary **lifestyle** is more and more focused on being active and healthier. This has led to a growth of fitness centres, fading the borders between sport and leisure. Sport itself has become a lifestyle; big clothes and footwear brands responding to this as sponsor of sport events and in the promotion of their products.

Space: sport became from a 'necessary physical exercise', more and more 'fun', by which, sport visibility and presence have become more important. This has an effect on how sport is manifest in

the **urban environment**, Public space is uses daily by sport people, or sport is used for city marketing. This all has an effect how sport is spatial integrated, with new sport facility typologies and new kind of public spaces (Kural 1999).



Selection of sport examples in Amsterdam, Berlin, Copenhagen, Porto and Valencia. Fluvial, La Petxina, Het Marnix, Havnebad, Auguststrasse, Prismen, Olympiaplein, Skaltitzer Strasse, Virgin Active Porto Plaza.



Rowing centre Berlagebrug (Amsterdam), Abastos fitness and swimmingpool (Valencia) and Doppelsporthalle Sredskistrasse sport hal (Berlin)

Examples of sport integration in urban environments

The sport examples analyzed in the research always interact with other programs and functions. Of each example, the position in the urban field (network, density), combination with other functions (education, culture, shopping) and the urban space (design, traffic, playgrounds), is analyzed and mapped. Main focus is "sport for all", where in particular the (local) public authorities have an important responsibility. It includes all kind of sport types which can be practiced by large majority of the population (everything without top/professional sport). Traditionally this kind of sport is organized, collective and non-commercial, indoor and outdoor, such as football, gymnastics, basketball and athletics. Three main spatial typologies were distinguished: sport building, sport cluster and sport in public space. Based on existing research, documentation and interviews with local public policy makers, also a broader context is recorded as: the municipality sport policy and the local sport culture.

The spatial typology of sport determines the sports participation. Equally important is the municipal sports policy. Valencia's ambition to its residents to provide a high standard of sports approachable and accessible to everyone. The policy is aimed at offering recognizable and reliable services, gradually spread throughout the city. Since the creation of the Fundación Deportiva Municipal Valencia (FDMV), thirty years ago, great strides were made on the basic levels of sport. The FDMV is a public company whose tasks are to develop new sports and run a knowledge centre about sports and to set up a municipal sports plan. Management is also their task. Defining standards provides a standardization for quality sports offered. In combination with a strong logo this increases the visibility of sport in the city. Despite these significant efforts to improve the quality of sports, schools gyms often stay unused after school time. The sectoral classification is to blame; sport is part of a Ministry other than education.

Copenhagen is characterized by a refreshing and out-of-the-box thinking method on the spatial and social position of sport in the city. Sport, leisure and urban development are closely intertwined. That is supported by the Foundation Culture & Sport and the Centre for Sport & Architecture. This centre is affiliated with the Faculty of Architecture of the University and focuses on the modernization of sport. Innovation and experimentation in development and realization phase is made possible by supplying knowledge and inspiring sports examples and concrete implementation funds (up to 10 to 20% of the construction of sports facilities).

Toolbox

In five European cities, a numerous amount of sport projects, are analysed on spatial, programmatically and organizational aspects (Amsterdam, Berlin, Copenhagen, Porto and Valencia). These cities represent a range of different sport typologies and spatial solutions. As well, all have a distinguish sport policy at a municipal level. All sport examples are visited and analysed on the spot, were sport experts and/or persons to local sports services has been spoken to research the background and policy framework. Lessons of the various sport projects are translated into a design and planning toolbox which consists of spatial, programmatically and organizational aspects.

Spatial aspects

The spatial aspects are divided into the following aspects: sport size/typology, position in the city, relationship with public space, visibility, distance and proximity, accessibility, public access and lockability, flexibility.

1. Sport size/typology

Starting point by integrating sport facilities are the dimensions established by international and national sports federations. The requirements relate to the sports field and the material (eg the use of artificial grass), locker rooms; they all are part of the overall program of requirements for a sports facility and determine the extent to which type of sport is spatially fit. For example, at the level of the building, a block, neighbourhood and / or recorded in an urban green structure like a city park. The monumental buildings of the former stockyards in La Petxina Valencia has been leading for the type of sport: sports function follows building.

2. Position in the city

Major sports complexes attract many people at different times, which makes it attractive to combine it with functions as restaurants, shops, hotels and music venues. This (smart) combination of functions can become an urban hub in the city. The diversity of program creates a mixed crowd which enhanced the urbanity of a place. This is also possible for small scale neighbourhood sports. In order to attract passers-by sport should be visible. On the scale of the city the city park El Turia Valencia is an important component of urban public space. At the same time the city park with many sports plays an important role in the area, mainly due to the coupling with the sports centre La Petxina in Valencia.

3. Relation with public space

The way the entrance of sports facilities presents itself to the city affects the contact with the public. Therefore, design and position of an entrance are crucial. Martikel No. 8 in Copenhagen shows that a public square can be an extension of an indoor sports complex. The basketball court and the striking design of public space invites to play, sit and skating. There is a direct interaction with the activities in the sports/cultural complex. The lower position of the field and the presence of sufficient space to stand and sit, has created a social place where people go forward to see and be seen. A purely functional place changes into a versatile, well-used urban place.

4. Visibility

The visibility-aspect of today's sport creates the need for a stage. Watching, showing and chatting, making sport a social place where people can meet. Striking design enhances the image of sport. The Sportplaza Mercator Amsterdam has a partially open glass façade. Daytime and evening for passers it is quite clear: here you can exercise! The city park El Turia Valencia is mainly used by sports associations; therefore these facilities should be lockable. At the same time there are public sports fields. The park is constructed in a former river bed. Park and users are clearly visible from the city.

5. Distance and proximity

Distance and proximity compared to other (urban) programs is an essential aspect to enlarge the visibility of sport. Not the absolute distance is important (Hoekman, et al, 2011, pp. 105, 316.). More essential is the precise qualitative interpretation of the distance. It is about creating an attractive and safe design of public space and connection to the environment. Such as stimulating multifunctional use, the extension of urban life to sports or linking sports directly to urban space. The Oporto Cricket & Lawn Tennis Club is an example of integration of a cluster with outdoor sports fields in a large urban block. The different sports (cricket, hockey, tennis) are in the courtyard surrounded by a mixed program of homes, offices, schools.

6. Accessibility

Accessibility is important to encourage people to exercise. The continuity and scope of a slow traffic route and a safe and attractive design of public space. The presence of sufficient cycle parking and parking are important too. Sports and allotments are the central pillars of the urban plan Sociópolis in Valencia. These programs are literally the centre in a new area: the sports field is 'district court' and public space is partially car-free. Sport is for most residents directly accessible in walking distance.

7. Public access and lockability

Use and management are essential for the usability and durability of sports. As a rule, it is necessary to close off during unused hours. Traditionally, fences, watercourses and height funds are means to close off playing fields, which means a reduction of the public and by cross-bility. Although the visibility does not have to suffer.

8. Flexibility

Sports-related areas such as the canteen or parking lot aren't in permanently use for sports, which gives space for flexibility in use. Sports facilities are used by multiple audiences. In Berlin, schools have private sports facilities or gym and an outdoor gym. In the evenings, the same sports facilities can be used by others. In this way, multiple use is created.

Programmatic aspects

Bringing together program promotes an interaction between program components and urban life. The greater the variety of amenities, the more diverse groups of people which will use the amenities. Fitting sport in an urban environment is more than just adding sports-related programs.

1. Sport chains

The multifunctional sports hall is a building typology where in one space different sports are possible. This creates a chain of different sports, with interaction between the different athletes. A direct relationship between sport and public space also contributes to a sports chain. In Sociópolis Valencia the public space is programmed that different sports are possible, such as basketball, skateboarding, circuit training, football and running. This combination of organized and non-organized sports of individual and group activities allows for exchange between the different groups.

2. Smart combinations

Smart combinations arise from the mixing of program components which in the past, under influence of the CIAM-dogma, have been separated. Technically and financially, these combinations are not complicated. It's proximity to various program components around the sport cluster or urban area are of great importance. In Denmark, sports and culture are historically linked. Almost every village has a Kulturhuset. These are community centres that provide space for various activities often linked to hospitality and sport. This traditionally grown connection between sport and culture is visible in the large number of sports and cultural facilities and is also part of many cities' sport policies.

3. Program mix

Mixing different sections can take place at district, neighbourhood and building level. It is essential that use and management aspects should be taken into account directly in the design of mixed sports complexes. Especially when it comes to providing innovative concepts sport management this is very important. La Petxina Valencia is a particular example, because a very diverse programming and a spatially interesting location led to a remarkably complex. Mixing consists of different sports, library, playground, restaurant / canteen, hotel (for athletes), centre for sports, municipal sports department and a conference centre. This centre attracts different people and has an area of increasing function.

Organizational aspects

This can be ordered by time: the actual use and management of 'today', the maintenance of 'tomorrow' and the developing or modernization of 'the day after tomorrow'.

1. Policy and target group

Sport sometimes is used in order to activate target groups. Copenhagen has adopted policies which new concepts and forms of sport are developed and implemented for disadvantaged groups (especially girls and ethnic minorities). The focus lies on the combinations between playing sports, exercise, recreation, leisure, culture, watching and being watched. The municipal approach in Valencia shows that a wide range of sports leads to higher sports participation by all residents of the city. This is supported by a favourable pricing, combined with the use of a logo that appears on all municipal sports complexes.

2. Use

In preparing multiple use is the primary objective of the arguments often intertwine. On one hand, is multiple use is financially more efficient, on the other hand, the synergy between the users sometimes is overestimated. Clarity about the principles and goals of multiple use is important in the planning phase.

3. Maintenance

Requirement to use a sports facility efficiently is a good match of use by various users and associations. Money for professional maintenance and management is often lacking. Allowing new sports groups on existing sports facilities therefore is difficult. In Copenhagen CPH City & Port Development took the initiative for management of the temporary sport area Plug N Play.

4. Developing sport space and facilities

If sport in an urban environment is considered important, it is essential to take sport fully in the development phase. Integration after construction of a neighbourhood is often financially and spatially impossible. In the new district Sociópolis Valencia, sport is completely contained during the design. Intensive collaboration between the designers and the public space of the city department is necessary. Plug N Play Copenhagen is an example of area marketing through sports. In the Øresund area much (basic) sport amenities are missing. At the same time there is stagnation in the implementation of the construction. The smart combination with allotments next to the gym makes combined use possible; children are sporting while parents harvest vegetables.



Fluvial, Largo de António Calém



Badeschiff



Matrikel No 8



Havnebad



Vor dem Schlesischen Tor



Olympiaplein



Plug 'N Play



Parque Marxalenes



Sociópolis



Rivier Turia, Estadi del Turia



Basketbalhoekje/Kreuzberg



Korfbalvereniging Blauw-Wit



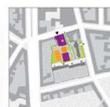
DSV, Deutsche Schule Valencia



StreetMekka



Doppelsporthalle Sredskistrasse



Auguststrasse



CCD dos Trabalhadores da CMP + Clube de Tennis do Porto



Skaltitzer strasse



Oporto Cricket & Lawn Tennis Club



Laan van Spartaan



Berlagebrug, Roeicentrum en Nereus



Het Marnix



Sportplaza Mercator



Prismen en Pragboulevard



Clube Fluvial Portuense



Virgin Active Porto Plaza



Centro Deportivo y Cultural 'La Petxina'



Abastos



Voetbalvelden regio Porto



METRO-Fussballhimmel



All the sport examples

Applicability of the toolbox

The analyzed sport examples can be clustered into three different project types and can be used as inspiration for actual and future sport facilities or space with sport use. Sport can be planned to create social and attractive urban meeting places or as catalyst/strategic project to improve the attractiveness of a neighbourhood or city.

In the **existing city** or **urban environment**, spatial characteristics and structure define/determine the spatial and programmatic transformations and densification. Looking from a sport perspective, this brings a new range of possibilities. Often, sport space can be created with small, not complicated and temporal interventions, like sport events, improving of walking/biking routes, using empty buildings, using roofs, parking areas or open playgrounds after school hours.

At **new urban development's** sport should be integrated in the development process. It is not only important to define the technical and programmatic sport requirements, but also to search for interaction, intermingling and symbioses with other programs and functions. To combine sport with education, recreation, playground and health can be made to integrate sport directly from on the beginning into 'the urban life'.

For **modernization of existing sports complexes** counts the existing specific situation and location. Sport innovations and technical possibilities as the introduction of artificial grass plays an important role in this. At more isolated locations, depending on the position in the urban field, the question is how to bring the city towards the sport complex. Programmatic variation and mixing are key aspects, but also combinations with other forms of exercise, such as playing, dancing, walking and cycling, makes a sport cluster more complete.

Conclusions and debate: look differently to sport

Sport is normally planned separately from other programs, which result often in a spatial isolated approach and design. Sport should be more broadly and open for interaction with other programs and activities. Sport projects can have an important role to match different urban interests, adding qualities and connecting different people, groups and organizations. This requires attention to aspects beyond the normally requirements for a sport facility.

Customization – sport as an urban meeting place

Technical sizes and requirements of sport are generic, the spatial design integration is always specific. The sport examples of this research demonstrate that there is a wide spectrum of spatial sport typologies. All examples are unique in their architectural design, placement in the urban environment, relation with the public space and interaction/intermingle with other activities/programs. When a sport place combines different aspects of the toolbox, it can have a role as an urban meeting point, for people of the street, neighbourhood, city or region. For the topic '*sport as a social meeting place*', it is important to *open-up* the sport planning. Public space has in many cities enormous potential for better sport, physical activity and playing. Sometimes, it means literal 'to map sport' and make the (potential) relationship visual between sport and public space, playground, parks, routes for slow traffic, schools, elderly livings or with public attractors as cultural events and shopping programs. Inside the existing city there are many sport possibilities.

Increase sport inclusive thinking

In the perspective of the active or healthy city model, sport plays a significant part. Therefore, it should be logic to promote '*sport inclusive thinking*' in planning. Not as a 'separated functionality', but as one of the important activities that improves the *living quality* in general. It should be logic to think about sport potential and possibilities in every urban spatial and urban plan, as it is for individual motorized mobility.

There is a culture clash between spatial planning and sport planning. Differences as: specific interests, planning periods, investment flows, political departments, development logics, technical requirements, laws and regulations and professionals should be discusses. According to Maartje Kunen, of the Dutch Institute for Sport and Exercise (NISB), it is a challenge to get all different visions in the same direction: "Athletes just do things, designers think in concepts/models with a dot on the horizon. When one is planning facilities, it is an art to understand each other's language".

Planning and knowledge

To achieve a high standard quality of sport facilities requires organisation. Crucial factors are: to define a key role in the organizing by public authorities (for long term, with consistence's and continuity), arrange and communication strategy for a knowledge centre of 'spatial sport planning', combination between theory (knowledge, expertise and practicality), policy (political framework) and projects (urbanism, architecture, sport facilities). Essential is also to exchange knowledge by developing pilot projects.

Finally, the greatest challenge lies in bringing together the worlds of sport and space, as part of the multifunctional city. If this is done by mutual respect and a healthy portion of challenge, it can give a positive boost for both the sport and for the city. Copenhagen and Valencia have, each in their own way, shown that long-term effort and integration of sport, design and policy, delivers much for the quality of space: both for athletes and citizens.

References

Boeijenga, J, Mensink, J (2008), *Vinex Atlas*, 010 Publishers, Rotterdam

Bosch, N (2009), *Ruimte voor sport, De ontkoppeling van groen en sportvelden*, in 'Bloed, Zweet en Tranen, Sport in Amsterdam', Dienst Ruimtelijke Ordening, Gemeente Amsterdam, pp. 44-53

Citation: 'It was no longer justifiable to maintain large sport fields of natural grass on desirable locations in the city. Which, long parts of the week were unused.' (own translation)

Casas Valle, D, Kompier, V (2012), *Sport in the City*, rapport version

Casas Valle, D, Kompier, V (2013), *Sport in the City*, Lay Out #22 magazine, Creative Industries Fund, Rotterdam.

Hoekman, R (2011), Van den Heuvel, M, Van der Poel, H (2011), *Sport in de stad, Over de maatschappelijke, ruimtelijke en economische rol van sport in de stedelijke context*, Akro Sport Media, Nieuwegein

Note: However there is a general correlation between sport participation grade and the proximity of sport facilities, in urban areas where the sport possibilities widely distributed (Den Haag, Rotterdam), other factors than distance are more important.

Kural, R (1999), *Playing Fields – alternative Spaces for Sports, Culture, and Recreation*, Royal Danisch Academy of Fine Arts, School of Architecture Publisher, Copenhagen.

Ruimte voor Gezondheid: Healthy Cities (congress), November 2012, Groningen, www.ruimtevoorgezondheid.nl (15 November 2012)

Van Bottenburg, M, Rijnen, B, Van Sterkenburg, J (2005), *Sport participation in the European Union*, W.J.H. Mulier Institute, Centre for research on sports in society, www.vanbottenburg.nl

Van der Linden, K (2009), *Ruimte voor sport, Sport is Ielijk*, in 'Bloed, Zweet en Tranen, Sport in Amsterdam', Dienst Ruimtelijke Ordening, Gemeente Amsterdam, pp. 75

1 Mini-symposium Sport in the City, 20 June 2013, Utrecht. Organized by the Creative Industries Fund, Rotterdam.