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## FORMATION OF FAN ZONES IN THE URBAN ENVIRONMENT TWORZENIE ELEMENTÓW STREFOWYCH W ŚRODOWISKU MIEJSKIM

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### ABSTRACT

The present article examines the question of organization of official fan zones in Kyiv and other cities of the world during the Olympic Games, World Cup, UEFA European Championship, and other sports events, their location indoors and in open areas.

The paper identifies specific features and sets of elements for formation of fan zones, examines scholarly works on the issue of organization of fan zones in the urban environment, describes the methodology of the scientific research, presents pilot projects of design of fan zones for watching sports contests in the course training design.

Key words: fan zone, urban environment, small architectural forms, course design.

### STRESZCZENIE

Artykuł odzwierciedla lokalizację oficjalnych stref kibica w Kijowie i innych miastach świata w ramach igrzysk olimpijskich, mistrzostw świata czy mistrzostw Europy w piłce nożnej i innych dyscyplin sportowych, ich lokalizację i umiejscowienie wewnątrz i na zewnątrz. Ujawniają się cechy charakterystyczne i zestaw elementów do ich formowania. Omówiono badania naukowe dotyczące organizacji stref kibica w środowisku miejskim, przedstawiono metody badań naukowych. Przedstawiono rozwiązania z zakresu projektowania środowiska strefy kibica do oglądania zawodów sportowych w ramach zajęć dydaktycznych.

Słowa kluczowe: strefa kibica, środowisko miejskie, małe formy architektoniczne, projekt kursu.

## 1. INTRODUCTION

A fan zone is a sports and entertainment area designed for placement of fans (Wiktionary, 2020). It is a specific location for broadcasting of contests, support of various sports games within the framework of the Olympic Games, World Cup, UEFA European Championship, and other sports events.

Special zones are arranged in city squares, parks, public gardens for the convenience of visitors. In the time of broadcasting of games, street furniture, fencing structures, stage and other auxiliary elements are installed additionally. Sports and spectator areas can be arranged directly beside the stadiums where games are taking place, as well as on the existing city sports grounds by equipping them with special structural elements, such as grandstands, entrance arches, LED screens for watching of games, opening ceremonies and award ceremonies, and vending stands for sale of sports goods. Fan zones are increasingly frequently built not only for watching sports games, but also for all other cultural events, including music and gastronomic festivals, fairs, etc.

Such areas are additionally arranged in large shopping malls, shopping and entertainment complexes, exhibition halls. Several locations may function as part of one event, but they are united by a common topic. Fan zones can be used not only for the sports and playing function, but also for informational and lecture purposes, as exhibition or media zones, for holding of workshops, etc.

## 2. ANALYSIS OF RECENT PUBLICATIONS ON THE SUBJECT

The latest scholarly researches investigate the issue of creation of a festive atmosphere in the cities where qualification matches or final matches of the World Cups or European Championships take place. Researchers study fan zones from the perspective of their tourist attractiveness, investment prospects, and planning of mega events. Authors of the academic publication "Inclusive by design: transformative services and sport-event accessibility" Tracey J. Dickson, Simon Darcy, Raechel Johns, and Caitlin Pentifallo examine socio-cultural roles of fan zones at modern sports events from the perspective of interested parties. In their conclusions, they express the opinion that fan zones generate new situations related to crowd control and safety. Scholars made empirical conclusions that will regulate the level of safety at such events in future in view of their growing popularity (Dickson, Darcy, Johns, Pentifallo, 2016, p. 532–555).

Jan Andre Lee Ludvigsen studied the availability of services for people with disabilities in fan zones at big sporting events. The article describes a case study of the fan zone in Vancouver (Canada) at the 2015 FIFA Women's World Cup. The scholar addresses the issue of enforcement of rights of people with disabilities, access to goods and services in all aspects of social participation, including big sporting events, such as the Olympic and Paralympic Games, Football, Cricket and Rugby World Cups (Ludvigsen, 2019). Christopher Hautbois, Mathieu Djaballah and Michel Desbordes assessed the potential impact of fan zones on local communities in the time of sporting events, in particular UEFA European Championship. This study allowed to analyze the cohort of football fans watching the contests at the stadium and in fan zones, as well as the impact of fan zones on the image of cities hosting big sporting events (Hautbois, Djaballah, Desbordes, 2019, p.532–555). Authors of publication «Governing by fun: EURO 2008 and the appealing power of fan zones» Georg Lauss and Andras Szigetvari address the issue of creation of a festive atmosphere in sports fan zones through the active interaction of fans, however they debate on the necessity of installation of additional devices for zoning and safety of all participants (Lauss, Szigetvari, 2013). R.V. Melnykov formed the main principles of using the models of pedestrian flows in the process of preparation and planning of mega sporting events based on the example of the 2018 FIFA World Cup. Also, he developed recommendations for organization of transportation during mega events (Melnykov, 2017). The problem of formation of elements of the special fan zone territory in the urban environment still remains understudied. No emphasis is put on the design of elements and integrated solution for the fan zone territory in the city.

### 3. RESEARCH METHODS

In accordance with the purpose of the research, tasks were determined and methodical sequence of the research was developed. The methodology of forming of fan zone elements in the urban environment includes the use of empirical and theoretical research methods, namely: analysis and systematization of standard documentation, scientific literature, electronic publications on the research topic, methods of observation and comparison and structural method. They form the basis for coverage of the set task, and their combination allowed to provide a comprehensive and complete description of the object of the scientific research.

Systematization of scientific information sources on the research topic allowed to analyze the existing directions of professional researches of scholars related to the development of the space of sports fan zones in the city structure. These solutions helped to form new research objectives to address issues of the integrated development of the fan zone territory as an element of the urban environment. A fan zone is a complex structural unit of the urban structure that performs various functions, such as holding and broadcasting of sports contests, tourist function, city image making, cognitive, communicative, exhibition, trade, recreational and entertainment functions, etc.

Using of the method of comparative analysis made it possible to compare dimensions of allocated areas in the urban environment for organization of fan zones during sporting events, both abroad and in Ukraine. Comparison of a set of elements, performance of functions, cohort of visitors and complex preparation for big sports events was carried out.

Visual inspection of such events and visiting of fan zones envisaged photo fixation of the formed environment, structural elements and a set of small architectural forms. Using of the structural method allowed to determine the main functions of the fan zone and to identify the characteristic patterns of formation of its environment as an element of the urban structure. Development of complex projects of sports fan zones in the urban space and their organic integration into the existing environment is one of the course design tasks given to students of the Institute of Architecture and Design of Lviv Polytechnic National University.

### 4. ANALYSIS OF THE CURRENT CONDITION OF DESIGN OF THE FAN ZONE SPACE

In 2018, the official fan zone of the Winter Olympic Games, which took place in Pyeongchang (South Korea), was opened. During that period, the fan zone also functioned at Kyiv TV Center of the National Public Broadcasting Company of Ukraine "Olivets", alongside with the only television museum in Ukraine. Fans, journalists, sportsmen, guests and children of all ages were accommodated in one room, but visited different sectors of the TV Center. Arrangement of the lecture hall in the center allowed to present interesting lectures on sports topics for the in-depth acquaintance with the history, rules and real facts of the Olympic Games and ways of healthy lifestyle (Fig.1).

Speakers included sportsmen, masters of sports, multiple champions of Ukraine and of the world, winners of the Olympic Games, representatives of the Winter Sports Federations, as well as experts in psychology, marketing, sports, and other subjects. In the interactive playing area, adults and children ventured into curling, skiing and biathlon — sports that were included into the program of the 2018 Winter Olympic Games. Special fields, equipment and simulators were arranged here, giving the opportunity at least partially to experience feelings that athletes are experiencing during the competition. The exhibition featured presentation of the sports equipment from the Winter Olympic Games, several information boards with the history of the Olympic Games, interesting facts about them and their participants. Thematic photo exhibition, information exhibition on the history and sports of the Winter Olympic Games, retrospective posters of the Winter Olympic Games, as well as exhibits from the Sports Federations of Ukraine were presented as part of the celebration (Fig.1). The media zone broadcasted online seven video streams from the XXIII Olympic Winter Games at once. Press conferences with the participation of athletes, experts, representatives of the National Olympic Committee of Ukraine were held in the press center — the main platform for communications (Fig. 1). Guests had the opportunity to take photos, talk to athletes and

experts, attend open lessons, workshops and other events in the creative thematic fan zone (Proman Ukraine, 2018).

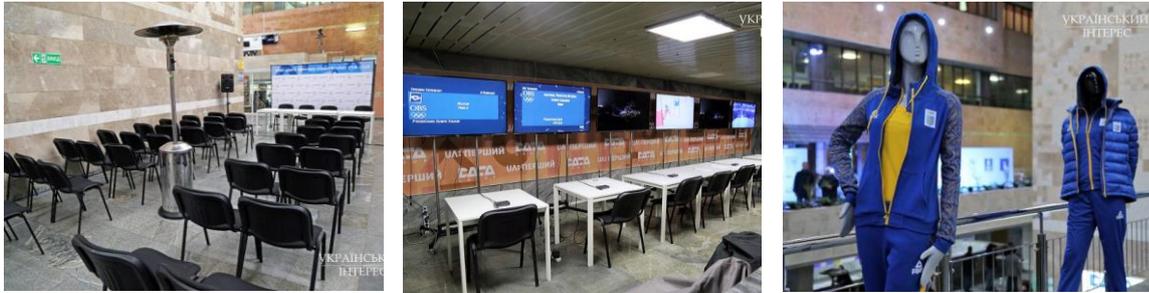


Fig. 1. Locations of the official fan zone of the 2018 Winter Olympics at Olivets TV Center, Kyiv. Source: Photo by Oleksandr Bobrovsky, 2018.

As part of the Rhythmic Gymnastics World Championship in Kyiv in 2013, the executive body of Kyiv City Council issued an order on organization and operation of the fan zone of the Rhythmic Gymnastics World Championship on Maidan Nezalezhnosti in accordance with the procedure for organization and holding of non-state public cultural, educational, sports and entertainment mass events. A large screen was installed on the main street of the capital of Ukraine, which broadcasted live from the Palace of Sports, where the contests took place (Baron, 2013). In 2016, fan zones in Sportyvna and Poshtova Squares in Kyiv functioned on the occasion of the Euro 2016 Football Championship. Each of these fan zones, prepared for Kyiv residents and guests of the city, was designed to accommodate about 6,000 people at once. Locations were equipped with several LED screens, media center, public catering facilities, food courts, souvenir products, entertainment and recreation zones, and everything else required for securing of the comfort of fans (Fig. 2) (Depo.ua 2016).



Fig. 2. Locations of the official fan zone of the 2018 Winter Olympics in Sportyvna and Poshtova Squares in Kyiv. Source: Photo by Oleksandr Khomenko, 2018.

The UEFA EURO 2012™ Poland-Ukraine was the first tournament held in Eastern Europe that took place in June 2012 in Ukraine and Poland. The championship matches were held at four stadiums in Poland (Warsaw, Poznan, Gdansk and Wroclaw) and at four stadiums in Ukraine (Kyiv,

Donetsk, Lviv and Kharkiv). The opening ceremony took place on June, 08 at Warsaw National Stadium. The final match took place on July, 01 in the Olympic National Sports Complex in Kyiv.

Lviv was one of eight cities to host the 2012 UEFA European Football Championship – the third largest event in the world after the Olympic Games and the World Cup. In the period of 2007-2010, the city administration carried out large-scale repair works to prepare for Euro 2012, resulting in development of a new infrastructure in the city, repair of more than 100 km of roads, construction of a modern airport terminal, runway, new stadium, increase and modernization of the city's vehicle fleet.

Euro 2012 provided a powerful impetus for the development of travel, hotel and restaurant business, creating new jobs and generating direct city budget revenues. Arena Lviv (a stadium that can accommodate up to 34,915 people) is the largest public construction object in Lviv over the last 40-50 years. The biggest in Western Ukraine sports and entertainment shows, festivals, concerts and conferences that can be attended by more than 120,000 people are still held at the stadium itself, as well as on the large squares around it. In the time of the 2012 European Football Championship, a fan zone was organized in the central part of Lviv, which functioned daily from 14:00 to 24:00 (Fig. 3). The territory of the fan zone was fenced along the perimeter, and the height of the fence reached 2 meters; therefore its total length, including the exit gate and evacuation exits, constituted 875 meters. In the process of installation of the fence, the access of transport vehicles to the central part of the city was restricted. Entrance to the fan zone was allowed through 34 checkpoints and was free on the days when matches took place.



Fig. 3. Fan zone for the European Football Championship 2012 in the center of Lviv. Source: Korrespondent.net, 2012.

In the time of the 2012 European Football Championship, Lviv placed its stake not only on broadcasting of football matches in the official fan zone, but also on the cultural leisure, therefore various cultural events and artistic activities took place in Lviv on the days when matches took place. On other days, concerts of famous music bands were organized, so the stage of Lviv fan zone continued to be bustling on all five days free from the championship matches.

In the time of Euro 2012 championship, 22 information points operated in Lviv, where fans and residents of the city could get relevant information and required assistance. A number of printed guides were published – a fan guide, a special map of the city with the designations of the main EURO 2012 objects and an event program (City-adm., 2012).

The official Euro 2012 fan zone in Kyiv was located in the central part of the city – on the Independence Square and on Khreshchatyk Street (Fig. 4). Its total area comprised 51 thousand square meters. The fan zone worked throughout the whole period of the tournament (from June 07 to July 01). At least 20,000 people visited it daily and up to 70,000 people on match days.



Fig. 4. Locations of the official fan zone of the 2018 Winter Olympics in Sportyvna and Poshtova Squares in Kyiv. Source: Realmusic.ua, 2012

Entrance to the fan zone was free on all days when matches took place. There was one large stage in the territory of the fan zone with a screen of 12 x 16 meters in size, as well as three additional screens of 9 x 12 meters in size. The official UEFA Euro 2012 store with an area of 1,000 square meters operated on the premises of the fan zone. There were also several catering outlets with a total area of almost 1,800 square meters, a media center (450 sq. m.), medical aid stations (140 sq. m.), as well as sanitary zones (3.8 thousand sq. m.). In addition, an area for people with disabilities was equipped. The fan zone and its surrounding area were guarded on a 24-hour basis, and surveillance cameras were installed at each of its entrances (LB.UA, 2012).

In 2019, a fan zone of the final of the 2018-2019 UEFA Champions League (Europe's premier club football tournament) was opened on Khreshchatyk. It was called The Champions Festival. It could accommodate up to 20,000 fans at once. For four days, various events took place here in order to entertain residents and guests of the city, who arrived here to watch the play-off match of the main club tournament in Europe between Real and Liverpool. The fan zone was located in the area from Maidan Nezalezhnosti to the intersection of the square with Bohdan Khmelnytsky Street, and its territory was completely fenced by turnstiles and billboards. Eight entrances with metal frames were arranged along the perimeter of the fan zone. There were also photo zones, street food tents, PlayStation gaming rooms, stage, mini football pitch and other kinds of entertainment in the territory. A separate pavilion featured the Champions League Cup, and everyone could take photos with it (Fig. 5) (UA-Football, 2018).



Fig. 5. Locations of the official fan zone of the 2018-2019 UEFA Champions League Final on Khreshchatyk in Kyiv.. Source: Information agency LIGABusinessInform, 2018.

In May 2019, the World Cricket Championship took place in England and Wales. Qualifying matches were held in ten different cities of these countries. One of them took place in Nottingham, where a fan zone was built on the Old Market Square and equipped with a big screen. Street cricket ses-

sions were also organized there (Fig. 6). Places for sitting and relaxing were provided in the area and cricket-based games were held. Public order in the territory of the fan zone was ensured by volunteers and law enforcement officers. Despite of the fact that the entrance to its territory was free, a part of the territory was still fenced with metal turnstiles for the safety of visitors (Nottinghampost, 2019).



Fig. 6. A view of the fan zone in Old Market Square, Nottingham. Source: By Matthew Bunn Business Editor, 2019.

The 2020 Summer Olympics, also officially known as the Games of the XXXII Olympiad, were to be held in Tokyo (Japan) in 2020. On March 24, 2020, the International Olympic Committee decided to postpone the Games until 2021 due to the global coronavirus pandemic. The Olympic Games should be the most innovative ones, since the infrastructure of Tokyo has developed rapidly in the process of preparation to the Games; in particular, the number of hotels, modern energy-efficient vehicles, and service facilities has increased greatly. Organization of the competition was carried out with the use of the state-of-the-art equipment and latest technologies. The Olympic Stadium was opened in Tokyo. It was built in 36 months instead of the old arena, which was built for the 1964 Olympics (Fig. 7). The stadium has five floors above ground and two floors below ground and occupies a territory of about 69.6 thousand m<sup>2</sup>. The design of the stadium and the state-of-the-art air conditioning system will allow maintaining the optimal temperature despite 40-degree heat that is usual for summers in Tokyo.

With good reason, it is believed that these Games should become the most innovative ones. Robots with special video cameras using the artificial intelligence technology should maintain and ensure the safety of guests and participants of the Olympic Games, as well as help people to carry their things, show the way, act as guides and translate conversations and texts into different languages. The 2021 Games in Tokyo will also become a catalyst for the urban gardening, for further

comfortable urban life in harmony with the environment, since it is planned to create about 1,000 hectares of green spaces by 2021 (Dw.com, 2019), (ZIK, 2019).



Fig. 7. The new stadium for the Olympics 2020 in Tokyo. Source: Photo by Kateryna Venkina, 2019 .

## 5. FAN-ZONE SPACE DESIGN WITHIN THE FRAMEWORK OF COURSE TRAINING DESIGN

Formation of the environment of such objects and design of public spaces, streets, squares are studied within the framework of the course and diploma design at the Institute of Architecture and Design of Lviv Polytechnic National University. The academic discipline "Small Architectural Form" is an integral part of the preparation of students in Design that solidifies knowledge of subjects related to the architectural space design. The purpose of teaching is to ensure deeper mastering of practical design skills by students and develop the ability to use this knowledge in further design work. Study of this discipline at the Department of Design and Architecture Fundamentals stimulates and develops the creative thinking of future designers, focuses them on the independent search for ideas and original three-dimensional solutions, requires them to work on additional visual information and literature. As a result, students are able to independently develop designs of small architectural forms and organically combine them with the existing environment, as well as to use the professional terminology and methods of finding ideas related to solution and implementation of creative concepts (Petryshyn, Petrovska 2012). Master students are offered to develop a project of a fan zone for watching of sports contests. Studying educational and academic literature and using the latest computer programs, students must independently form the object-and-spatial environment of a fan zone in the real public space of the city and organically combine it with the existing environment (Fig.5; 6; 7).

Careful study of the project task, brief summary on the chosen location of the projected sports and spectator area, nature of the use of the site, analysis of the existing buildings become the basic tasks at the initial stage of design. Search for a creative idea, inspiration, and their embodiment in projects of small architectural forms at the next stage allow to form the image of a future object. It includes design of administrative and economic premises; entrance arch and stage; fencing structures; selection and placement of devices for physical exercises; installation of temporary structures for the sale of sports equipment, souvenirs and additional information; grandstands for watching of competitions; recreational spaces; photo zone, media zone, gaming area or other area of the student's choice; installation of screens for watching of contests and award ceremonies; placement of lighting devices, garbage containers and other auxiliary elements that together will form a space for celebrations within the framework of sports contests. All project designs must be accompanied by general and detailed drawings indicating manufacturing materials and schemes of fixation of projected elements.



Fig. 5. Course project of organization of a fan zone in Lviv (Completed by student Melota Yu. Supervisor: Petrovska Yu.R.).  
 Fig. 5. Projekt zorganizowania strefy kibica na Alei Swobody we Lwowie (Zrealizowany przez studentkę Melotę Yu. Opiekun: Petrovska Yu.R.).



Fig. 6. Course project of organization of a football fan zone on Svobody Avenue in Lviv (Completed by student Viznyak V.O. Head: Petrovska Yu.R.).  
 Fig. 6. Projekt dotyczący organizacji strefy kibica na Alei Swobody we Lwowie (zrealizowany przez studentkę Viznyak VO Opiekun: Petrovska Yu.R.).



Fig. 7 Course project of organization of a gymnastics fan zone in B. Khmelnytsky Park in Lviv (Completed by student Bilovus H. Supervisor: Petrovska Yu.R.).

Fig. 7. Projekt organizacji strefy kibica poświęconej gimnastyce w parku im B. Chmielnickiego we Lwowie (zrealizowany przez studentkę Bilovus Ch., Opiekun: Petrovska Yu.R).

## 6. CONCLUSIONS

The urban environment is constantly filled with new objects that create modern public spaces. Fan zones increasingly frequently become a part of the urban environment, public gardens, parks, or sports grounds.

Football tournaments, such as the UEFA Championship or the European Champions League, have turned into mega events and media shows that constantly attract the attention of a wide audience. Fan zones offer a unique sports atmosphere and entertainment for those fans that do not have the opportunity to support the team directly at the stadium, but want to be part of the event. Based on their location, fan zones can be divided into zones arranged indoors (large shopping and entertainment centers, exhibition pavilions, sports complexes) and in open areas (central city squares, public gardens, parks or directly beside the stadium). A fan zone territory may include a whole complex of small architectural forms, including places for recreation of contest participants, such as grandstands for visitors, screens for broadcasting of matches and award ceremonies, temporary installations for the sale of sports equipment and souvenirs, information stands.

The space of a fan zone is equipped with additional elements that form the entrance zone, creative photo zone, exhibition zones, playing zones for children, press center, etc. Auxiliary utility facilities, in particular fencing structures, lighting devices, are also important for the safety and comfort of fans during the championships.

In the general system of professional training of designers at the Institute of Architecture and Design of Lviv Polytechnic National University, the discipline "Small Architectural Form" is focused at formation of knowledge and skills of students in architectural planning and design, creative design, creation of an artistic image of objects in the urban environment. In the process of the design training, students have the opportunity to organize a fan zone as part of the public space, as well as to offer an original design of small architectural forms, a set of auxiliary structural elements, decorative and plastic forms that form a multi-functional fan zone space for interesting leisure, sports and recreation.

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## AUTHOR'S NOTE

The research interests of author Yuliana Petrovska includes the study of the urban environment, the formation of art installations, phytoinstallations and the development of art education in architectural schools of higher education.

## O AUTORZE

Sfera zainteresowań naukowych autora Yuliana Petrovská obejmuje badania środowiska miejskiego, tworzenie instalacji artystycznych, phytoinstallations oraz rozwój edukacji artystycznej w szkołach architektonicznych wyższych uczelni.

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