Abstract

Great events, which the World Exhibitions, held periodically since the end of the 18\textsuperscript{th} century, certainly are, occupy a position somewhere between science and entertainment, culture and consumption. Facilities erected especially for this occasion and development of the allocated areas are by definition temporal structures, which are to be disassembled or transformed after they have fulfilled their function. These areas, even after dozens of years, or even more, still remain areas that stand out in the structure of the city. Milan, the capital of the Italian region of Lombardy, so far has been the host of the World Exhibitions twice, with the time interval of over 100 years. The areas and facilities that remained after the first of them were subjected to a secondary development. In one of the locations of the exhibition from 1906 a large-scale mixed-use development is being implemented, which is intended to create a great part of the future urban fabric of the city. In this paper, the Author shall analyse the current spatial structure, in particular the quality of the emerging tissue, the relations that occur within it, and the possible links with the neighbouring areas. On the basis of the literature available, the Author shall distinguish several criteria which should be satisfied by systems described as urban and shall specify how they are implemented and whether it is possible to find the concept of urbanity in the described area.

Introduction

In 1938 L. Wirth published his essay, already classical today, ‘Urbanism as a Way of Life’, referring to the notion of urbanism as a phenomenon signifying a specific lifestyle, lying the foundations for the development of the contemporary sociology of the city (Jałowiecki 2011). The urbanism defined then refers to social relations, as well as to the cultural environment which moulds these relations.

In categories of urban planning, the contemporary approach to urbanism was most influenced by concepts of modernism, especially by the radical statements and works by Le Corbusier, and
the effects of the deliberations of the CIAM congress written in the Athens Charter\(^1\). Although the concept was based on functionality, which actually stands for adjustment to human needs, the result was a revolutionary revaluation of the concept of the city itself, and the solutions introduced at the time frequently evoke controversies or call for revision\(^2\). The model of a modernist city based on a simplified geometry of space and a strict division of functions did not fulfil the hopes connected with it. Modern society which hungered for new cities, disciplined in formal and functional terms, turned out to be a utopia (cf. Paszkowski 2011, pp. 165-168). Urbanism, therefore, must not be identified with modernity, which should fulfil a role of one of its components only.

The city, an extremely complex organism, is constantly defined anew, and the notion of urbanism changes along with it. As E. Rewers emphasises, ‘Post-industrial cities of the late 20\(^{th}\) and early 21\(^{st}\) century get detached from their cores – polis – and drift in directions the recognition of which constitutes a challenge for numerous fields of science’ (Rewers 2005 p. 38). In this paper the Author wishes to focus on physical, urban aspects of the phenomenon of urbanism. The subject matter of these deliberations is – without limitations – the search of specific properties which allow to evaluate and analyse the existing developed parts of the city of Milan in the categories of urbanism. It is assumed that the preservation of such properties may foster the occurrence and development of desirable social interactions, and therefore, activities referred to by J. Gehl as ‘optional’ and ‘social’, in contrast to the ‘necessary’ ones, which occur irrespective of the quality of the existing space (Gehl 2009 p. 11). It is unquestionable that there is a strong relationship between a form of urban space on one hand and social and economic forces which influence it on the other (Moudon 1997)\(^3\).

In the morphological approach, the fundamental urban planning material is urban tissue, the quality of which is of utmost importance for the functioning of the city (Levy 1999). The notion of tissue here stands for a juxtaposition of several accumulating systems; the network of roads and ownership-related division that account for the block development or any other type of development, and finally buildings, the architecture and function of which may be subjected to frequent changes (Panerai, Castex, Depaule, Samuels, 2004). What properties of the tissue, therefore, are essential for the urban quality of a specific system? A research branch of urban morphology is based on the assumption that despite conditions that change in time certain rules and logics of moulding of forms remain the same (Levy 1999; Kropf 2001). In the contemporary approach to the city there occur such phrases as: post-polis (Rewers 2005), meta-city (Maas 1999) or system-city (Weinstock 2013), which refer to meanings from beyond the material dimension of space. Nevertheless, in spite of these common definitions, ‘what remains is the nostalgia after a real city with real urbanism’ (Paszkowski 2011, pp. 28-29). As e.g. propagators


\(^2\) Monofunctionality of urban zones, primacy of car traffic often constitute factors which foster degradation of the urban environment (Jencks 1987).

\(^3\) Relations between the shape of the space and human behaviour have been the subject matter of a considerable part of research in the field of sociology of the city, to mention just the most influential figures: H. Lefebvre, M. Castells, R. Florida, S. Sassen.
of the movement of New Urbanism postulate, one should take a closer look at historical cities, preserving continuity in their structure, diversity of their functions, and their natural accessibility, the scale of traffic connections corresponding to the capacities and tastes of a pedestrian (Calthorpe 1993; Duany et al. 2001; Katz et al. 1994).

For the purposes of the evaluation of an emerging tissue in terms of its potential to build ‘urbanism’, the following analysis criteria have been adopted, selected from amongst numerous ones that appear in contemporary studies:

- Continuation of the main directions of composition, which can secure a formal integration of adjacent parts of the city and their mutual interrelation (Trancik 1986; Carmona, Heath, Oc, Tiesdell 2003; Perez de Arce 20015 et al.).

- The size and form of the development block, which constitutes the fundamental material of the urban tissue and decides about its quality by defining open and covered spatial relations. The attribute of urbanism is often combined with the traditional block development system (Trancik 1986; Krier 2009; Panerai, Castex, Depaule, Samuels, 2004).

- Density and accessibility of the network of pedestrian routes have a direct effect on the way spaces and buildings function. The scale of development and the configuration of the system of streets and passages may become an important generator of pedestrian traffic, which is an indispensable component of sustainable urban development (Jacob 1961; Calthorpe 1993; Gehl 2009; Hillier 2007, et al.)

- The quality of public spaces within the most fundamental meaning, which is the opportunity for social contacts to occur. As it has been proven, the form and disposition of the surrounding area may foster or discourage from undertaking social activity (Kostof 1999; Gehl 2009; Paszkowski 2003; Lorens 2010 et al.)

- Diversity of functions, heterogeneity at the local level, which constitutes an essential property of each tissue determined as the urban tissue. Choice options, multitude of services and users, contribute considerably to the process of moulding of a ‘living’ city. (Batty, Besussi, Maat, Harts, 2004; Kriken 2010 et al.)

Milan as a Case Study

City and Its Development

Milan, the capital of the region of Lombardy, is Italy’s second largest city and most definitely its most important financial and economic centre, and in terms of tourists visiting the city, it is right behind Venice.

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4 New Urbanism derives from America, where the problem of erosion and dispersion of cities is more intensified than it is on the Old Continent, and the remedy is sought in the return to traditional forms of shaping of city quarters. It is a very buoyant direction in design, in Europe manifested in the works of e.g. Léon Krier. (Krier 5 The metropolitan area of Milan is inhabited by over 3 million people, the population of Rome is over 4 million. Source of data: http://www.demo.istat.it access on 01.03.2016.

6 According to S. Sassen, Milan is also one of those European cities which stand a chance of becoming ‘global cities’ by becoming more significant. (Sassen 2005, Sassen 2006)

7 In 2013 it was over 6,000,000 tourists per year. A large impact on this astonishing result is exerted by the organisation of fashion and design fairs, which enjoy immense popularity. Source of data: http://www.cittametropolitana.mi.it/ access on 01.03.2016.
The beginnings of its incorporation reach back to the 3rd century B.C., to the times when Roman legions quartered over the Po river. The urban layout of the central part of the city, demarcated by the former course of the municipal fortifications, is organised around Piazza del Duomo, and subsequent quarters and districts as far as to the administrative limits of the city reiterate this concentric configuration.

The spatial development demonstrates successive historical periods of glory and demise, growth and recession, like it is the case in numerous large cities in Europe. The last significant replacement of architectural substance took place after the World War II, when large parts of the city were destroyed, and subsequently rebuilt or reconstructed, and the intensified demand for housing substance contributed to the expansion of the city along transport lines and to urbanisation of new territories (Domenico 2002).

Starting from the 1980s, production and economic structures were shifting towards creative economy (OECD 2006). Consequently, numerous large mostly factory complexes were abandoned or utilised only in parts. These territories, frequently situated in strategic locations, became breaches in the compact urban tissue, and their revitalisation, completing them with a new function and form, became a task implemented do this day.

**From Expo 1906 to CityLife**

The World Exhibition held in 1906 was not the first venture of the type organised in Milan. In the second half of the 19th century many trade fairs and exhibitions were taking place there, along with national exhibitions, which enjoyed great popularity. In 1871 Milan was an open city, offering great opportunities, with quite prosperous economy as for the then national conditions. Organisation of large fairs devoted to innovations of industrial production could seem a somewhat risky idea in the period of serious transformations which were happening in the country at the time. Nevertheless, the presentation of achievements and opportunities offered by Milan on a broader national arena was an area where – quite justly – the chance to increase the position of the city in many fields of economy was seen (Granata 2015). The event could not compete with a similar one, organised by the leading actors of the European economy, such as England or France; nevertheless, it became the first from a series of trade exhibitions which were held in Milan over the following 35 years, until the World Exhibition in 1906.

Dynamic economic development, based predominantly on the engineering, electric and chemical industries, secured Milan’s stable position in Europe in the early 20th century. It was

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8 The so-called Spanish walls erected in the times of domination and rule of the House of Gonzaga (Domenica 2002).
9 Structures which are still the symbols of the city were also reconstructed, e.g. Galleria Vittorio Emanuelle II, or Teatro alla Scala, but apart from historical reconstruction or construction of the actually unified housing estates, it was the time of interesting formal experiments. Their result is – for example – a controversial skyscraper Torre Velasca, or the edifice of Grattacielo Pirelli (Andrerola, Biraghi, Lo Ricco, 2015).
10 At the end of the 1990s in Milan there was over 10 million square metres of abandoned land, which constitutes over 5% of the total surface area of the city (Fossa 2015).
11 The very form of an exhibition open for broader audience was initiated in 1798 by L’Exposition publique des produits de l’industrie française. Over subsequent years national exhibitions were organised mainly in European countries, and the turning point and the beginning of international expositions was the Great Exhibition of Industry of All Nations, opened in London in May 1851, which introduced a swing and scale of the architectural and landscape settings never encountered before (Auerbach, Hoffenberg 2008).
12 In the period directly preceding the Italian unification, which was announced in 1861 (Granata 2015).
13 The exhibitions were held in 1881, 1887 and 1892 (Granata 2015).
accompanied by considerable social transformation, most of all within the working class, caused by the massive inflow of people from other regions of Italy, as well as a change in production processes, in which the previously demanded traditional skills were no longer needed. A planned reconstruction of the spontaneously sprawling city, a logical distribution of functions, as well as finding architectural means of expression, a new style which might reflect the arising reality, became necessary. The development plan for the city, resolved after several years of works in 1998, actually constituted an existing concept of a concentric distribution of the tissue and function of the city, which with some minor changes has been continued to this day. The development expansion beyond the line of the city walls, demolished in compliance with the intentions of the plan, and the gradual annexation of agricultural areas by the emerging industrial plants and housing estates determined the directions for the city’s development for the next decades (Fabris 2012).

One of the most important urban planning and economic operations undertaken simultaneously and connected with the implementation of the provisions of the new plan was the recovery of the Sforza castle and a vast square located at its northern side, which used to serve as military grounds. In return, an area was allotted in the new designed tissue in the north-western part of the city which several years later was used for the purposes of the World Exhibition, which turned out to be an enormous success strengthening the position of Milan on the international arena.

The exposition erected on Piazza d’Armi consisted of several dozen buildings and objects arranged in a classical layout along the perimeter and in the centre of a vast area. The square, also today, after numerous development changes and in the process of its last great transformation, stands out against the background of the surrounding tissue thanks to its size, which is way beyond the size of any development block or municipal piazza, as well as thanks to its compositional layout, which makes it a formally prominent place.

In 1906, a bit more than a decade after the Beruto plan had been resolved, the external belt of development was not moulded yet, and occasional postcards or maps concentrated on the very venue of the Exhibition, locating it among abundant and undefined greenery. After the completion of the event, which lasted six months, the entire exposition was demolished and...
the area remained empty until the end of the World War I. In 1922, two years after the organisation of the first post-war trade fairs, the Independent International Trade Fair Organisation was established and bestowed with this then suburban area (Granata 2015). Piazza d’Armi saw the beginning of a period of intensive development which was to cater to the growing demand for the exhibition and fair infrastructure. A simple composition following the principle of maximum density was dominated with the direction of the ‘diagonal’ along the course of Via Domodossola and Via Domenchino, along which individual pavilions were arranged. At the beginning of the 21st century the size of the territory, as well as its central location, proved to constitute a considerable limitation for further development of the fairs. The exhibitory function was nearly entirely moved outside the administrative limits of the city leaving the edifice of the congress centre partially cutting into the north-western quarter of the area.

This area, which for nearly 100 years had been used for the purposes of one of the most important branches of industry of Milan and Lombardy, became a subject matter of a competition of bids, in which a bid of the ‘CityLife’ consortium consisting of true stars of the world’s architecture was selected.

![Figure 1. Scheme of the new development](source: Author’s scheme on the basis of materials available at Anderola, Biraghi, Lo Ricco, (2015).)

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21 The new seat of the Fair designed by the Italian office of Fuksas was built in 2005 in areas provided with favourable traffic connections between Rho and Pero; an adjacent area was occupied by Expo in 2015. www.fuksas.it; access on 05.03.2016.

22 Modernised in 2012 according to a design by Mario Bellini Architects. www.bellini.it; access on 05.03.2016.

23 Thanks to the privatisation of the institution of the fair organiser (Fiera Milano), it was possible to select a bid which proposed the most favourable price. The concept which constituted an appendix to the bid had been drawn up by e.g. Arata Isozaki, Zaha Hadid and Daniel Libeskind. The design of the green areas was prepared by the office of Gustafson Porter. www.ordinearchitetti.mi.it; www.city-life.it access on 05.03.2015
Analysis Based on the Defined Criteria

To this day two parts of the housing development located in the southern part and some of the green areas have been implemented; the remaining buildings and public spaces, e.g. spectacular skyscrapers which constitute the symbol of this project, are under construction. The analysis presented below covers most of all the already erected structures, and the conclusions and observations referring to the other parts are formulated basing on the available plans of the entire project.

- **Continuation of the main compositional directions of the city.**

  The area of more than 36ha close to a square is located in parallel to the axes along the directions of the world and at the angle of ca. 45° towards the neighbouring quarters. The rigorous geometrical organisation of the surrounding tissue creates an opportunity to demarcate numerous potential directions, diagonals, axes and intersection points in the aforementioned area, which can be used when arranging newly erected structures. The orthogonal network of streets and the regular compact development blocks that fill it do not find, however, a visible continuation in the planned area. A monumental Haussmannian axis running on the southern side, composed of avenues and squares, having passed the first buildings bends and joints park paths, gradually losing its compositional significance. The same principle governs the solution of the extension of Via Domodossola – an important artery which ‘hits’ the northeastern corner – having passed a next part of the shopping mall, it transforms into an organic form of a piazza that combines the buildings freely scattered in the central part of the project. The course of other streets is ignored, with the exception of fragments of residential buildings located more to the south, where they have a form of fenced, closed footpaths which end somewhere amongst the greenery. Areas covered with buildings and greenery intermingle in an amorphous system, and their limits are illegible. It should be concluded, therefore, that the main important directions moulding the urban planning composition of this part of the city have not been used to link the completely new structure in morphological terms with the context.

- **Size and form of the development block**

  The housing projects implemented so far, although differing in terms of their architectural expression, allow to make a general observation as to the intentions concerning the process of the development moulding. The area which in the historical surrounding tissue consists of several quarters, in the new project has been filled with a monumental structure of quite extravagant architecture. The buildings, much taller than their direct vicinity, form a loose reminiscence of traditional development blocks, only in several places referring to the course of the existing street and forming its frontage, which in comparison to the surrounding much finer structure results in a sensation of spatial chaos.

- **Density of the network of footpaths, accessibility**

  "Hadid" and ‘Liebeskind’ blocks. www.city-life.it access on 05.03.2015
  Available for viewing e.g. on websites www.city-life.it; www.zaha-hadid.com; www.liebeskind.com, www.isozaki.co.jp; www.gustafson-porter.com, and in studies devoted to this subject
  www.ordinearchitetti.mi.it; access on 05.03.2016
  Other buildings, according to the masterplan presented by the developer, are designed as detached structures; therefore, the criterion of a block of development is not applicable here.
  The northern elevation of Via Senofonte is formed by the lowest – 6- and 7-storey buildings of the ‘Hadid Residence’ complex.
A direct consequence of the design decisions discussed above is a relatively small number of footpaths inside the project. Most footpaths are park avenues, not linked with the designed buildings, arranged freely amongst vast green areas. It should be expected that there will be a certain accumulation of pedestrian zones in the central part, and the planned shopping centres will fulfil a role of catalysts of urban activities, attracting potential users. Despite the fact that the final form still remains a mystery, it seems that in such a vast area relatively few opportunities to move around have been provided\textsuperscript{29}, and the alternative options are limited. In order to create a well-functioning urban environment based on the activities of pedestrian users, ‘most blocks must be short; that is, streets and opportunities to turn corners must be frequent’ (Jacobs 1961 p. 116). A substantial effect on the hermeticity of the already implemented housing projects derives from the fact that they are completely and uncompromisingly fenced. The lack of any passage between individual buildings which form a closed enclave and the need to travel along fences which occur even in street frontages, constitute quite a nuisance. The accessibility of the project from the outside, as well as the network of footpaths within its territory possible to organise are considerably limited, which seems to be the most severe and tangible denial of urbanism (Roitman 2010).

- **Quality of public spaces**

Public space becomes a component which is ascribed with the greatest importance in the process of forming of the urban tissue (Lorens 2010), and its transformations become the subject-matter of research carried out in numerous fields of science. It could be assumed that the basic function of the urban public sphere is allowing for diversified social contacts to emerge (Dymnicka 2010), which are fostered by shaping of the space between buildings and their relations with open areas in an appropriate way. As J. Gehl emphasises, ‘when designing open air spaces and facades of buildings adjacent to them, one needs to plan individual elements which generate and support life between buildings in detail and with utmost attention’ (Gehl, 2009 p. 91). Therefore, it should be assumed that the fundamental component should be the location of different functions, including entrances to residential buildings from the side of accessible public space, which creates the so-called ‘active front’ (Panerai, Castex, Depaule, Samuels, 2004). The physical organisation, including references to archetypal models which a square and a street are, as well as the type and character of the detail, are also of great importance (Kochanowska, 2010). In the analysed complex, objects of the street furniture for the space have been designed with great diligence, which seems to suffice to make sure that the green areas are attractive to their recipients. Fenced residential enclaves, on the other hand, shape the surrounding public space only by their sizes and architectural expression. At the level of the ground, in a particularly important spot, which constitutes a direct encapsulation of the space, the buildings are separated from the existing street\textsuperscript{30}, as well as from the designed square with tight fences, which effectively hinders any activity whatsoever. The lack of services on ground floors\textsuperscript{31} and the location of entrances designed from the internal part of the entire

\textsuperscript{29} Most of all it is ‘the main axis’ running between residential blocks, broadening in the central part of the project and terminating at the intersection with Largo Domodossola.

\textsuperscript{30} From the side of the existing Via Senafonte, in one place where an attempt to organise the buildings in a frontage system has been made, the space of the street is separated from the buildings with a fanciful fencing, which is discontinued only at the entrance to an underground garage. The physical separation is additionally emphasised with a difference in the ground levels – the ground floor is slightly above the adjacent pavement.

\textsuperscript{31} The project does not contain any service outlets, even in parts adjacent to the streets.
project constitutes an additional legible separation of a closed, private space addressed to the residents.

The area of office and commercial buildings, on the other hand, located away from the edge of the project, equipped with a rather poor pedestrian link, considering the lack of a sufficiently broad and diversified offer of services\textsuperscript{32}, may transform into a shopping mall, an area which will be a mere substitute of an urban public space (Ghirardo 1999).

- **Diversity of functions, heterogeneity**

‘When diversity is decreased’, L.N. Kriken writes, ‘the loss to city liveability is substantial’ (Kriken 2010 p.90). Diversity in terms of functions, and to a certain extent in terms of forms, as well, depends on the existence and functioning of a public space (Jacobs 1961). The relation between those two spheres is natural in historical layouts, but in case of new investments it often turns out to be fragile and ephemeral. The aforementioned weakness and failure to take advantage of the potential of the place to create liveable urban spaces in the CityLife project is also reflected in the last of the analysed categories. The emerging buildings are predominantly monofunctional\textsuperscript{33}, which seems to be at odds with the ide of the return to heterogenic systems observable today, or even with the pursuit of ‘hybridisation’ and combination of different ways of use in one object in order to increase the spectrum of availability of functions and to improve the attractiveness of space (Holl 2011).

In this context, it is symptomatic that the presence of the surrounding streets, which are the most important carriers of diversity in the urban tissue, is intentionally ignored. Ground floors have been consequently designed in a manner that renders it impossible to use them differently than the uses planned in the design\textsuperscript{34}. Minor local services are located at the edges of the project, already within the territory of the existing urban structure. Considerable distances between individual enclaves of development cannot guarantee that the desirable pedestrian relations will be stimulated and maintained – they are deprived of purpose, with the exception of the purpose of satisfying the need of recreation.

**Figure 2. Housing areas on the south part of the development**

Source: Author’s photo

\textsuperscript{32} As of today a large shopping centre and three office buildings are being erected, whereas the modern art museum designed by Daniel Libeskind has vanished from the current plans. www.arup.com/Projects/Citylife_libeskind_museum/Details.aspx access on 05.03.2015

\textsuperscript{33} The designs of residential buildings do not provide for any service outlets, even in parts adjacent to the streets; the office buildings are only grouped with a large shopping centre, creating a central ‘business-shopping district’. http://www.city-life.it/en/business-shopping access on 05.03.2015

\textsuperscript{34} The ground floors are elevated by ca. 1m above the street level ‘for the sake of privacy’ and separated with a wall within the plot limits (Anderola, Biraghi, Lo Ricco 2015).
Summary

The results of the analysis in each of the selected categories demonstrate a considerable separateness of the implemented project. This area, which due to its location, size and previous development used to stand out against the background of the tissue surrounding it, will remain foreign, and the opportunity to create a new liveable urban quarter has been wasted. This manner of moulding development, based on an abstract spatial composition illegible from the human perspective, on detached buildings, on the segregation of functions and types of traffic clearly, although probably unconsciously, refers to the modernist concept of building cities, today criticised on numerous planes, e.g. due to the disintegration of space and public sphere (Jacobs 1961; Sennett 1977; Krier 1979; Trancik 1986; Krier 2009'; Panerai, Castex, Depaule, Samuels, 2004; Milun 2013, et al.). Therefore, it could be assumed that the project implemented in Milan constitutes an antithesis of urbanism at the theoretical level. The analysis criteria presented herein, helpful in the process of determining certain physical attributes of the tissue, do not exhaust such a broad problem that the concept of urbanism is, which is also connected with the cultural and historical continuity of the city, with the meanings and values whose carrier it is, and with the community that fills it. Urbanism is also a sphere of individual feelings, experiences and building of one’s own relations with the surrounding space, which is not subject to objective criteria.

References


Kirk 2005;


OECD Territorial Reviews. *OECD Territorial Reviews: Milan, Italy 2006*


