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Aleksander Böhm

## The Quality of Urban Living

### Abstract

*Objectives:* This paper presets the different factors of living in an urban space, as well as their implications.

*Research Design & Methods:* The mosaic of the different ways of living in a modern city is currently influenced by a new phenomenon (till now only partially recognised), namely the advancement of information technology. The article assumes the form of the overview of the history of the development of modern city.

*Findings:* Comparing and estimating different results of urban innovations can serve as the best practice for urban planning.

*Implications / Recommendations:* Eliminating the disadvantages and retaining the main advantage of a “flat with own garden” – now called *smart sprawl* – seems to be a permanent and long-lasting tendency.

*Contribution / Value Added:* The paper is a contribution to the list of the contemporary problems such as urban sprawl, Transport-Oriented Development, telecommuting, and the role of the public space.

*Keywords:* evolution of urban housing, city planning, the quality of urban living

*Article classification:* conceptual article (overview)

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## Introduction

The city has always held a privileged position in the history of settlement. It was – and generally still is – an area of the great accumulation of everything brought by the civilisation of a given epoch. This has its good and bad consequences for the inhabitants who have tended to settle in cities rather than leave them. And even if they left, it must have been due to the unusual circumstances of a plague, invasion, or natural disasters. Once the effects of these had ceased, they usually returned to their city as long as this was possible.

On a global scale, the sustainability and appeal of urban space are reflected in the forecasts that predict that by 2050, i.e. after nearly 10,000 years of urban history, around 75% of the world's population will live in urban areas. It is even claimed that we are becoming an 'urban species'. Yet, at the same time, we must not lose sight of abandoned cities, cities buried under sand, overgrown by jungle or, in more recent times, shrinking cities – with a concomitant tendency towards suburban sprawl. Thus, in addition to the overwhelming resultant centripetal force, there are also centrifugal vectors that are said to be capable of leading to the 'twilight of cities' – or the disappearance of cities as we know them.

The following text is written from the position of an urban planner, and it is therefore charged with the tendency to plan space – to look ahead and seek answers to the question: what next? Within the confines of a dozen or so pages, one might be tempted to recall the facts most relevant to the extrapolation intended here.

## The crystallisation of the city

One should begin with the work that was pioneering in many respects, that is Hippodamus' project for the reconstruction of Miletus around 479 BC – and, more broadly, the Hippodamian plans, which were later used in many areas of Greek colonisation. They distinguished urban space as *asteios* ('brilliant') in contrast to rural space *agricos*

('vulgar'). The city had cobbled streets and an elegant agora, where trading in fish was forbidden. The city, and the state at the same time, enjoyed democracy. There was a theatre, a gymnasium, and, naturally, a temple. There were no public gardens, but there were plenty of open spaces just outside the walls of the then small towns.

The nobility of the spatial individuality of the city was also strongly emphasised by the Romans, who additionally ensured the standard of municipal facilities (i.e. healthy water, efficient sewage systems, segregated traffic, and a representative forum), but also entertainment in the established parks, as the crowd demanded *panem et circenses* ('bread and games'). Thus, efforts were made to achieve that which Vitruvius described as *venustas* ('beauty', 'charm'). This must have been a widespread need, since the first trade union of *topiārīi* (i.e. urban gardeners caring for greenery) was established in Rome (see Figure 1).

At the time, the imperial capital had over a million inhabitants, many of whom lived in *insulae*, i.e. multi-storey tenement houses.

Thus, the custom of having a suburban house (*villa sub urbana*), where the patricians liked to spend the time of the most unpleasant heat in the city, crystallised as early as in antiquity. Rome was an empire whose security was guarded by legions deployed on the frontiers, so the feeding zone surrounding the city could remain 'open'.



Figure 1. Model of a Roman insula

Source: Reproduction from the author's collection.

Although we tend to associate the Middle Ages with the austerity of life, as early as at the end of the 13th century there was an office in Siena called *Ufficiali dell'ornato* and dedicated to the beautification of the city and the décor of buildings. The frescoes by Ambrogio Lorenzetti (1280–1348), which decorate the Palazzo Pubblico and showed – to people who could not read – an allegory of the effects of good and bad governance in the city, are very telling, which might mean that asceticism was not the only important thing in the worldly life of that time.

In turn, the out-of-town estates might have served the function of a manor or/and outdoor recreation. Situated far away from densely built-up towns, they were also a refuge from the frequent epidemics of the time. Such places would sometimes be used for frivolous pleasures – in defiance of the plague – as gracefully described by Boccaccio (between 1350 and 1353).

Nevertheless, safety within the city walls – in the event of war – was paramount and worth enduring the inconvenience of the cramped conditions and the stench of the gutters. However, there were exceptions, especially a little while later. Colas Breugnon, a connoisseur of the weal and woe of life in the 17th-century France, used to say: “My shell, my niche is outside the walls, and the result of that is that when from the top of St. Martin’s tower they spy an enemy in the plain the town shuts its gates, and the enemy comes to me... and then I have to rebuild... but what could I see there?” (Romain, 1947 [1919], pp. 12–13).

Apart from such exceptions, anything that could be too dangerous, burdensome, or inconvenient within the walls was placed outside the city – hospitals, slaughterhouses, tanneries, as well as brickyards and forges – for fear of catching fire. Outside the city there were also public meadows – *pratellum* – as a remnant of the Roman ‘Campus Martius’ tradition, still used for military training, but also as pastures or cattle markets. There were inns and workshops of the so-called ‘bunglers’, i.e. craftsmen who were not members of guilds. There must have been mills and harbours by

the water, hunting lodges in the surrounding forests, and some monasteries situated in secluded spots. All of this, scattered in the zone of food resources, created a kind of exurbanisation and sometimes a more compact suburban tissue, gradually incorporated into the city – which its inhabitants usually perceived as a promotion. In this way, they combined the benefits of belonging to the city with the pleasures of living closer to nature.

An example of the unprecedented career of a similar place was Versailles, once the royal hunting ground. It was there – about 30 kilometres from neglected and rebellious Paris – that Louis XIV moved his court (and along with it several metropolitan functions) in 1682. It was here that he received his envoys, where festivities and parties were held, and where the luminaries of the political and cultural life of the time met with the monarch. It is worth noting at this point that the gigantic costs of maintaining the majestic Versailles upset the state budget, which later contributed to the outbreak of the Revolution in 1789. With a previous population of around half a million, Paris regained its metropolitan splendour only after the sanitary facilities had been put in order, representative buildings built, streets and squares modernised, and the Grands Boulevards established.

Life in cities was for a long time subordinated to the factor of defence – including the numerous projects of ‘ideal cities’ from the turn of the 16<sup>th</sup> century. Yet with the development of warfare techniques, the limits set by the old walls were gradually exceeded while at the same time remaining under the influence of new constraints, namely the range of artillery fire, which became increasingly extensive. Military constructions in a city always caused certain dysfunctions in its life<sup>1</sup>. They were accepted by city dwellers

<sup>1</sup> For this reason, according to the Roman law, legions were to be stationed in camps outside the city, according to P. K. Dyczek, *Novae* (‘Legion camp and late antique city – information from unpublished research’).

in exchange for a sense of security. Municipal governments often erected walls on their own initiative to protect the inhabitants, sometimes taking in people from the surrounding zone of food resources for the duration of the war. In turn, when – following the increasing scale of warfare – the military infrastructure in the city served mainly the supra-local strategy of the state, the city became a ‘garrison city’, and the fortress-city relationship assumed an oppressive character. The quality of life of the inhabitants was ruthlessly subordinated to this objective, which meant, among other things, the obligation of the so-called demolition reverse<sup>2</sup>, and in the case of an impending siege, it presaged forced evacuation and/or starvation.

### Suburbia and beyond

With the replacement of bastion fortifications by a system of dispersed forts, and especially with the introduction of long-range artillery and later the advent of aviation, the corset of military architecture burst and the urbanisation of suburban areas began. A pioneering example in this area was the implementation of the ‘*Eixample*’ plan – the ‘expansion’ – of Barcelona in 1859, designed by Ildefonso Cerdá, who also coined the term ‘urbanisation’, i.e. the process of urban development (see Figure 2).

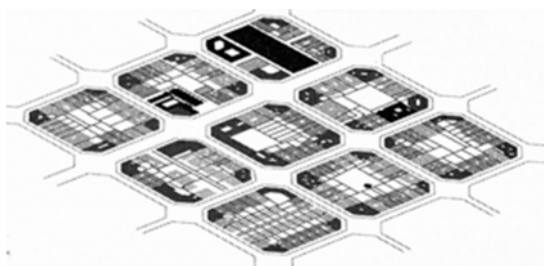


Figure 2. Layout of city blocks in Barcelona

Source: Cerdá and the Barcelona of the Future. Reality versus Plan. Barcelona 2009.

<sup>2</sup> A ‘demolition reverse’ was a commitment for the duration of the war to demolish at one’s own expense a structure built in the firing zone from the fortress.

Among the objectives set for the designer at the time, there was primarily the improvement of housing conditions (which were deteriorating due to cramped spaces and clashes with industry) and the improvement of road links between the urban tissue and the surrounding area. This was achieved through a regular layout of extensive urban blocks – with enclaves of mid-block greenery inside – and a clear grid of wide streets intersected by diagonal arteries. As it turned out, the rigidity of the urban grid and permissible building height did not deter the Catalan architects, who had been filling out Cerdá’s canvas with highly original buildings for more than 150 years. Today, the most highly rated asset of Barcelona is the quality of life in the city. When asked about its level, almost all residents (99%) found it satisfactory, good, or very good<sup>3</sup>.

Less than half a century after the ‘*Eixample*’ plan, Ebenezer Howard (1898) announced his idea of the Garden City in England. Against the backdrop of the disastrously deteriorating quality of life in cities, which followed the rise of the industrial age, Howard’s proposal came as a ‘new opening’. It was inspired by a comparison of the good and bad sides of urban and rural life – reminiscent of later SWOT analyses. As a result, the Garden City offered living conditions combining the good sides of the city and the countryside while eliminating their negative sides. To implement such a garden city concept, Howard proposed setting up a company which, after taking out a loan, would buy land (cheaply because it would be outside the city, but within easy reach of the railway carrying residents to the city centre), draw up an urban plan, prepare the development site, and start building and selling flats. These flats were to be either in single-family semi-detached houses with small gardens, or in compact urban blocks with large inner squares.

<sup>3</sup> The survey was conducted between 1st June and 31st December, 2015. 88% of the participants completed the survey online, while the remaining 12% completed the paper version (see: [www.investbarcelona.pl](http://www.investbarcelona.pl), retrieved on 26.04.2021).



This scheme has evolved to take on different variants of development standards, not only in England but also in many countries, including Poland. Its universal value and the source of its popularity has been the affordable offer of buying a ‘house with a garden’, which, as it turns out, is the most popular form of housing in every latitude. It should be noted, however, that the Garden City concept referred mainly to housing development, treating other functions of the city – including workplaces – rather neglectfully. Hence, it usually resulted in housing estates which were not entirely autonomous, or which were merely ‘bedroom communities’.

The quality of life in a city functioning according to democratic principles results only to a limited extent from the ideas of town planners or architects. The key to their implementation is the ‘social contract’ in the form of a legal act adopted by the local self-government, which in Poland is called the local spatial development plan.

In relation to the principles of urban life, it perpetuates the priority of the common good over the benefits of individual property rights. This particular type of consensus gained the status of local law in Euclid, Ohio, in 1926, by a decision of the Supreme Court of the United States. Known as Euclidean zoning since then, this law has been widely used in America and was later adopted as a key element of zoning plans throughout the civilised world. Initially, the regulations specified building intensity and height ratios for particular zones: single-family, multi-family, commercial,

administrative, industrial, and recreational. The most convincing argument for adopting such municipal regulations – which, after all, limit the landowner’s freedom – was the desire to stabilise the quality of the space and, therefore, the price of property acquired in a particular zone. In other words, the plan became a form of guarantee that a neighbour would not be able to build whatever they liked, as this could lower the value of the property. With time, the provisions of the plan encroached more deeply and broadly, also encompassing utilitarian and aesthetic standards – if that was the will of the residents. An important development in this regard was another Supreme Court ruling, in 1954, stating that “local law has the power to ensure the beauty as well as health”<sup>4</sup>. As a result, it was possible to develop the original *zoning* to include the appearance of public spaces, and then to take the shape of *form-based zoning*, or zoning according to specific forms of development (see Figure 3).

Such developed municipal spatial planning became widespread only after Americans had experienced the ill effects of an earlier – very liberal – concept called *Broadacre City*. It was the project of an otherwise outstanding architect, Frank Lloyd Wright, which he worked on until the 1950s. The idea consisted in dividing the selected area into squares of one acre (approx. 0.5 ha). The construction of surrounding roads and technical infrastructure routes was to be the task of the municipality, while the purchasers or lessees of land within the designated investment



Figure 3. 1. building line; 2. maximum and minimum height; 3. minimum width of the elevation in relation to the width of the plot; 4. surface area of windows in relation to the surface of the elevation (on individual storeys); 5. other attributes, including greenery and street furniture

Source: <https://w.w.w. formbasedcodes.org/definition> (retrieved on: 20.12.2015).

<sup>4</sup> Ruling in *Berman vs. Parker* of 22 November, 1954.

blocks could further develop them at their own discretion. The result was vast areas of ‘roadside sprawl’, punctuated from time to time by a strand of ‘the main street’ – where retail and services are concentrated – with skyscrapers looming on the horizon in the centre. Such ‘regulations’ leading to a “*modern space salad*” (Alexander & Chermayeff, 1964) – or ‘modern spatial salad’ – were criticised as stimulating ‘sprawl’ (a spontaneous ‘splash’ of development) which had little to do with the city (see Figure 4).

In these quasi-urban areas, the quality of life varied from luxury in the ‘good neighbourhoods’ through the monotonous ‘national average’ to the extremely poor one in the peripheral slums. It was therefore a clear step backwards compared to concepts – also a consequence of the progressive mobility of the inhabitants – which went in the opposite direction.

The first of them is a project from 1868 (!) of a villa estate Riverside near Chicago, connected to the city centre by a new type of road – a *parkway*. The author of the project, F. L. Olmsted, emphasised the landscape values of the whole establishment subordinated to the varied topography, with the convenience and attractiveness of the 15 km-long carriage ride (!) to work in the city, along a road with the character of a recreational avenue.

The aforementioned effects of the industrial revolution – first in England and later in many other



Figure 4. ‘Modern space salad’

Source: Alexander & Chermayeff, 1963.

European countries, and called ‘paleo-technical’ in the first phase – brought about the emergence of substandard housing spontaneously arising in the vicinity of mines, steelworks, and factories. They were built in areas that had not been prepared for the avalanche of people looking for work. Cramped spaces and poor sanitary conditions resulted in recurrent epidemics and the danger of workers’ rebellion, which forced the authorities to introduce the first urban planning regulations in England in 1844. They regulated the development conditions concerning access roads, water supply, sewage system, and minimum size of building plots, as well as – later – also workers’ gardens and a compulsory square.

Against the backdrop of these provisions – markedly improving the quality of life – subsequent changes were the consequence of advances in the technology of production and the popularisation of machines that required expert maintenance. Industrialists began to compete for qualified workers by offering them high standards of housing in factory-based company towns. Those were reminiscent of the ephemeral projects from the 18<sup>th</sup>-century ‘romanticism of industry’ and the concepts of the utopian socialists, but differed from them in their strong economic foundations. As of the second half of the 19<sup>th</sup> century, company towns became a permanent feature in the suburban landscape of industrial cities. This partly stemmed from the fact that one of their aims was the multi-generational stabilisation of the workforce, which was facilitated by company schools, nursing homes, day-care centres, canteens, and – not infrequently – parks, swimming pools, and theatre halls. Their standard was sometimes so high as to bewilder future workers and their families arriving from the countryside<sup>5</sup>. Hence, in 1905 in Giszowiec in Silesia, in order

<sup>5</sup> “The miner prefers to walk a good half mile to work every day from Zabrze, where he has a tiny wooden hut with a grubby floor, with no daylight, where he lives with his family, a cow, with no fuel, and does not want to get a free flat in the Klein Zabrze settlement, where he will have free fuel. There he will not be allowed to keep potatoes and

to overcome this kind of resistance, the designers were instructed to conduct an inventory of country cottages to adapt the style of the new housing estate to them. Today, its part, saved from demolition, is an elite place of residence among block housing estates in Katowice (see Figure 5).

The dynamic development of motorisation in the United States in the 1920s led to a search for solutions to prioritise collision-free pedestrian traffic in residential areas. This resulted in the idea of a neighbourhood unit – designed by C. Stein between 1923 and 1929. In addition to the aspect of safety, its name emphasises the care for human relations, which was then considered an important factor in the design of housing developments. This was to be facilitated by the small scale of the housing estate, which did not exceed several thousand inhabitants. It was about people bound by neighbourly relations who walk their children to the same school, belong to the same parish, and do their shopping in the same shops.

Other problems – partially already outlined – existed in more densely populated Europe. Tony Garnier tried to solve the growing clashes between city and industry in a modern way in his project of an ‘industrial city’ in 1904, planned near Lyon.



Figure 5. The remains of Giszowiec against the background of the contemporary housing estate in Katowice

Source: Photo by the author.

*cabbage. Nor a cow – in a word, this flat is too good for him.*” (From the report of the German administration in Silesia.)

He proposed comfortable residential areas away from the industrial plants, keeping the historic districts intact and using open spaces for recreation.

Thus, he was thirty years ahead of the concepts drafted by Le Corbusier in the Athens Charter, surpassing them at the same time in the level of the proposed quality of life. The ‘industrial city’ did not come into being, but in the very same Lyon, Garnier – commissioned by the local government – built an urban block of affordable flats in the 1920s, inscribed on the UNESCO list in 1991<sup>6</sup>, where residents still enjoy the quality of life proposed a hundred years ago.

It should be stressed here, however, that the above-mentioned Athens Charter was created under the pressure of the dramatic housing shortage that emerged in Europe as a result of the disastrous effects of the First World War. This forced the international urban planning community to combine the avant-garde slogan of ‘Work – Housing – Leisure’, i.e. the segregation of the then conflicting functions, with the search for methods of fast and cheap construction, in line with the slogan: ‘Wohnung für das Existenzminimum’ (‘minimum subsistence dwelling’).

Despite the urgent need, those proposals were mainly used in Soviet Russia, while they met with limited demand wherever a free market economy was in operation. Twenty years later – in the aftermath of another world war – the devastation again led to a ‘housing famine’. After the Second World War, a bloc of socialist countries with a centrally-planned economy emerged in Europe and the construction of low-cost housing was used there to promote the new system.

Initially, the housing estates built in Poland, and even the two new towns, Nowe Tychy and Nowa Huta, represented relatively high housing standards (see Figure 6).

<sup>6</sup> Tony Garnier Urban Museum in Lyon in a city block redeveloped under the direction of Krzysztof Pawlowski in 1985, where, among other things, reproductions of Garnier’s design were placed on the gable walls of the renovated buildings, creating an open-air museum of his work.



Figure 6. Nowa Huta, A1 housing estate by S. Juchnowicz

Source: Salwiński & Sibila, 2008.

Following the principles of a command economy, compulsory design norms included not only urban planning ratios, but also an area of flats and even their equipment and furnishings.

However, in the late 1960s and early 1970s, the growing economic inefficiency of the socialist system became apparent, and the economy of shortages became synonymous with it. In this situation, the existing design norms – sometimes absurdly meticulous (see Figure 7) – were impossible to implement and were preserved only

in design documentation, while the quality of life decreased dramatically.

As a consequence, the residents – often coming from the surrounding villages – tried to compensate for the harshness of the surroundings of the prefabricated blocks of flats and ‘secured’ – legally or not – allotment gardens in the area for themselves.

At the same time, in Western European countries, the aforementioned segregation of vehicular and pedestrian traffic proved to be too costly and was replaced by the ‘taming’ of vehicles as part of the ‘Woonerf’ concept. Following the example of the Netherlands, the ‘traffic calming’ was based on transforming it – under certain conditions – into the pedestrian and vehicular traffic. Thus, as an added value, a new, attractive character of the urban interior was formed along with the ground floor storefronts. This has become popular especially in inner-city districts, contributing to their comprehensive activation without too much impairment to the quality of life of the inhabitants – something that is also attributed to the constructors of car engines, which are increasingly less harmful to the environment.

Some streets, hitherto overloaded with vehicle traffic, could regain their multi-use character – also as a culture-forming public space. Where this was

City population	Cycling tracks in sq.m	Dirt tracks in sq.m	Archery tracks in sq.m	Riding-schools in sq.m	Total sq.m	Area per person in sq.m
5,000	–	–	–	–	1,400	0.28
10,000	–	–	–	–	1,400	0.14
15,000	–	–	–	–	1,400	0.09
30,000	–	–	4,500	–	5,900	0.20
50,000	–	–	7,500	–	8,900	0.18
100,000	–	–	15,000	–	19,550	0.20
150,000	–	–	20,000	–	55,950	0.37
200,000	10,000	45,000	20,000	–	142,350	0.71
250,000	40,000	15,000	20,000	48,000	191,500	0.76

Figure 7. Normative programme of recreational facilities in housing estates

Source: Reproduction from the author’s collection.

not possible for various reasons, ‘20 km/h zones’ or ‘30 km/h zones’ were used for vehicular traffic on segregated carriageways. The inconvenience of car traffic near the flats is the ‘price’ for the possibility of commuting and parking not only near one’s dwelling place but also work, school, shopping, entertainment venues, etc. The limited capacity of streets and areas in their vicinity, however, made the habit of having a private car – parked nearby – so burdensome that it was gradually being supplemented or even replaced by efficient public transport, the developing system of ‘city cars’<sup>7</sup> and bicycles. Despite fears, this also brings about a revival of revitalised historic districts inaccessible to private cars. New developments, in turn, aimed to concentrate housing, workplaces, and commercial activities close to public transport stops, which has become known as TOD, i.e. *Transport-Oriented Development*. Such transport, until now usually inter-district, is now taking the form of agglomeration transport, which makes life easier for suburban residents.

The progressive multithreaded changes in the quality of life in the city are also illustrated by the revitalisation programmes for neighbourhoods degraded for various reasons to the level of the so-called ‘urban wasteland’, and in extreme cases classified as an area of social pathology. After an initial period of activities limited to improving the technical standard of buildings and their appearance, contemporary initiatives are reaching back to the sources of urban degradation and reduced quality of life, i.e. to socio-cultural causes.

In this field, the revitalisation programme of the Brooklyn Bedford-Stuyvesant neighbourhood in New York stands out as an example of bringing a degraded area back to life while giving it a new and higher quality<sup>8</sup>. At the time, the 13 km<sup>2</sup> of neighbourhood had a population of 500,000 and its 1920s heyday was well behind it. 90% of the population was African-American and

Puerto Rican, who – as immigrants in the 1950s and 1960s – gradually displaced the white-collar community<sup>9</sup> (who chose houses with gardens in the suburbs), and then, street by street, led



Figure 8. a. A development of the 1920s; b. A street in the 1960s

Source: A Report from Educational Facilities Laboratories, 1969.

<sup>7</sup> Cars used on the basis of a paid fee.

<sup>8</sup> It is the work of a corporation founded in 1967 by Robert Kennedy and Jacob Javits.

<sup>9</sup> ‘White collars’ is a popular term for clerical workers in the United States.

the neighbourhood to cultural and technical degradation (see Figure 8a and Figure 8b).

The neighbourhood revitalisation concept called ‘A College in the City – An Alternative’ (A Report From Educational Facilities Laboratories, 1969) was based on a programme designed to teach people how to live better, get a profession, and educate children who will want to live and work there. Vacant buildings and vacant lots left by burnt-out houses were gradually filled with social welfare facilities, counselling centres, vocational training centres, schools, libraries, community centres, gymnasiums, offices, and new flats. Simultaneously, public transport was modernised and bands of carefully designed public space were introduced. Yet, the focus of the programme was on raising the level of social capital.

In 2007, the Bedford-Stuyvesant neighbourhood’s prolonged (almost two-generation-long) rehabilitation process was given a noticeable boost by the removal of the nearby harbour docks at the mouth of the East River and by the creation of the Brooklyn Bridge Park leisure and commercial complex in their place – opposite Manhattan, easily accessible by ferry. In the second quarter of 2015, transactions in the Bedford-Stuyvesant neighbourhood were the second most popular – after Manhattan – in the New York’s real estate market.

The revitalisation programme presented above was interventionist in character, with a large contribution of public funds, concentrated in one area. The previously outlined phenomenon of sprawl, on the other hand, has a global character. It is accompanied by widespread criticism from professional circles and perhaps even more widespread popularity among the clientele of ‘houses with gardens’. This paradox can be compared to the rift, noticed in the 1980s by Jean-François Lyotard (1984) – between the artist and society. He even called it *le différend* – ‘a dispute’. This problem, interesting in itself, has become the subject of a comprehensive report in the United States<sup>10</sup>,

<sup>10</sup> TCRP Report 74 – Cost of Sprawl – 2000, Washington D.C. 2002.

and in terms of urban planning practice, it is being addressed in an accommodating manner. Rather than controvert the merits of a house with a garden, the planning and landscape effects of the prevalence of such a development on a large scale should be eliminated. Its main shortcomings include:

- an increasing distance of the flat from the workplace, school, commerce, and services;
- increasingly long commutes to the ‘city’, at the expense of recreation and social life;
- the increasing cost of building and maintaining roads and technical infrastructure;
- mono-functionality (‘bedroom communities’);
- the lack of public spaces and human interaction zones;
- anonymity, the lack of social ties and a sense of security;
- scenic monotony.

By eliminating the disadvantages and retaining the main advantage of a flat with a garden, solutions that are known as *smart sprawl* – the intelligent deconcentration of differentiated development – were sought. These were preceded by *walled (gated) communities*, surrounded by a fence with a guard booth, in which a sense of security was ‘revived’ – especially in the richer neighbourhoods of cities in developing countries. Such an enclave was also the result of a desire to live ‘among one’s own people’, i.e. people of a similar social status or a similar age group. The wall was also sometimes created as a sound barrier, out of a desire to make use of the land along an arduous road. Inside larger estates of this type, services started to appear as well as clubs, swimming pools, tennis courts, and other elements from the ‘middle-class dreams’ and ideas of prestige, and these also were expressed in pretentious names (see Figure 9).

Fulfilling the dream of living ‘on an island’ – especially in the literal sense – may have further increased the attractiveness and price of housing. However, in extreme cases of environmentally-unsustainable solutions, these were symptoms of gigantomania threatening the safety of the whole venture.

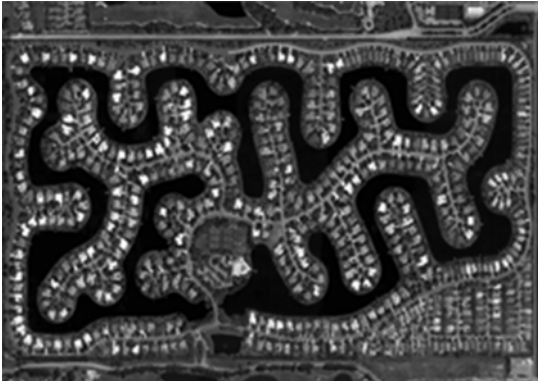


Figure 9. Projects and estate developments in Florida

Source: Reproduction from the author's collection.

From the point of view of the attractiveness of the urban community as such, the negative sides of a longer stay 'on an island' or 'behind a wall' have emerged over time in walled communities. They resulted from isolation and alienation, i.e. the reduction of public space to the level of a neighbourhood space at best. Life in isolated housing estates – especially with the overcrowded conditions inside – was becoming distressing for children and young people, and on top of this, police statistics were increasingly debunking the myth of safety 'behind the fence' (see Figure 10).

Other users of urban space, once treated as shared space, began to protest against these 'ghettos for the rich', making their lives more difficult, which led to a ban on gating residential areas in many cities.

After initial attempts to formally 'diversify' *sprawl* – for example through the application of shopping centres – in the second phase there appeared projects in which the deconcentration of the homogenous substance of the development resulted from topographical barriers, now used as strands of fringe recreational areas. This was a more or less conscious reference to Eliel Saarinen's 1918 concept for Helsinki, which he called 'organic decentralisation'.

Following on from this, the most promising trend at the moment is the movement known as



Figure 10. The organisation of closed settlements in Poland

Source: Reproduction from the author's collection.

*New Urbanism*, promoted since the 1980s by the Luxembourg-based architect Leon Krier. In design projects and developments of the New Urbanism, the so-called green infrastructure – together with the spatial structure of the cultural heritage of a given area – form the canvass that 'keeps in check' urban expansion. It has nodal 'seeds' of public space from which cohesive networks of streets and city blocks diverge, accentuated by structures whose postmodern style refers to the proven canons of the urban landscape, following the aforementioned principles of *form-based zoning*.

A measure similar in effect was proposed in a slightly less popular English concept called 'the Urban Villages Group' (Urban Villages

Group, 1992). It has a well-established tradition of urbanising former rural areas while respecting their original layout, intimate scale, natural values, sometimes their specific *genius loci*, but under conditions of higher building density. Hence many districts of expanding London were composed around a square that became an enclave of greenery preserved from the former village square.

The analogies between the attempts to articulate *sprawl* and the ‘organic deconcentration’ of 1918, as well as the idea of ‘Design with Nature’ (McHarg, 1971) – including the relationship with the zone of food resources – can be traced back to the Hippodamian plan of 479 BC (mentioned at the beginning of this article). Their immanent feature is **composing and combining the man-made work with the work of Nature** around it. The composition provides the two ‘autonomous’ beings with a synergic effect, and not only a juxtaposition that augurs conflict.

In the examples of urban housing sketched so far, single-family housing predominates, supplemented by developing multi-family housing. It has its origins in the previously shown Roman insula as well as the tenement house, which has evolved over many centuries.

In the Middle Ages, it began to undergo a significant transformation due to the cramped spaces within the city walls, which forced the original full-sized plots to be divided into half-sized plots – about 4 acres in size – which lowered the living standards<sup>11</sup> (see Figure 11).

Later, especially in the urbanised suburbs, homestead plots originally associated with agriculture were gradually filled with more profitable craft workshops, manufactories, and, finally, factories, with the development of Łódź being a textbook example. In such cases, the living standard deteriorated drastically, which was not only due to the density of multi-storey multi-family buildings, but also as a result of the mixing

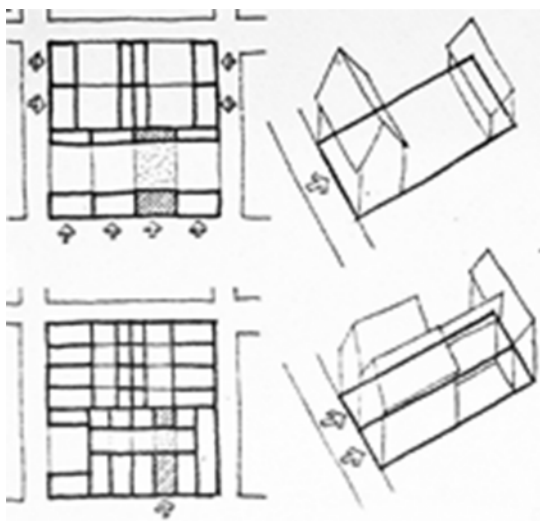


Figure 11. Division of full-sized plots in a medieval town

Source: Böhm, 1981.

of residential buildings with factory buildings within the same urban block (see Figure 12).

If industrial facilities were moved to other locations over time, it was due to the search for better conditions for production rather than for reasons of improving living conditions, which were sometimes extremely inconvenient.

At the turn of the 19<sup>th</sup> century, the typical structure of inner-city districts in most European cities was an urban block, and one of very different standards.

Against the background of the ‘well-courtyards’ stereotype, which unfortunately often depicted the existing state of affairs, it is important to note examples of better solutions, parallel to, but different from, the well-known postulates of the previously mentioned Athens Charter. Instead of the rapid ‘factory production’ of detached blocks of flats (advocated therein) facing the sun, these attempts aimed at improving the urban block, providing a higher comfort of living. This was achieved by limiting the density of development and by introducing a common green area into the interior of the block, while at the same time differentiating

<sup>11</sup> It is interesting to note that the four acres was the size of a plot of land in Miletus and now it is the smallest size permissible to build a single-family house.





Figure 12. Stages of urban block development in Łódź between 1873 and 1931

Source: Tołwiński, 1948.

the individual segments of development that sometimes resembled rows of ‘urban villas’ (see Figure 13).

An interesting innovation in the interwar period was the reversal of the ‘front’ of the development from the street towards the green courtyard. This resulted in a new distribution of the functions of the living compartments, i.e. the living room was turned towards the garden interior of the urban block, while the kitchen and secondary rooms were turned towards the street, from which there was an entrance to the building and a staircase, with shops and services located on the ground floor.

This pattern of shaping new residential urban blocks in the development of the inner city appears to be most noticeable at present. Developers are looking for more favourable density ratios on



Figure 13. Innovative solutions in Poznań from 1902 – an urban block consisting of urban villas with a common garden designed by E. Asmus, M. Biele, and F. Weiss

Source: Jakimowicz, 2005.

the outskirts of the already packed inner cities. Thus, urban block complexes with a green courtyard inside, usually hiding an underground car park, are being constructed. Greater profits, increased by ground-floor storefronts and the possibility to reduce parking space, are offered not only by ‘urban infill’ in the city centre, but also by buildings located in the suburbs (as long as they are within reach of public transport), which was mentioned earlier in relation to TOD.

This offer is mainly aimed at a specific group of users of urban space – young couples, the so-called singles, students, or people who treat a flat in the city centre as a studio or a place to rent (see Figure 14).

They usually possess their ‘primary’ home outside the city centre or in another city. As a result, the priority here is good accessibility by public transport and a prestigious design, while the development density, the view from the window, and the greenery around the house are all becoming less important.

Yet another type of urban housing arises from the conversion of post-industrial or post-military buildings into flats (sometimes offices); in other words – lofts. Proposals of this kind appeared decades ago and initially shocked with their boldness in overcoming stereotypical associations,



Figure 14. A contemporary ‘urban infill’ (by S. Deńko) in Kraków

Source: Photo by the author.

but soon gained popularity owing to their originality. They found their way into a niche of customers so numerous that there was a lack of abandoned original spaces (the so-called ‘hard lofts’), and thus fakes (‘soft loft’ condominiums) appeared on the housing market. This phenomenon seems to be another testimony to the flexibility of the urban substance, whose most important magnet is diversity, freedom of choice, and a sense of community.

## Conclusion

This mosaic – or rather palimpsest – of different ways of living in the modern city is currently influenced by a completely new phenomenon – the advancement of information technology. It is a factor whose effects humanity is only just recognising as people observe its symptoms ‘trickling down’ into the cities that have already been formed. The observation of the recent epidemic –

during which, out of necessity, many activities connected with work, education, trade, and services are performed remotely (i.e. at home) – helps forecast the consequences of this process. The streets became deserted, shopping malls and events fell silent, it became dull in public spaces and everyone began to miss the recent commotion, hustle and bustle, and even the crowd and noise. People put their laptops away and went out to wave to each other and sing chorally on balconies. Like the characters from the *Decameron*, they thus manifested their disagreement with fear as well as their desire to be together despite the unfavourable conditions. It turned out that the virtual ‘lightness of being’, even in these circumstances, cannot substitute real life – no matter how inconvenient it is – and people are not to become a group of frightened introverts. At the same time, it has also turned out that many of the necessities of everyday life can be handled without leaving home and, therefore, sometimes more conveniently. This convinces sceptics of the benefits of IT, but also dampens enthusiasm for the new possibilities, which prove insufficient for the full enjoyment of city life. It is also worth recalling here the erroneous predictions of the supposedly dangerous influence of the radio and television on reading, concerts, and sports events.

Alongside the spatial consequences, IT also affects people’s time management. The shorter time required to perform necessary tasks – owing to conveniences – means that groups and individuals have more time for other activities and occasionally also some ‘leisure time’. Thus, one can again hear the Roman exclamation: ‘bread and games’. And this is where the problem arises. One might venture to say that the progress of civilisation has been driven by innovation in meeting needs. In other words – though with a dose of simplification – the commercial offer was the result of market analysis. Today there is ample evidence that the opposite holds true, i.e. that the overproduction of ‘gadgets’ forces the promotion of non-existent – or simply irrelevant – needs. After all, business must be booming. What effect does this have on

the city – ‘an area of increased concentration of everything brought by the civilisation of a given era’? Among many hypothetical scenarios, there is also one in which the city, as the main producer of waste, disappears under its heaps and can be reborn in some unknown form.

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Andrzej Majer

## Cultural Atmosphere as a Component of the Quality of Life in Cities

### Abstract

*Objectives:* The aim of this paper is to draw attention to the fact that cultural atmosphere or ambience – although underestimated – is one of the key aspects of the quality of life in cities.

*Research Design & Methods:* The article is theoretical, as it reviews the literature on the quality of life and the characteristics of cities, trying to identify their main determinants as well as, against this background, to show the importance of cities' cultural atmosphere.

*Findings:* The author attempts to prove that the cultural atmosphere is difficult to define, yet it is important feature regarding, for example, motives for attachment to the city or to local patriotism. The paper also explores how the cultural ambience is considered as a significant factor when taking into consideration location-related decisions.

*Implications / Recommendations:* The subject of the article belongs to the sphere equally important to that of economic features. The culture and its character, elusive yet spectacular, manifests as a vibrant presence of people leading their existence and living side by side in the common environment. Immigrants, clerks, artists, street vendors, and police officers – alongside thousands of homeless people – create spectacular *mélange* and the character of the city. These features have to be considered.

*Contribution / Value Added:* This paper tries to ease the relative shortage of scientific analysis on the said topic.

*Keywords:* quality of life, city, cultural atmosphere

*Article classification:* conceptual paper

*JEL classification:* A12

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## Introduction

“Let others rise Ganges, Sorrento, Crimea to the skies, but I prefer Łódź! Its dirt and smoke are my happiness and delight!” This fragment of Julian Tuwim poem titled “Łódź”, quoted many times on various occasions, poetically introduces the problematic of this article. The prospect of living in an environment polluted with dirt and smoke seems unappealing, but Tuwim’s verse expresses that the predilection for a particular place (city) is bivalent: someone from the outside could see only the deficiencies of the old, factory-like city of Łódź, while the author of “Polish Flowers” and “The Ball at the Opera” was sentimental about the city where he was born and brought up of his first steps in life.

The motives of this article are double folding: the quality of life in cities is the framework upon which the author think that cultural atmosphere is one of the important aspects assessed, although not fully appreciated ones. Both ideas are multi-facets, vague in scope and content. Cultural atmosphere is difficult to describe, although it comes to mind as the aspect substantially determining decisions on settle for life. This feature resembles ancient *genius loci*, which includes the character of the city’s structure, a variety of buildings, and the diverse lifestyles of people. It allows to realise that every city, though having features shared with others, is unique. Its cultural atmosphere is something spiritually tangible, felt, perceived, and sensed, something that emanates from the urban composition, general structure, and buildings, yet also from the vivid existence of dwellers. Thomas Hansen and Oskar Verkaaik define these features as the charisma of the city – an impression that is close to the atmosphere and consists of the same components: moods, ambiance, behaviours, gestures, and the appearance of the distinctive personalities among the crowd (Hansen & Verkaaik 2009, p. 12). The cultural atmosphere – like the culture itself in a broader sense – is always “somebody’s” in terms of affiliation to a specific nation, social entities, collectives, or communities.

Without need to reach to the theoretical knowledge, it is sure that both features – atmosphere or charisma play a crucial role when concerning, for example, human’s attachment in the form of local patriotism, and something that counts as important factors of the setting decisions.

Quality of life is one of the themes which used to be relatively popular in social sciences and fields such as medicine, philosophy, economics, sociology, pedagogy, politics, etc. However, it opens the wide field of interpretations. Thanks to ambiguity, theoretical and definitional conventions and unlimited freedom of explanation, the concept of quality of life is sometimes emotionally charged or has the character of an ideological-evaluative tool, impossible to be explicitly grasped and entangled in specific political and cultural contexts. Depending on the point of view, it is understood informally or scientifically. Several scientists consider “quality” to be an undefinable concept, treated as assumed, yet not to describe within a stringent theory. Nevertheless, many theoretical and empirical efforts have been undertaken to seize this notion for either utilitarian or cognitive reasons. Correlates and indicators of urban life quality belong to the wider context of studying the general satisfaction of life. This can be (simplifying in purpose) divided in two groups: 1) “hard” – as actual, objectified and measurable, quantitative, graspable, and empirically verifiable, typical of sciences that use mainly determinate criteria, such as geography or regional economics; and 2) “soft” – subjective and imaginative, mainly qualitative thus unquantifiable, individual, difficult to grasp, having a value-based character (e.g. within cultural anthropology or sociology), for which the category of quality of life, besides logical and epistemological reasons, has mainly conventional nature.

## Specified determinants of the quality of life

Within the limited scope of this article, it is not possible to describe the abundant body of scientific opinion and research on the quality

of life. Its understanding must be diverse for societies and cities in wealthy regions of the world, often strikingly different from the many poorer ones, which are compelled to deal with permanent deficiencies. Excluded as well from further considerations are qualities of large cities and towns, in which downtown fill in extravagant buildings, differs sharply with shantytowns and poverty-stricken slums in the others. The lifestyle in a large agglomeration also contrasts from pursuing in a small town. Finally, essentials of culture also participate in that variance: the urban centers of Europe are unlike from those of Africa or Asia, as Max Weber pointed out in his characterisation of the “occidental city” – that is the European style urban settlement of ancient or medieval origin which contrast with evident superiority (worth emphasising) to the “oriental city,” which belonged to the less advanced Asian formation in terms of democracy. What nevertheless these two have in common is that studying of urban reality and the quality of life is everywhere of great cognitive and practical importance (Weber, 1958, pp. 15–19).

The urbanisation that has created cities was, and still is, a continuous process of subsequent phases and unequal outcomes. Already 50% of the world’s population and almost 80% of Europe’s inhabitants are concentrated in agglomerations which play a decisive role in economic growth and regional development, offering employment, higher education, and professional services, being also centers of technology and innovations. Cities in richer and poorer parts of the world today are profoundly interested in implementation of critical goals: social cohesion, environmental protection, and sustainable or possibly resilient development. They also try to reduce or at least mitigate the acute problems of social inequality, environmental and air pollution, and crime, all of which are traditionally considered to be inevitable belongings of the urban realm. The quality of life has become one of the important subjects of urban policy in most countries of the European Union, as evidenced by numerous European and

governmental policy suggestions (Banai & Rapino, 2009, pp. 259–276). Cities and their governments must participate in the world-wide or local urban competition for a limited sample of goods. Current economic scenarios consider a high quality of life as a vital mechanism of development and well-being. Satisfactory life seems the main attraction for the businesses, production, and workforce, also as instrument increasing the ability to compete with other cities; this was analysed by researchers more than half a century ago (Hall, 1995, pp. 175–214). Ensuring that citizens are adequately satisfied with life in a city has become an important field of urban policy.

The quality of life is mainly analysed according to two conventional approaches:

- (a) objective – usually based on the analysis and reporting of secondary data, aggregated for different geographic regions or spatial scales, and contained mainly in official data from censuses or systematic sociological surveys. This is an approach often associated with research into social indicators research;
- (b) subjective – designed to collect primary data at a disaggregated or individual level and using qualitative research methods focused on the behaviours and judgments of either individuals or larger social units.

Faced with contemporary challenges, most urban development strategies involve ensuring and enhancing the quality of life, measured all over the developed world alike. Cities compete to attract the highest number of resources at the local, regional, national, and global levels. Although the outcome of this contest depends on many factors, including global trends, national policies, decisions regarding the location of businesses, development strategies and the efficiency of local politicians, undoubtedly the highest chances in this rivalry have “cities with character” – which might be the cultural ambiance. In comparative studies and analyses, cities quite often are placed in different places, based on various economic, social, and geographical characteristics to reveal their best and worst faces. Policymakers and business representatives, but also

common citizens, use these results of city evaluation as a basis for considering advantages and setting targets for future developments, likewise making individual decisions to migrate for economic and non-economic reasons, i.e. changing the place of residence because of the desire to alter the social environment or to improve living conditions. Recently, the resiliency has become extremely topical because of natural disasters.

Positive scores in legitimate cities' rankings might serve as the crucial element of a city's marketing strategy. The Mercer, an influential consultancy portal suggesting the most favourable locations for business, recommends the following cities as the best ones in this respect: Vienna in Austria, Zurich in Switzerland, Vancouver in Canada, Munich in Germany, and Auckland in New Zealand. It takes into consideration factors such as climate, prevalence of mass diseases and sanitary standards, ease of communication and physical distance, as well as the quality of the local political and social environment, concerning the law and preventing the crime. In this ranking, Poland's capital Warszawa takes the 82nd place, next to Bratislava, Vilnius, and Port Louis in Mauritius (*Quality of living city ranking*, 2020).

Saskia Sassen (2009) examines rankings of various city's attractiveness, states that in recent years European cities have begun to dominate in that issue, while American cities have lost a lot. In the top twenty of the places, the agglomerations previously regarded as modern, such as Los Angeles or Boston, was taken by the "old-fashioned" Amsterdam or Madrid, mainly due to the high rating of non-economic (cultural) factors in them. The position of a city in such ranks may be important in specific areas or sections of the global market. However, this does not mean that it is about the best cities in general. As Sassen points out: "If we are not in the top ten and we think positively about our region, then we need to open our eyes to the significant differences when a company sits in Copenhagen wanting to avoid the much more expensive Frankfurt or London. The main issue here, then, is for cities to open up wisely in individual

aspects – that determines where investors will go" (Sassen, 2009).

Often the positions of cities in reliable arrangement emphasize most of the strengths, ignoring the disadvantages. Little attention is paid to the methodological limitations of arrangements in rankings, especially when they generalise and compare cities with different histories and present. In 2018, the weekly journal *Polityka* – together with researchers from the AGH, University of Science and Technology in Kraków – compiled a list of Polish cities where people can live the best life. Many factors were considered and divided into the following categories: education, leisure, housing, local government, work, environment, community, safety, health care, and communication. The higher the weighted average from all the categories, the higher was the position of a given city. As the authors explained, the methodology used to build the index complies with the current recommendations of the OECD and the European Union Commission in this area. Only objective and generally available statistical data, collected scientifically, were used for the analyses. Subjective data, such as the results of surveys or even representative opinion polls, were not noted. The primary objective was to identify the best or most attractive city in a general sense, which, in practice, amounted to a simplified approach, although different areas of reality require different conditions. The first three places were taken by, respectively: (1) Sopot – owing to winning in four categories, namely: environment, education, leisure, and community, as well as due to and high positions in the areas of availability of work, transport, and connectivity. Then it was followed by (2) Warsaw, whereas in most of the country's capitals it is easiest to get a job and earn the best money. Besides, it boasts good education, communication, and access to health care. There was 3) Kraków, which won its place on the podium by offering good access to health care, having the efficient local government, and the active local community (*Jakość życia w miastach*, 2018).

Surveys on the quality of life in eighty-three European cities showed an already well-known

outcomes: aggregated ratings of satisfaction with life in each city revealed high levels of fulfillment declared by at least 80% of the respondents. In sixteen cities, this level of satisfaction reached 95%, and in forty-six of them it was higher than 90%. Among the cities included, Denmark's Aalborg ranked first in satisfaction with a (99%) satisfaction level, while the lowest levels were reported in Athens (52%), Naples (34%), Palermo (28%), Miskolc (26%), and Marseille (25%). The levels of resident's satisfaction in cities under 100,000 population were found to be uniformly high. In the six smaller cities included in that survey, at least 95% of the respondents they were generally fulfilled; besides the above-mentioned Aalborg, these were Oulu (96%), Burgas (95%), Luxembourg (95%), Braga (95%), and Piatra Neamt (95%). The twenty-eight cities with satisfaction levels below 90% included fourteen capitals of the countries from within the European Union, with nine of them having populations between 1 and 5 million. In the ranking of satisfaction with living in capital cities with the percentage of satisfaction reaching 90%, Warsaw ranked equal to the Czech Prague, Irish Dublin, or Slovenian Ljubljana, with the percentage of satisfaction reaching 90% (*Quality of life in cities*, 2013, pp. 7–21). The high level of satisfaction with the quality of life was confirmed in subsequent surveys carried out under the same assumptions and methodology. It should also be added, that in the light of evaluations of twenty-two more detailed aspects that make up the perception of satisfaction (for example, the quality of the environment or the spotlessness of streets and squares), evaluations were no longer so positive.

A more recent compilation of assessments of the 2015 quality of life in 64 cities across Europe takes into consideration the index of purchasing power, levels of air pollution, house prices in relation to average family incomes, the index of the general cost of living, public safety, the health care satisfaction, usual commuting time, and climate quality (*Quality of Life in European Cities*, 2015). Correspondingly to the cited above, this survey

showed a clear prevalence of positives, but at the level of specific areas (for example, satisfaction with public transportation), differences between the results became more apparent. In about half of the cities, at least three-quarters of the respondents were satisfied with the public transport in their city (the highest levels of satisfaction were in Zurich at 97%, Vienna at 95%, and Helsinki at 93%). On the other hand, in 9 cities, less than half of the respondents declared approval with public transport in their city: in Bucharest (48%), Valletta (46%), Reykjavik (45%), Kosice (45%), Oulu (all 45%), while Naples (33%) and Rome (30%). The lowest levels in this regard were recorded in Palermo (14%). In general, satisfaction with public transport as one of the vital components of the quality of life was found as high in German and Swiss cities, but much low in Italian cities (*Quality of Life in European Cities*, 2015, pp. 8–9).

The well-known Polish nationwide inquiry *Social Diagnosis* distinguishes between two groups of indicators: “civilisational living conditions” and “lifestyle.” It takes into consideration the multidimensionality of the quality of life and include both living settings and assessments of one's own well-being. This approach combines subjective and objective indicators, on the one hand asking for a general evaluation of life (the level of satisfaction with “life in general”), and on the other hand – eliciting – partial assessments, covering nine distinguished aspects: general housing conditions, factual well-being, social capital, physical well-being, mental well-being, life stress, and the perception of social pathologies (Czapiński, 2013, p. 388). The holistic perception of the city as a place of living, which is a component of quality-of-life assessments, is an extrapolation of the valuations of individual areas, which are then transferred onto the whole city – notes Magdalena Szmytkowska in her geographical-humanistic analysis of the determinants of the urban space based on the example of attitudes towards the city of Gdynia (Szmytkowska, 2018, 81–93).

Neither the aggregation nor simplification of indicators in the city rankings do not reflect the



true attitudes and preferences of residents, although some of them merely attempt to ponder “soft” factors alongside with “hard” ones. Sometimes this reinforces stereotypes and clichés effective in social awareness, having also equivalents in the popular slogans. Thus, for example, in Britain the small county Northamptonshire announces the motto “Let yourself grow,” while the county Kent is “The Garden of England,” then County Durham is “The Land of the Prince Bishops,” and Warwickshire is the “Shakespeare Country.” The different variations of these labels are intended to serve the directed promotion of the so-called destination branding. Management of this already progressive business includes the following elements: brand creation, operational activities related to product positioning, promotion, protection, tactical activities (market building, creation of communication channels, and brand virtualisation) and, finally, strategic activities.

Within the same framework publicised are – though sometimes not clearly understood or suitably translated – narratives like “Glasgow’s Miles Better,” or “It’s Happening in Liverpool.” According to Sharon Zukin (2014), the beginning of city branding dates to the urban crisis of the 1970, when graphic designer Milton Glaser developed the world-famous slogan “I ♥ New York” for a campaign promoting the values of family life. Later, in the 1990, almost every city wanted to be as loved as New York and perceive as clean, safe, and open for business. City branding in recent years has evolved into an industry associated with tourism and the media, sports, and entertainment complex. Originally promotional in its design to attract new residents and business, now it is often associated with carefully designed advertisement campaigns intended to persuade people from so called “creative class” to settle down. From Las Vegas to Seoul, city governments have created bureaus or special organisations of tourism, mass convention and entertainment and spend a lot of funds to hire brand consultants up to create the showcase of the cities’ opportunities.

Within social-sciences literature, there are descriptions of cities drawn from an arbitrary set

of metaphors and a literary setting of characteristics. John Rennie Short (2006) has collected them into a compilation corresponding to the way of feeling their atmosphere: “city of networks”, “city of polarisation”, “city – niche of migrants”, “city of competition”, “city of gender”, “erotic city”, “political city”, “designed city”, “city of disorder” (Short, 2006). Other authors propose visions of perfect or ideal cities. For example, Tomasz Martyniuk’s (2011) tourist guide does not deny that Kraków is a truly “magic city”.

From the point of view of the assumptions of quality-of-life surveys and their evaluative character, it might be questionable to reduce the number of factors influencing the way individuals evaluate their life and satisfaction with it. Statistical-quantitative studies aimed at ordering the cities in terms of measurable aspects of the quality of life and stop at just them can sometimes head to misleading conclusions. As Agnieszka Jeran writes: “No one who knows Bydgoszcz, Toruń, and Wrocław will confuse these cities” [...] yet their statistical characteristics in many areas overlaps, and the results of studies on the quality of life in these cities can be considered surprisingly similar.” The three cities are located close to each other within one voivodeship. Although they occupy different positions in the ranking, in the light of representative quantitative research (using questionnaires) on quality-of-life measurements of most features, they turn out to be almost identical. The differences in the results of the findings probably reflect not so much the specificity of cities and their characteristics, but the side effects of the statistical quantitative surveys (Jeran, 2015, pp. 222–235).

Studies on the attractiveness of cities in Europe and the United States revealing that many attractive factors replicate on both continents. Positive opinions about cities as places to live are common due to the high level of public services and amenities boosting the comfort of everyday life, combined with certain characteristics of the social structure. Economic considerations are the first to be thought when making migration-related decisions: availability of work, satisfactory wages,

social security, and the adequateness of public services. These factors are decisive when it comes to the local population, but play a lesser role for the external visitors, who are more attracted by cultural and entertainment-related incentives. Analyses of the determinants of labour migration show that migration decisions are generally dependent on the employment opportunities. However, the second place is taken by the variously conceived quality of life, including such ecological aspects as climate conditions, easy contact with nature, and the availability of recreational areas. The third important factor is the housing situation. The fourth one – which does not mean it is less significant – is low crime and pathology rates. These findings show that among the factors influencing the attractiveness of cities and apart from purely economic factors, there are also considerations which can be described as qualitative. Also, in the case of the investigated attempts to encourage human capital to settle down, the economy is not the one resolving argument. In other words, an attractive region does not necessarily have to be tantamount equate to wealth in the economic sense (*Attractiveness of Regions to Migrants and Visitors*, 2020).

Other studies also come to analogous conclusions about the role of non-economic aspects: the beauty of the landscape, the existence of widespread recreational areas, the availability of public infrastructure facilities, as well as well-functioning health services, reputable schools, prestigious universities, and tourist attractions. Thus, of interest are not only cities with low unemployment rate and satisfactory wages. Nevertheless, as Thiess Büettner and Alexander Ebertz explain, even if wages in the region or city are satisfactory, high crime rates discourage migration-related decisions (Büttner & Ebertz 2009, pp. 89–112).

Most of the studies confirm the ambivalence and relativity. For many years, researchers have claimed that the quality of any subject has an objective dimension, but it is based primarily on the subjective component of a perceptual nature.

As Robert W. Marans asked (2011): “What do we mean by the quality of life? It is certainly a multifaceted concept, often used in the media and by politicians, although it is impossible to define it precisely. It is difficult to distinguish between the concepts of quality of life, well-being, satisfaction, and happiness” (pp. 11–12). Both “hard” and “soft” groups of criterias are linked by referring to the system of values and hierarchy of needs, shaping people’s economic and social behaviour as well as determining preferred lifestyles, models of consumption, and the attitude to wealth or socially acceptable and desired quality of life.

The sociological point of view is presented extensively by Ewa Rokicka (2013), who distinguishes five main currents of interest in the reflection on the quality of life: 1) the attention focusing on the protection of the natural environment, which shows that the attitudes towards critical aspects, like air pollution, water contamination, excess noise, etc., for the natural environment and for the people’s health is growing in importance for the common awareness; 2) the quality of life is considered through the prism of the state of health in the patient’s self-assessment, and it takes into account the impact of diseases and applied treatment on the individual’s functioning in the physical, mental, and social spheres; 3) the concerns related to the problems of urbanisation – focuses attention on particularly unfavourable effects of spatial development in residential areas, such as defective planning of cities, housing, excessive motor transport, or high density of agglomerations; 4) the stream based on sociopsychological motives concentrates on the negative consequences of the development of civilisation for individuals and for social life (such as social alienation, loneliness, and emptiness in human life); and 5) the answers focusing on the economic aspect of the quality of life, where quality is understood as the material level of life of an individual, local community, region, country, or even nation, and as such, it can be treated both as an explanatory variable, or as a determinant of economic development along with its effect.

The level of wealth and poverty and in particular their uneven distribution is critical for assessments of the individual and societal quality of life. To illustrate poverty well, signs such as unemployment rate, access to fresh drinking water, the availability of sewage and gas networks, life expectancy, the weight of infants and the proper child nutrition are used, in addition to financial ones. There are both comparative and valuing as descriptive (non-valuing) orientations in the explanation of the quality of life. Within the descriptive orientation, a distinction is formulated between the objective and the subjective qualities, argued by almost all researchers investigating the discussed issues. The objective dimension of the quality of life consists of such overarching factors as the standard of living, material conditions, and health (Rokicka, 2013, pp. 161–162).

What city life mean in the general perception? For Alexander Wallis (1967) the modern metropolises were a separate world, thus particularly interesting field of sociological research. They are vivid environments, fascinating in their diversity, exciting, colourful as a social environment, making it impossible to get bored with, and vibrant with energy. Living in a large city can provide constant, appealing experiences and stimuli. They are the centers of modern civilisation; each of them has unique and interesting features (Wallis, 1967).

One of the main advantages of living in a city is close access to culture, and for the followers of trendy activities cities always have a lot to offer: theaters, cinemas, museums, art galleries, dance halls, subject-based meeting places, and festivals. The comfort of living in the city is another point in its taste. Almost everything in the field of services is within easy reach thanks to the transportation system and even with walking distance. The public transportation reduces the need to own a car. Living in a city means access to jobs and the chances of finding suitable employment or boosting specialised qualifications. It offers career opportunities, which for many professions is a prerequisite. Getting suitable accommodation or achieve a proper education is easy. They are full

of attractions stores, offering fashion novelties. Every city is a unique blend of architecture and culture. On a social level, everyone can meet many interesting people with little or no effort. Cities attract interesting and dynamic individuals which creates flavour and makes them vibrant centres of events.

Sociological and anthropological perspectives on describing the quality of urban life take into attention mainly, though not exclusively, “soft” criteria. As Claude Lévi-Strauss (1964) stated in his “Sadness of the tropics: “One has the right to compare cities to symphonies or poems, they are objects of the same nature” (p. 127). This quote appeared in the foreword of Waclaw Piotrowski’s (1976, p. 7) empirically based study of the socio-spatial structure of Łódź.

The comparison of the structure and composition of cities to the work of art points in the direction of feeling, that means articulating judgements and opinions under the influence of receiving stimuli – basic material for the further narration of perception or valorisation. This concept was used in the studies on the cities and relates to the designate “communication.” Social sciences, especially cultural anthropology, have taken this anthropomorphic comparison seriously. A humanised city can “speak” to its audience-dwellers, just like poetry or painting to the reader and viewer, hence it can be interpreted in a variety of ways like a piece of art. This manifests itself in people’s attitudes and statements, from the common opinions of residents to scientifically based analyses, both of which can be the substance or data for further scholarly interpretation. In speaking by some ways and means to its audience, the city uncovers character, identity, and quality. Each of the cities should be treated in terms of unique and several characteristics typical for urbanity as a form of life. Within the Polish sociology, the general direction of the study of culture – and in this context the conditions and the quality of life – was outlined by Florian Znaniecki, who defined the city as a non-spatial, humanistic entire, displaying itself in human experience and activity. For this

reason, people living in the urban realm consider themselves “inhabitants” of the city; the material conditions of this residence exert an influence on their lives. “This does not mean, however, that they allow themselves to be entirely situated in this territory, like houses or streetcars. After all, they are not only bodies, but experiencing and active subjects, and in this capacity, they are not in the city, but – if I may express it this way – the city is in the sphere of their common experience and action, they create it as an overly complex social structure” (Znaniński & Ziółkowski, 1984, pp. 34–35).

### **The quality of life and the city’s cultural atmosphere**

As mentioned before, notions of the cultural atmosphere are difficult to define and parametrise, although it can undoubtedly be felt and remarked. Firstly, it is a symbolic representation of many objects or phenomena, based on typical images existing in individual or collective consciousness. Secondly, it consists in an awareness, feelings and sharing of beliefs about the ambiance of a given city and its landscape. Finally, it is something that corresponds to the spirit of the city (understood like the ancient *genius loci*). Such atmosphere can be understood and assigned to a whole range of terms with various meanings: aura, character, physiognomy, colour, character, specificity, style, properties. Though difficult to determine, it may function as a regarded and decisive criterion in any kind of appraisal. People born and brought up in the realm of a given city get used to and typically pay no attention to its nature and spirit, contenting themselves within the domestication, part of natural attachment to the place (city, housing estate, street). Yet an outsider, a sentimentally unmotivated observer, a passing short-time visitor, or a sporadic tourist, might have an enthusiastic or unpleasant opinion about it. Peter Critchley’s view on Liverpool might be an example: “It is a city to do something, to change, to try, a city with human dimensions, embodying and expressing

lightness of heart, passion, spirit, imagination, energy, diversity. It welcomes everyone. In terms of material resources, Liverpool has much to offer. It is a beautiful city, with more significant buildings than any other city in the UK, outside London. However, the city’s greatest asset is its people. They are the heart and soul of the city. The physical content, the structure of the buildings and the social forms of the city are in creative relation to the content – the individuals whose actions and interactions make up the social life of the city.” Critchley quotes a clipping from the *Illustrated London News* of May 15, 1886: “Liverpool ... has become a wonder of the world. It is the New York of Europe, a world city, not just of the British countryside” (Critchley, 2015). In contrast, prominent author John Steinbeck noted about the Big Apple that: “New York is a foul, dirty city. Its climate is a scandalous, its politics can frighten children, its traffic is madness and its competition murderous” (Steinbeck, 2003). According to numerous everyday opinions, Łódź is still mainly a working-class city, not deserving attention, even though the economic transformation thirty years ago exterminated Łódź textile industry and, on the other side, the richness of its 19th-century heritage is now fully appreciated. Gdańsk is still considered to be a city of shipbuilders (despite the museum-like present nature of its shipyards), and Scotland’s Glasgow is continuously referred to as a rude industrial city, even though it now leads Europe in terms of modern transformation.

Quotations above selected from many statements on cities refer to the impressions which can be summed up as “atmosphere.” This sort of ambiance seems to be indispensable, even though characterised mainly by metaphors and parallels expressing its general features, alongside with peculiarities. Some authors have proposed other terms and concepts semantically close to cultural ambiance. Richard Florida (2010) writes about “street culture,” thus defining its various components and stimuli as “... a rich mix of cafés, street musicians, small galleries, and restaurants, all cultural elements within which it is difficult to separate participation

from observation, creativity from the creator himself' (Florida 2010, pp. 172–173). Sharon Zukin, describing the downtown of New York, illustrate how the city's cultural environment, conceived as a mosaic of the ethnic groups, styles, and aesthetics that make up population, is constantly noticeable within the central and public spaces of this city, its streets, parks, stores, museums, and restaurants. Culture and its character, sometimes vague yet spectacular, manifests as the living presence of different people. Immigrants, civil servants, artists, street vendors, and police officers alongside thousands of beggars and homeless people embody this unique, eclectic *mélange* and character of the city (Zukin, 1995). Daniel A. Bell and Avner de-Shalit (2011) explain why philosophy and the social sciences should discover not something else, but largely all the "spirit of cities," that can be assumed as equivalent with cultural atmosphere. It is not easy, they argue, to theorise about what makes certain cities unique, and why their identities matter from a standardising point of view. In the "ideal" or "model" city, the maximisation of the various possibilities and advantages is undertaken according to current patterns. Modern middle-class dwellers take pride in living in an environment that makes their way of life more comfortable and inspiring compared to rural life, but they can also take satisfaction in living in an urban environment that is exceptional compared to other cities. As Bell and de-Shalit further explain (2011): "We call this pride an urbanity (civicism). It is rooted in the sense that the city is special [...]. A sense of community – something that seems to be as deeply embedded in human nature as, for example, the pursuit of personal freedom – must be linked to a communal feeling of particularity, which we also call ethos or spirit. [...]. In modern cities, another form of community has developed. While more and more people are experiencing a growing sense of cosmopolitanism, they also want to feel special. Cities allow for a combination of both cosmopolitanism and a sense of community rooted in that particularity. Residents take pride in their

cities and the values they represent and try to nurture their specific civic cultures and ways of life. Jerusalemites struggle to promote their segregated religious identity, Montrealers try to preserve their linguistic identity, etc." (Bell & de-Shalit, 2011).

Nine of the cities analysed by these authors can be employ in view of the leading features that give them distinct character and atmosphere: in Jerusalem it will be three great religions; in Montreal – two languages and cultures; in Singapore – one nation in two versions, i.e. traditional and super-modern; in Hong Kong – extreme commercialism and the utilitarianism of development caused by the scarcity of space; in Beijing – the demonstration of traditionally oppressive political power; in Oxford – a prestigious and intimate space of learning; in Berlin – tolerance for some behaviours and intolerance for others. Paris, in this convention, is a city of adventure and romances, while New York is a city of business, haste, and unrestrained ambition. Phenomenology describes the experience of cities through notions such as "character" or "spirit of place," "mood" or "magic." Yi-Fu Tuan proposed the term "topophilia," literally meaning love of place and affective connections between people and their physical environment, creating positive feelings. The opposite of topophilia is "topophobia" – an aversive attitude towards the environment, causing anxiety or depression (Tuan, 1987, pp. 92–113).

Similarly, the specific charisma of a city, especially a large one, can be considered as triggering fascination and encouraging positive evaluations. Like the impact of charismatic persons and their ability to influence followers or enemies, charisma can be something characteristic that cities possess. It can then include a uniqueness shaped by history or staged through modernisation; one can feel their symbolic meaning. People can declare complex feelings, as they do under the influence of tempting attention charismatics personalities, when they excite for history of the municipalities, and when they perceive a unique charm and

impression caused by the richness of their architecture or beauty of specific places.

In this specific environment charisma evokes many more meanings. On the one hand, it will be the metaphorical soul of a city, emanating from its history, urban composition, infrastructure, or certain buildings and public spaces. On the other hand, it will be the appeal of the crowd or some dwellers, their style and presentation, special appearance, or unusual behaviour. Artists, cab drivers, policemen, or just ordinary street passers-by; the amazing presence of all of them as well as the manner they speak, gesture, move, or dress can all contribute to a charisma that is indefinable, although noticeable almost to the naked eye. They all make up the cultural characteristics of cities (Majer, 2015, pp. 113–116). As Thomas Hansen and Oskar Verkaaik (2009) write on this subject: “Urban spaces have spirit and cities have souls. Some are dangerous and threatening but attract attention; others are marked by beauty and excess; still others frighten with monotony and commonness. These qualities are contagious and can permeate the character of people living in such cities” (Hansen & Verkaaik 2009, p. 5).

Social sciences have often drawn their rationales for interpreting the atmosphere of cities from fiction, literatures and poetry, and great writers have repeatedly expressed their feelings on that subject, usually stipulating that they cannot even come close to capturing its essence. An example of the split between the apotheosis and anathema of the big city can be seen in Italo Calvino’s (2013) following reflections: “It is New York, a city that is neither exactly America nor Europe, that gives off a surge of extraordinary energy that you can immediately feel as if you had always lived here, and at certain times, especially in the Upper City, where you can sense the bustle of big offices and ready-to-wear factories, this city lands on your head as if it wanted to crush you” (Calvino, 2013, p. 194).

The atmosphere of a city always grows out of basics of the nations or region’s culture; in other words, is an emanation of cultural diversity.

Thus, can be understood as a kind of compilation of symbols and messages, within the boundaries set by the physical geography and human imagination or emotions. It does not necessarily have to coincide with the current reality. The media of a cultural atmosphere can be tangible objects with distinct identification features, present in social consciousness as distinguishing signs and markers. Usually significant artifacts play the role of messages. As Anna Karwińska (2008) writes, “...such features as antiquity, aesthetic value, uniqueness, originality, authenticity, which evoke historical and emotional associations, make a given area unique and shape the identity of a place. It is worth noticing, however, that not only historical or monumental objects that refer to aged traditions, but also centuries – also old traditions form the basis for shaping the collective identity [and thus the cultural atmosphere – note by A. M.]. For building the identity of local communities, and sometimes only of certain groups, seemingly average places may be important, which nevertheless create history and symbolic space for a selected group of people. Sometimes humble and ordinary elements of space become significant and important, complementing the dominant values of another culture in the space; they also play an important role in shaping urban cultural landscape and the local identity” (Karwińska, 2008, pp. 90–96)

The characterisation of cities in contemporary scientific literature exemplify the growing number of entries dealing with the exemplary or desirable cities, i.e., cities as they ought to be from the perspective of ideas, assumptions, theories, or concepts. Many of these visions can inspire and draw attention to important, if not crucial, aspects of urban reality. Yet many of them are hypostases or images belonging to so-called wishful thinking. In recent decades, sample concepts of cities and their functions have appeared one after another: the sustainable city, the smart city, the green city, the competitive city, the creative and attractive city, and lastly the slow city. The newest adjective having some inspirational power is the postulate

that cities must be resilient and having the ability to respond quickly and effectively to various natural catastrophes, such as the devastating hurricane Katrina in New Orleans or unexpected terrorist attacks like the one in New York City. A handbook explanation of a resilient city is that it should be dominated by forms of development and physical infrastructure strong enough to resist the physical, social, and economic challenges such as fossil fuel depletion and negative climate change, natural disasters, or extremist attacks (*Resilient Cities*, 2020). There are a growing number of scientific works devoted to the factors determining the resilience and vulnerability of cities and referring to the assessment of this resilience in terms of a strategic diagnosis (Majer, 2020, p. 188).

Cultural atmosphere can be likewise described in the context of the so-called cultural tourism. Paulina Kosowska (2013) quotes one of its definitions "...group or individual expeditions of a tourist nature, in which the encounter of the participants of the trip with objects, events and other qualities of high or popular culture, or the increase of their knowledge of the surrounding world organised by man, is an essential part of the programme of the trip or constitutes a decisive argument for the individual decision to undertake or participate in it" (Kosowska, 2013, p. 19).

What ultimately causes that a city, especially a large one, may be considered as good environment for living in a qualitative sense, and having a proper cultural atmosphere? Among many factors, one can probably mention the countless opportunities to meet new people all the time, the unrestrained possibilities to consume, liberty to dress naturally and spend free time any way, the exceptional architecture and art, and finally, the ease of moving easy around the territory. Trying to reach deeper into the reasons for approval or dissatisfaction might reveal other aspects. In the overall sense of good quality of life in each city, the state of the economy plays a significant role. Today, the level of economic development is largely the result of the successive phases of urbanisation and the creation of new jobs,

both in traditional sectors and in the field defined as cognitive-cultural. However, it turns out that culture is as much important as economy. Thus from this perspective, the perception the quality of life is determined not only by official "temples of art" (museums and galleries with world-famous works, or renowned theaters and concert halls), but also by smaller showcases run by local artists, halls of chamber performances, boutiques with unusual clothing, and often connected catering establishments, known jointly as places of culture. An example in this respect is the Off-Piotrkowska development in Łódź, which is a set of boutiques and eating places or the now defunct Fabryka Trzciny (Reed Factory) in Warsaw.

Assessments of a city's cultural climate is a very sensitive and might vary depending on a person's situation, emotional state, weather of the season and even part of a day. In every physical urban space, there are points communicating certain contents to which some people can have a personal, emotional, or sentimental references. These can be areas whose charm is recognised by the locals, but also by tourists and seldom visitors, and which become hallmarks or evoking symbols of a given locality, able to arouse concordant or contradictory emotions. The feeling towards such places and the communities or the whole city influences one's mood and are capable to generate the desire to join and build one's own future with them. It also reflects historical and currently verified knowledge of a place and helps predict its future. Psychologist Edward Relph (1976) wrote that one can imagine a city as a mosaic of buildings or other physical objects, but the person perceiving these objects sees far more; they are beautiful or ugly, useful, or unnecessary, they can be a citadel or factory, an eye-pleasing specimen, an object of property rights; in short, they are meaningful and evocative. Relationships with such places and objects are as indispensable and varied, or as satisfying or disagreeable, as relationships with other people are (Relph, 1976, pp. 45–47, 141).

By some scholar's modernity is understood as an period that differentiate people and disperse

nations or communities. For Zygmunt Bauman (2006) most people are contemporary nomads without belonging or at least they have a nomadic personality. According to him, this is especially apparent when it comes to the young generation, for whom it is normal to be in many places at once, here today and there tomorrow (Bauman, 2006, p. 92). It is a fact that substantial parts of the societies, including those of Europe and Poland, are increasingly on the move or more precisely: under the continuous process of changes. According to the new ontology, the world around is a sort of experience which should be treated as a narration generated from a certain perspective, never as an accomplished unit. For many people, this is neither a comfortable perspective nor a sure leaning point. Thus, such a vague position may frequently turn into an attachment to certain places because of its cultural atmosphere. Most people feel an emotional connection – positive or negative, pleasant, or awful – with the places related to the present day and a memory of the past, and sometimes even with some prediction of the future. Feelings felt towards such places and the individuals or communities that fill them conjointly socio-spatial ecumene – micro polis, that is fragments of the city considered to be “one’s own,” belonging to its inhabitants – individuals, family, friends, colleagues, neighbours, acquaintances. It is, in other words, sort of personal city within a city, a kind of *pars pro toto* (a part for the place of the whole), but also a metaphor corresponding with the desire to give a real structure to the way people interact with their urban environment (Majer, 2015, p. 7).

Likewise, as the way the identity of people and objects cannot be adequately explained within the framework of science, so the urban atmosphere can be simply a prefiguration with greater or lesser explanatory capacity. Difficult to the full comprehension, though may evoke sentimental associations, and awaken the memory of experiences that co-create the foundations of personality and the fundamentals of individual biographies. According to Fritz Steele (1989), “Sensation of place is the feelings of an individual

in a particular environment (such as experiencing stimulation, joy, effulgence, or the like). [...] A spirit of place is a set of qualities that give some part of a space a specific atmosphere or personality (like a feeling of mystery or identity with someone else or a group) [...]. The environment (setting) is the individual’s immediate surroundings, including physical and social elements” (Steele, 1989, p. 48).

In well-developed countries, urban areas play the role of drivers of economic growth, social change, and political integration. Dynamic and prosperous cities can attract, establish, and maintain both the human talents and investment capital necessary to create economic opportunities and sustain high levels of living. Globalisation, developments in technology and the growing importance of knowledge in the economy have forced modern cities to seek new sources of revenue and job creation in sectors other than industry, primarily in specialised services and culture. This has raised the threshold of expectations from the current principles of urbanism: it is to consist of a high quality of life and the most favourable conditions for living, working, studying, resting, and entertain. For politicians and city managers, this is a challenge that can no longer be ignored or avoided.

## Conclusion

Cities are vibrant, dynamic spaces, focusing human efforts in every field. They also have the greatest potential for continuous improvement of the quality of human life. For millennia, people have come to cities with hopes and dreams for a better life. Today, many cities managed to raise the material standard of living higher than any time in history, although not equally for everyone. In many cities of the developed and less developed world, circumstances of urban life are appallingly poor. Even so cities continue to attract people because of the quality of life.

I shall end these considerations with a quote from Lewis Mumford (1961) who predicted the importance of the city’s atmosphere by making



the following, persuasive comment: “The mission of the city is to continue the conscious participation of people in the historical process. Through its own complex and enduring structure, the city greatly enhances the ability to interpret these processes and to take an active, formative part in them, so that each phase of the spectacle that is its stage bears to the highest possible degree the stamp of consciousness, the seal of purpose, and the colour of involvement. Improving all dimensions of life through conscious community, rational communication, technological mastery, and above all, changing reality has been the highest task of cities throughout history. And this remains the primary reason for their continued existence” (Mumford, 1961, p. 576).

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Konrad Sarzyński

## The Quality of Life in Polish Cities with Poviats Rights

### Abstract

*Objectives:* The study aims to measure the quality of life in cities with poviat rights and analyse whether differences depend on the number of city residents.

*Research Design & Methods:* It was hypothesised that the greater the number of inhabitants, the higher the quality of life in a given city. This hypothesis was verified with calculations based on the Statistics Poland data in the form of synthetic and auxiliary indicators.

*Findings:* The results confirmed the hypothesis. The highest scores characterise the largest Polish cities regarding health, ecology, and economic and social spheres. Simultaneously, it was the smallest cities with poviat rights that had the highest security and education levels.

*Implications / Recommendations:* All cities with poviat status need to improve ecological awareness, as it is an area with the lowest scores regardless of the size of the city.

*Contribution / Value Added:* The presented model uses commonly accessible data and is easy to replicate, although it might give less precise results than a custom-made analysis.

*Keywords:* the quality of life, standards of living, city

*Article classification:* research article

*JEL classification:* I31

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## Introduction

The quality of life is an extremely complex and subjective concept. For example, in a spatial context, different people can perceive the environment as attractive or unattractive. Some people's key factors in choosing a place to live will be irrelevant to others. Therefore, attempts to quantify the quality of life are doomed to simplification and references to indicators representing the fulfilment of needs.

The study aims to measure the quality of life in cities with poviats rights, and determine whether there are differences depending on the number of residents. It was hypothesised that the greater the number of inhabitants, the higher the quality of life in the city. To verify this hypothesis, data was collected from the Local Data Bank from Statistics Poland (LDB SP). The quality of life index was calculated using the zero unitarisation method. The value of this indicator, together with the information on the number of inhabitants of individual cities, made it possible to verify the hypothesis. The analysis was enriched with the calculation of the quality of life in six areas – social sphere, education, economy, ecology, safety, and health.

## Understanding and measuring the quality of life

The quality of life is a comprehensive concept that is of interest to scientists from many fields – economics, sociology, psychology, philosophy, and medicine. As a result, many definitions capture the quality of life from various perspectives specific to a given field. Trzebiatowski points to four main groups of definitions: existential, life-oriented, needs-oriented, and distinguishing between objective and subjective trends (2011, p. 26).

The economic perspective naturally tends towards the concept of needs and their fulfilment as a measurable and quantifiable feature. In a meta-analysis of research on the broadly understood happiness in cities, Papachristou and Rosas-Casals

(2019) indicate that the concepts of 'quality of life' and 'well-being' are those most frequently chosen by researchers. The former one most often relates to the housing situation, economic development, or health, while the latter one is used primarily in psychological approaches to the subject (Papachristou & Rosas-Casals, 2019, p. 202).

The quantitative expression of the quality of life makes it possible to average and compare the units and groups of units. Therefore, it is evident that the economic understanding of the quality of life will be built around the fulfilment of needs. Objective determinants of the quality of life can include wealth, living conditions, the availability of health care, environmental safety, social relations, social support system, social activity, or personal development (including education) (see Trzebiatowski, 2011, p. 28).

Contemporary mega-trends, commercialisation, and consumerism can pose serious threats to the quality of life, especially in cities (see Kudłacz, 2017, p. 51). The weakening of social ties and the commercialisation of space make it more and more difficult to meet the needs in the social sphere. Public space is also at risk, including access to landscaped green areas. In effect, there can be a decrease in the social activity of the inhabitants. Also, participation in and access to culture can be an important factor influencing the quality of life. As Sanetra-Szeliga notes, participation in culture can positively affect the subjectively-perceived health condition as well as the sense of life satisfaction (2017, p. 56).

The subjectivity of the perception of the quality of life often demands interviews and questionnaires to be used for their measurement. On the one hand, it gives an extremely valuable opportunity to thoroughly understand the needs and the degree of their fulfilment, especially those of a higher order, which escape quantitative measurements (Trzebiatowski, 2011, p. 28). On the other hand, such research is time-consuming and costly. The 2018 study by Kotarski (2018) in Rzeszów, Poland, carried out with the use of the WHOQOL-

BREF questionnaire, shows that key indicators influencing the quality of life are age, wealth, and health, emphasising the prevalence of overweight or obesity. A sense of safety is also vital for the quality of life, and this applies to both public safety, manifesting through the number of crimes or their detectability, as well as road safety (see Murawska, 2016). Data corresponding to these factors is available in the LDB SP and can be employed to build a quantitative quality of the life satisfaction indicator.

A nationwide survey comparing the quality of life in all cities with poviats rights would require a large-scale research project and a significant investment of funds in its implementation. Therefore, the search for quantitative indicators of the quality of life – based on the existing statistical data – is justified and is the only solution that allows low-cost and small research teams to monitor the quality of life in a large number of places.

The selection of indicators is crucial for obtaining reliable results. However, it can differ considerably between countries or cultures. The availability of data also differs (Sobol, 2019, p. 355). This means that indicators designed for Polish cities can be imprecise in other countries and may not be applicable due to the lack of data.

Quantifying the quality of life does not include individual, subjective feelings expressed through categories such as well-being. However, this approach reflects the “socially recognised set of values” through the eyes of decision-makers (Czepkiewicz & Jankowski, 2015, p. 102). As the authors rightly point out, the quantitative approach is, therefore, not sufficient for examining and describing the quality of life to a full extent (Czepkiewicz & Jankowski, 2015, p. 102). Still, it is the most effective and precise way to make comparisons between many entities.

In search of alternative methods of measuring the quality of life, Brzeziński (2018) suggested the analysis of participatory budgeting. It is an interesting concept based on the assumption that the projects submitted by the residents reflect both the areas of life of insufficient quality as well as

the highly-developed ones. However, this is an indirect and circumstantial method, and, therefore, it is susceptible to false interpretations more than a statistical data analysis.

## Methods

Data from the Local Data Bank from Statistics Poland was used for the analysis. The study covered cities with poviats rights, which allowed access to a wider catalogue of data than in the case of research carried out at the commune level.

Limiting the study to cities with poviats rights excludes small cities. This restricts the obtained conclusions, but even in the case of analysis at the level of communes, the smallest cities would not be included, or the data would be very imprecise. The location of small cities in urban-rural communes would make it impossible to accurately diagnose the situation based on statistical data presenting the commune as a whole, including rural areas. On the other hand, the category of cities with poviats rights is so wide that it gives a good picture of the situation in medium-sized and large cities, including small cities below 50,000 inhabitants, such as Krosno or Świnoujście, and Warsaw with nearly 1.8 million inhabitants. For the analysis, cities with poviats rights were divided into three categories (see Table 1): small (up to 100,000 inhabitants), medium-sized (100,000–250,000 inhabitants), and large (over 250,000 inhabitants).

The selection of indicators to measure such a broad and underlying concept as the quality of life is problematic. This is well illustrated in the report titled *Jakość życia w Polsce. Edycja 2017* [*Quality of Life in Poland: The 2017 Edition*], in which the emphasis was placed on the comprehensiveness of the collected data. As a result, data come from different sources and from different years. It is available only at the nationwide level, which limits its usefulness when analysed at lower levels.

As Szaban notes, there is no universally accepted set of components of the quality of life, which results directly from the ambiguity and multidimensionality of this term (2019, p. 30). The author attempted to

Table 1. Size categories of cities with powiat rights

Category	Cities
small cities (up to 100,000 inhabitants)	Biała Podlaska, Chełm, Grudziądz, Jastrzębie-Zdrój, Jaworzno, Jelenia Góra, Konin, Krosno, Legnica, Leszno, Łomża, Mysłowice, Nowy Sącz, Ostrołęka, Piekary Śląskie, Piotrków Trybunalski, Przemyśl, Siedlce, Siemianowice Śląskie, Skierniewice, Słupsk, Sopot, Suwałki, Świętochłowice, Świnoujście, Tarnobrzeg, Zamość, Żory
medium-sized cities (100,000-250,000 inhabitants)	Bielsko-Biała, Bytom, Chorzów, Częstochowa, Dąbrowa Górnicza, Elbląg, Gdynia, Gliwice, Gorzów Wielkopolski, Kalisz, Kielce, Koszalin, Olsztyn, Opole, Płock, Radom, Ruda Śląska, Rybnik, Rzeszów, Sosnowiec, Tarnów, Toruń, Tychy, Wałbrzych, Włocławek, Zabrze, Zielona Góra
large cities (over 250,000 inhabitants)	Białystok, Bydgoszcz, Gdańsk, Katowice, Kraków, Lublin, Łódź, Poznań, Szczecin, Wrocław, Warszawa

Source: own elaboration based on the LDB SP data.

Table 2. Indicators used to calculate the quality of life index (d – destimulant, s – stimulant)

Indicator	type
<b>social sphere</b>	
the dependency ratio	d
migration balance per 1,000 residents	s
natural increase per 1,000 residents	s
foundations, associations, and social organisations per 10,000 residents	s
<b>education</b>	
gross enrolment rate (primary schools)	s
places in kindergartens per 1,000 children in the age group 3–6 years old	s
expenditure per capita on Section 801 – Education	s
<b>economy</b>	
gas users (% of total population)	s
share of newly registered entities from the creative sector in the total number of newly registered entities	s
registered unemployment rate	d
registered entities per 1,000 residents	s
own income per capita	s
<b>ecology</b>	
waste collected selectively in relation to total waste	s
share of parks, lawns and estate green areas in the total area	s
<b>safety</b>	
the rate of detection of perpetrators of crimes identified by the Police (in total)	s
crimes identified by the police in total per 1,000 residents	d
road accidents per population of 100,000	d
fatalities per population of 100,000	d
<b>health</b>	
spendings per capita on Section 851 – Health Protection	s
doctors per 10,000 residents	s
infant deaths per 1,000 live births	d

Source: own elaboration based on LDB SP data.

translate popular indicators, including those from the aforementioned Statistics Poland report or *Social Diagnosis*, into data available in the LDB SP, resulting in 28 indicators. They constituted the starting point for the construction of the set of indicators used in this analysis. Ultimately, 23 indicators were selected. After the stage of data collection, two indicators were discarded due to very low variability (coefficient of variation below 5%), namely the percentage of sewage users and the percentage of sewage treatment plant users. Table 1 contains all the components of the quality of life index.

One of the best methods of normalisation in the case of the stimulant-and-destimulant analysis with a different scale of values is zero unitisation (see Kukuła, 2012), which reduces all values to the range from 0 (worst result) to 1 (best), enabling a simple and intuitive comparison of scores. The sum of the indicators is a synthetic value of the quality of life in each city with poviat rights.

The zero unitarisation method uses the following formulas:

$$z_{ij} = \frac{x_{ij} - \min_i x_{ij}}{\max_i x_{ij} - \min_i x_{ij}} \text{ for stimulant variables}$$

$$z_{ij} = \frac{\max_i x_{ij} - x_{ij}}{\max_i x_{ij} - \min_i x_{ij}} \text{ for destimulant variables,}$$

where:

$z_{ij}$  – unitized value of  $j$  for item

$x_{ij}$  – value of  $j$  for item

$\min_i x_{ij}$  – minimum value of  $j$

$\max_i x_{ij}$  – maximum value of  $j$

To make the interpretation of the results easier, the quality ranges were determined on the basis of the arithmetic mean and the standard deviation (Table 3). Cities where the quality of life has fallen below the average value by more than the value of the standard deviation should be interpreted as places where there can potentially be problems in meeting the needs of the inhabitants. At the other end of the scale, there are cities with results

higher than the average by more than the value of the standard deviation, most often characterised by high results in almost all of the examined aspects.

To verify the hypothesis, the data was visualised in the form of a histogram, together with values of the arithmetic mean for each of the size groups of cities with poviat rights (Figure 1).

The larger the city, the higher the quality of life in it. The group of cities with more than 250,000 inhabitants clearly stands out, with most of them achieving above-average results, with the exception of Łódź (8.96) and Szczecin (10.17). The average results in the other two categories are similar, and most cities scored results close to the national average (10.58). In the smallest cities with poviat rights (below 100,000 inhabitants), the quality of life was mostly lower than the average, i.e. only every third city achieved an above-average result. In the medium-sized cities, it was almost half of the cases.

The next step was to compare cities with poviat rights in six areas (Figure 2). This allowed a deeper analysis – the general quality of life index does not express the differences in individual aspects, averaging the situations in which a city might score very high in one aspect and very low in another.

The largest cities dominated in three areas, namely healthcare, economy, and the social sphere. This is mainly due to the concentration of specialised medical services, the largest companies, as well as creative sectors and dynamically operating non-governmental organisations in these cities. Attractive for foreign investors with scientific and infrastructural backgrounds, they are natural economic leaders in their regions. The availability of specialists and advanced technologies also contributed to the higher quality of healthcare. The overall attractiveness of the city, in turn, had a direct impact on the indicators assigned to the social area – large cities are not so severely affected by the ageing of the society, they also have the best-developed offer in terms of social activities.

The smallest cities with poviat rights had the best situation in terms of safety and education.

Table 3. The criteria of the quality of life

the quality of life	criteria	range
moderate	$< (x - \sigma)$	$< 9,14$
decent	$x - \sigma$	9,14 – 10,58
high	$x + \sigma$	10,58 – 12,02
very high	$> (x + \sigma)$	$> 12,02$

Source: own elaboration.

On the one hand, the higher level of security is due to less traffic on the roads. On the other hand, the largest cities can invite more crimes. They can be less detectable due to crimes committed by visitors, who are often attracted by the wealth of the inhabitants or the luxurious offer of shops. A greater anonymity of the largest cities' residents is probably also affecting the results. In terms

of education, smaller cities were characterised by better availability of kindergartens and higher expenditure on education per capita. The former indicator was the lowest in the largest cities. On the other hand, the level of expenditure on education in large cities can be lower due to scale (larger schools), which can lead to a more effective use of funds.

In the area of ecology, the indicators are gradually increasing along with the city size. Waste segregation is related to the residents' greater environmental awareness and sensitivity, and partly also due to the environmentally worse living conditions and daily contact with air or noise pollution. In the smallest cities, a lower share of parks and squares can also result from the feeling of "closeness" to nature – natural green areas in the form of forests, lakes or other recreational areas can be located in a short distance

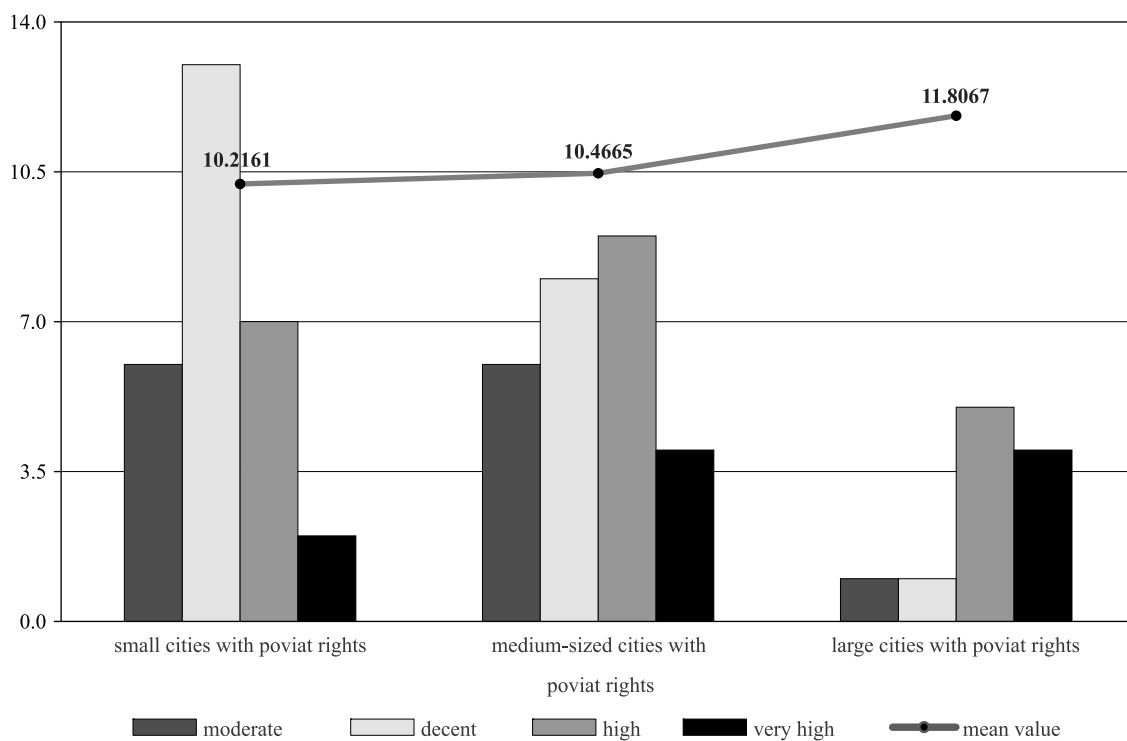


Figure 1. The histogram of the quality of life in cities

Source: own elaboration.



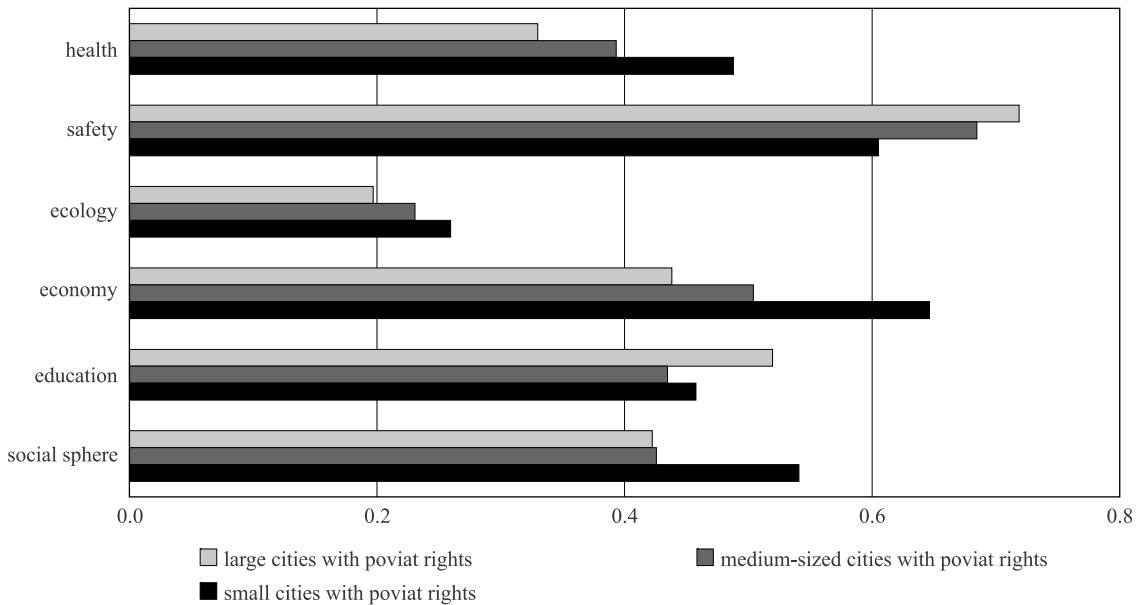


Figure 2. The mean value of indicators from six sub-categories of the quality of life

Source: own elaboration.

from the place of residence, even if they are outside the city's administrative boundaries. Due to their spatial extent, residents of the largest urban centres should have access to greenery within the administrative boundaries of a given city, most often in the district. In large cities, green zones outside the city's administrative borders are located even several kilometres from residential areas and are inaccessible by foot.

## Conclusion

The study aimed at measuring the quality of life in cities with poviats rights, highlighting the differences depending on their size. The quality of life indicator was proposed with the use of data from Statistics Poland. In the form of a complementary analysis, the situation in six areas was examined (social sphere, education, economy, ecology, safety, and health).

All in all, the largest Polish cities are characterised by the strongest position in the economic and

social areas, which is not surprising and results directly from their strong position at the regional and national levels. Also in the case of ecological issues, greater activity of large cities is visible, probably due to greater awareness and higher expectations of their residents. Small cities, on the other hand, are safer and offer better access to education. All cities with poviats rights need to improve the ecological awareness, as it is an area with the lowest scores regardless of the size of the city.

Data analysis for cities with poviats rights has two main limitations. Firstly, it does not take into account the smallest cities, which makes it unlawful to extend the conclusions to all Polish cities. Secondly, it takes into account only the city within its administrative boundaries. In the case of the largest cities, this may not fully correspond to the functional urban area, covering several municipalities from the surrounding area. This should be taken into account when analysing

the obtained results, but it does not diminish the comparability of data.

The presented analysis is an example of a survey that can be carried out cyclically for the entire country. Although data availability restricted the study to cities with poviats rights, their diversity allowed for a relatively good reflection of the situation in medium-sized and large cities. The ease of replication is an undoubted advantage and makes the method handy in monitoring changes in the quality of life in the future.

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Frank Eckardt

## **Enjoying Water in a Fragmented City: The Rhine–Herne Canal as a Mirror of a Changing Society**

### **Abstract**

*Objectives:* This article aims at increasing the knowledge on how cities are changing by processes of post-industrialism.

*Research Design & Methods:* The article reviews the historical process of the use of water in the Rhine–Herne canal and the surrounding city of Gelsenkirchen.

*Findings:* The article shows that the canal has regained significance to people. However, depending on the social status, the canal means something different now. For the urban poor, it is again a place for refreshment and free swimming. For the middle class, it is a popular spot for dining out and acquiring a sense of maritime atmosphere.

*Implications / Recommendations:* Water in post-industrialism requires a socially differentiated understanding.

*Contribution / Value Added:* The article contributes to a critical review on contemporary urban planning policies regarding water.

*Keywords:* Rhine–Herne Canal, water, swimming, social polarisation, de-industrialisation

*Article classification:* theoretical article (conceptual article)

*JEL classification:* O29, Z13

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## Introduction

Climate change has also made water an important issue for cities that did not have to worry about their water supply for a long time (Urich et al., 2013). This also applies to cities in Europe, which through modern urban planning have so far been able to provide problems with the disposal of wastewater and the supply of clean water (Gandy, 2005). Water became an elixir of life that for many people in the course of the 20th century was associated with relaxation and freedom from stress in the world of work. Today, this aspect of urban water is less the focus of specialist discussions, while urban planning is primarily concerned with regaining the ecological qualities of waterways and making the necessary adjustments to climate change (Haaren & Galler, 2011; Libbe & Nickel, 2016).

The Ruhr area in Germany is a good example of this. For two decades, great efforts have been made to restore the Emscher river to its natural state (Cormont, 2012). The activities of the “International Building Exhibition Emscherpark” (Faust, 1999) have received a lot of recognition in the professional world as well as in the society (Shaw, 2002). It is also noticeable that the social significance of the Emscher – and, above all, the Rhine–Herne Canal next to it – has hardly received any attention.

As will be shown below, this canal has fulfilled an important social function for the workers and their families since its construction. As a free space in an industrialised landscape, it had an identity-creating meaning, and shaped a working-class culture that is now largely lost. Through the modernisation of industrial cities and social democratic reform policies, offers such as swimming pools and later leisure facilities – such as the “sports paradise” – were set up, and as such were supposed to enable the population to have access to a safer and more pleasant form of swimming and bathing. Such offers got more and more determined and devalued by the economic process of deindustrialisation as well as by the social fragmentation. Dealing

with the public baths also reflects how society falls apart into different living environments if it is not held together by common work contexts.

With the following case study – namely the observation of the Rhine–Herne Canal over time – the academic knowledge on what the processes of post-industrialism mean for the life of the affected people can be improved. Therefore, the author intends to contribute to an international debate on post-industrial cities (Leary-Owhin, 2016; Eckardt & Morgado, 2011). As recent studies have acknowledged a particular way of experiencing the landscape and nature of these cities (Zimpel, 2019; Włodarczyk-Marciniak, Sikorska, & Krauze, 2020), the following pages are meant to deliver an insight into the social meaning of water. Methodologically, such cities are representing a case study motivated by the work of Robert Beaugard’s *Voices of Decline* (2003), but due to the space limitations, this article cannot unfold the variety of sources of his book.

### An icon of industrialism – the Rhine–Herne Canal

Transport lines have been crucial for the Ruhr area to develop as the largest industrial area in Europe at the end of the 19th century. Coal mining and steel production shaped the economic geography in all regards: in addition to collieries and blast furnaces, the residential colonies were built and railroad lines cut through these residential areas, leaving little space for the little free time that the workers and their families had. The high density meant that epidemics such as cholera could still spread at the beginning of the 20th century. Wastewater was concentrated in the immediate vicinity of the houses. Fresh air was also not available due to the massive burning of coal. In short, the residential area was bad for health and offered little opportunity for relaxation and recreation. The strong population growth that resulted from industrialisation made the situation even worse. Toxins discharged into the groundwater, and running water by industry led to extreme

contamination of drinking water to such an extent that already in the 1870s, the residents of the Emscher area were increasingly susceptible to diseases of all kinds. Malaria was endemic and five to ten times as common as in other places of the Ruhr area, and typhus mortality was twice the Prussian average (Wehling, 2014, p. 83).

The situation did not fundamentally change in the decades before the First World War. The concerns of industry had absolute priority and instead of taking greater account of living conditions in urban planning, the landscape was further fragmented for infrastructure buildings and industrial plants. The railway lines were no longer sufficient for the transport of coal, and industrial goods and the construction of the Rhine–Herne Canal was supposed to ensure the further expansion of the transport routes. The construction of the 45-kilometres-long canal took over eight years (1906–1914) and cost around 60 million German marks (Eckoldt, 1998). At times there were three excavators and 200–250 people deployed on the construction site. Many of the workers came from abroad, presumably from Poland. They lived in a specially established canal workers' quarter in the north of Herne (Schmidt, 2009, p. 94). The construction was directed by the Royal Canal Construction Directorate, which had been founded for this purpose in 1906. Partly, the canal was laid in a river bed of a small river at the same geographical position (the Emscher). When the construction was planned first, the Emscher was meant to be transformed into a shipping lane. The Emscher Canal Committee had already been set up in 1873 and a plan for canalling this small river was presented two years later. Obviously, however, the capacity of this river was regarded as not sufficient, and regardless of the realised canalling, a new and bigger canal was assumed to be needed (Sympher, 2012). With the Rhine–Herne Canal, a missing link between the Duisburg harbour and the already built Dortmund–Ems Canal was closed. Already in 1915, over 3 million tons of cargo were transported on the Rhine–Herne Canal; in 1918, it was three times as much (Schmidt, 2009, p. 95).

Twenty-two harbours were built, of which some were also linked to single coal mines, such as the harbour of “Unser Fritz” in Wanne Eickel, where up to 318,556 tons of coal (1922) were shipped (Adolph, 1927, p. 106).

As a result of the construction of the canal, the industrial landscape continued to expand and compact along this waterway. An industrialised space was created with a highly dense ensemble of bridges, cranes, rails, warehouses, lines, and a wide variety of buildings. For the people of the Emscher region, however, this canal also meant that they now lived near flowing water. While the Emscher itself was only used as a sewer pipe, the new canal was a kind of river that quickly became something special in the perception of the residents. The canal was quickly adopted as a swimming opportunity, especially by children and young people. More precisely, it was about jumping into the canal. With the many bridges over the canal, jumping into the water became a very popular leisure activity where one could show courage, because the ship traffic had to be carefully observed. In fact, swimming in the canal was not only dangerous because of the high volume of ships, but also because people in the Ruhr area did not know how to swim. Small and sometimes larger accidents, some with fatal consequences, were common. To this day, however, swimming in the canal has an unbroken positive status and is considered a cultural working-class tradition that otherwise hardly exists in Germany.

### **My city – valorising water**

“Meine Stadt ist kein Knüller  
in Reisekatalogen  
kein Ferienparadies  
mit Sonnengarantie  
sie ist ein  
kohlenstaub-getränkter Riese  
der seine schwarze Vergangenheit  
im Rhein-Herne-Kanal  
blank wäscht.”

(Ilse Kibgis, 2017, p. 10)

[En. “My city is not a big hit/in travel catalogs/no vacation paradise/with sun guarantee/she is a/coal dust-soaked giant/his black past/in the Rhine–Herne Canal/washed clean.]

This poem by Ilse Kibgis, titled “My City”, is probably the best known one by this poet from Gelsenkirchen; she wrote it in 1977. Kibgis worked all her life in this city on the Rhine–Herne Canal as a cleaning lady, in a washing saloon, or as a waitress (Kirbach, 2017). Her poems found recognition late and can now serve as an important and rare testimony to how the people in the Ruhr area perceived their homeland and what they valued about it. It is no coincidence that the Rhine–Herne Canal is featured at the beginning of the poem. The canal had become particularly important for Gelsenkirchen. It divides the city into a northern part and a southern part, and thus is located centrally. However, this “city centre” does not include any classic facilities such as those offered by cities that have grown over centuries with their marketplaces, town halls, and bourgeois residential facades. This centre is a place that lets one feel a piece of freedom in the midst of work and poverty. Ilse Kibgis put this into words with another of her poems, namely one titled “Auf der Kanalbrücke” [En. “On the Canal Bridge”]:

“eine Prise Wind  
im Gesicht  
scharf die Konturen  
schneidend wie ein  
Scherenmesser  
  
ein bisschen Spucke  
abgetrieben in die  
Böschung  
  
ein Himmel mit  
Rauchglaswolken  
  
Hochöfen  
die mein Blickfeld  
abstecken  
  
Sonnenuhren  
die langsam gehen

Emscheraroma  
das mich  
chloroformiert.’

(Ilse Kibgis, 2017, p. 20)

[En. “On the canal bridge/a pinch of wind/in the face/sharp contours/cutting like a/scissors knife/a little bit of spit/aborted into the/embankment/a heaven with/smoked glass clouds/blast furnaces/which is my field of vision/marked out/sundials/who go slowly/Emscher aroma/that me/chlo-roformed”]

Standing and jumping from the canal bridges always happened in the horizon of the industrial plants and yet with a view of the sky, which in the Ruhr area was seldom smog- and cloud-free until the 1970s due to the many exhaust gases. The belated sundial that Kibgis speaks of here expresses the longing that people nevertheless were filled with under the overcast sky.

Besides Kibgis’ poems, this area has never entered literature, films, or other forms of cultural communication. In general, the Ruhr area – and in particular the canal – has been regarded as devoid of culture and simply “dirty” – a stigma that last until today. After the Second World War, the Ruhr area experienced the second renaissance, and Germany’s economic resurgence is closely related to it. Because of its economic importance, both the Weimar Republic and the Allies did not grant the Ruhr area independent political representation in the reorganisation of Germany after the war. Despite many plans to give the approx. 5 million people more political say and visibility, this has not happened yet. One reason for this was the well-known left-wing orientation of most of the workers, which in 1920 led to the largest armed conflict in Germany since the peasant wars in the Middle Ages in the so-called ‘Ruhrkampf’ [‘the Ruhr battle’], where 80,000 workers took up arms against political repression (Gietinger, 2020). Social democrats and communists, however, established a diverse working-class culture at the local level, which included, for example, intensive club life, sport, allotment gardens, and union representation.

An outstanding example of the increasing quality of life was also the planning for the Grimberg outdoor pool, which was carried out in 1927 by the city of Gelsenkirchen. As a replacement for the completely inadequate outdoor swimming pool at the head end of the city harbour in Schalke – which had to be abandoned as a result of multiple accidents and the effects of mountain damage (sinking of the beach) – a new facility was to be created that met all requirements. It was difficult to find the right terrain for this. In the city centre, there was a lack of the necessary open spaces; in addition, the smoke and soot development was unfavourable to the construction of an outdoor swimming pool. The original intention was, therefore, to create the planned facility in the immediate vicinity of the Rhine–Herne Canal. Finally, an area of thirty-one acres was leased by the city from the owners of the Emscher for the construction of a spacious outdoor swimming pool and a recreation facility. Horticultural facilities and berths as well as sand areas and smaller trees – and sports and playgrounds – gave the outdoor pool a high value to stay in, and ensured that the outdoor pool was not only seen as a sports facility, but also became the centre of leisure activities. As a result, the outdoor pool was almost always very busy, as can be seen in Photograph 1. The pool actually offered the opportunity to do active sport, and with a 50-metre pool, a 10-metre diving platform, and a spectator terrace that could accommodate around 2,500 people, the outdoor pool was also important for German swimming. In 1958, the German Swimming Championships took place there. Together, the three pools contained around 8,000 cubic meters of water. The sports and general swimming pools were filled with canal water via a pumping station that ran through a filter system, which meant the filling of the family pool with tap water. At all times it has been a real concern for the city council and administration to maintain and improve this facility. Even during the Second World War, the Grimberg pool was kept open almost to the end, and made accessible



**Photograph 1.** Stadt Archiv Gelsenkirchen, FS V-20878, Hans Rotterdam, 1953, *copy rights: ISG.*

to the population again in June 1946 after the war damage had been removed. Still, it was closed in 1983.

### **Times of hope and a society in transition**

When the Grimberg outdoor pool closed, the Ruhr area had already been undergoing a change in its industry for more than two decades. One was about the process called ‘Strukturwandel’ [‘Structural change’], which initially represented itself as deindustrialisation, which meant the closure of mines and steelworks as well as other industrial areas, such as textile production. As a result, many people lost their jobs, and cities were faced with the cost of structural unemployment. This,

in turn, meant that the cities of the Ruhr area went into a massive debt so that they could deal with the specific needs of their residents and so that the social infrastructure could be maintained. For the cities along the Rhine–Herne Canal, the closure of the Graf Bismarck colliery in Gelsenkirchen was a particular shock (Rudolf, 2014).

This mine was one of the most efficient ones in Europe and as such consistently produced more coal – and faster – than the previously closed mines. Since 1958, the competitiveness of German coal was in trouble and there was talk of “coal crises”. Politically, however, the main aim was to oppose this by means of lowering the price of production for investments in increasing efficiency. In particular, the Graf Bismarck colliery had been extensively modernised shortly before its closure. When it closed in 1966, 7,000 workers lost their jobs. The conservative state government reacted incomprehensibly and without a concept. The furious protests of the workers, who felt they had been abandoned, meant that the Social Democrats were able to take over the state government for the first time. They should shape politics continuously until the year 2000. Their concept was that the economy must be actively reformed. This included, among other things, the founding of mass universities in the Ruhr area as well as the establishment of new industries, such as the Opel car factory in Bochum.

However, these programmes did not prevent structural unemployment from developing in the Ruhr area, which, in turn, brought about further social problems. The industrial landscape of the Ruhr area changed in such a way that large areas were no longer used and were partially contaminated, and new industries settled in clusters, most of which are located in the southern cities of the Ruhr area. In particular, the cities on the Rhine–Herne Canal were largely decoupled from the new dynamism of re-industrialisation and the service economy. People who worked in the old coal and steel industry were mostly retired early or were long-term unemployed. For the cities, this meant that social costs were incurred that were

not compensated by the national social security funds or the federal government. From the 1980s onwards, a downward social spiral developed in which the de-industrialised cities had to take on more and more debt and at the same time were able to invest less and less. This, in turn, led to social problems becoming more acute and concentrated in some parts of the city.

During the 1960s and the 1970s, however, there was still great optimism and it was believed that structural change was a temporary phenomenon. The general belief in progress led to continued investments in social infrastructure. The building of the ‘Zentralbad’ (‘Central pool’) in Gelsenkirchen was an expression of those hopeful decades. The planning had begun in 1965 and the closure of the Graf Bismarck colliery one year later did not dissuade the initiators. The indoor pool was realised as planned and opened in 1971. It had the great advantage that swimming was also possible in the colder months, i.e. *de facto* most of the year. An indoor swimming pool was opened in the north of Gelsenkirchen in 1955, and another one was completed in 1962 in the Horst district. However, both pools are not easy to reach for large parts of the city and the modern central pool should also be used as a sports facility where swimming competitions could take place. Providing children with swimming lessons was an important motive for the construction of the central pool. Its geographical location was also intended to underline the central function of the inner city of Gelsenkirchen.

Despite the fact that the number of jobs in industry continued to be cut and deindustrialisation was shaping the region increasingly, local politicians did not allow themselves to be confused in their belief that investments must continue in the city’s social services. Another bath was planned at the end of the 1970s. With the ‘Sportparadies’ [‘Sports paradise’], a multifunctional pool has now been built near the Rhine–Herne Canal, which has both indoor and outdoor areas, and, therefore, offers swimming all year round. Additional leisure activities were built, such as bowling alleys or a sauna. The ‘sports paradise’



is located in the immediate vicinity of the sports facilities of the FC Schalke football club and the newly founded Berger Feld comprehensive school, which also stood for the social reform claim of social democracy. In 1984, the ‘Sportparadies’, which cost around 25 million DM at the time, was opened. The water areas in the bathing paradise are distributed over three pools as well as six pools in the covered area. The offer is complemented by a 10-metres-high diving platform in the outdoor pool area as well as a 58-metres-long slide with a separate catch basin in the indoor pool.

In addition, an ice rink was built, which is now also used as an event hall under the name ‘Emscher Lippe Halle’. Conceptually, therefore, the ‘Sportparadies’ is not a classic swimming pool, but, rather, an attempt at a modern leisure facility that should also offer families a place for all-day stays. The prices of the tickets are significantly higher than in the other baths. The indoor pool is designed as a wave pool that produces artificial waves every hour and is, in fact, not suitable for sporty swimming. The sports paradise is, therefore, an early example of the slowly developing ‘adventurous society’, in which swimming is replaced by the experience of water and in which leisure activities are in the foreground. Thus, it also represents the requirements and needs of a society in which work and integration through the work in society no longer functions the way it used to in the industrialised city. Offers such as the ‘Sportparadies’ were not intended to compensate for the loss of the world of work, but they offered the opportunity to temporarily escape from worries related to this.

### **A double return of the canal**

Today, thirty years later, the ‘sports paradise’ is to be demolished. The city council of Gelsenkirchen decided in November 2019 to dismantle this facility and the central pool, and rebuild it at the same location. In the 1980s, the social situation in the Ruhr area’s cities developed almost dramatically. Unemployment solidified at

a high level and the cities could no longer get out of the debt trap. The swimming pools were dependent on subsidies from the city. However, the city tried to enable poor families to continue visiting the baths with grants and, as a result, there was a lack of funds to renovate the swimming pools. The structural and visual condition, especially that of the central pool, could only be poorly improved. Its dilapidated condition became a symbol of the decline of the city, which has since lost massive numbers of inhabitants.

The poverty perpetuated, and in many parts of the city solidified over generations to such an extent that child poverty in Germany’s Gelsenkirchen is one of the greatest. In rankings of urban development, the city often takes one of the last places. Local politics refers to the successes that have been achieved in spite of the limited scope of action of the heavily indebted city. Nevertheless, the everyday situation in many old working-class neighbourhoods is difficult for many citizens, as private investments in apartments and buildings have also failed to materialise. Anyone who has money and wants to own their own apartment or house prefers to build a new house rather than invest in the existing residential buildings. As a result, a social geography has developed that has brought about a polarisation of social differences in the immediate vicinity.

The most haunting example is the newly built ‘Stölting Hafen’, which is a kind of marina on the Rhine–Herne Canal (Photograph 2). The Stölting company, the owner of the facility, advertises itself on its website as follows: “Your nautical oasis of wellbeing right on the Rhine–Herne Canal. On an area of more than 10,000m<sup>2</sup>, we offer you peace, quiet, relaxation and idyll in a state-of-the-art port facility. Maritime flair near you to relax, stroll, feast and relax.” One can anchor their boat there all year round and pay up to 2,000 euros a year for it, depending on its length. The port is now connected to a company that offers boat tours. The marina is structurally designed in such a way that one can sit on the edge of the harbour. The benches and other seatings invite one to linger,



**Photograph 2.** The Stölting Marina

*Source:* the Author's archive.

and in the eyes of many people from the city, it actually arises as a kind of maritime flair that is otherwise not to be found anywhere in the Ruhr area. The gastronomy – which consists of two restaurants, a bakery, and an ice cream parlour, and is priced in the middle range – is also important.

It can be said that the place has been well-received by various social groups, but mainly by the local middle class. The marina is connected to a newly built residential area that offers two-family detached houses. The houses are built in rows one behind another so that only the first row has a view of the marina. House prices are likely to rule out a social mix of residents, and the housing offer can only be accepted by the middle class. The houses are equipped with small gardens, making them particularly attractive to families. The resultant new district is geographically isolated. There are only two access roads, both of which connect to bypass roads. The district is not within walking distance. There is a public transport connection, but it should not be decisive for the accessibility. The marina, which is called 'Graf Bismarck' after the nearby former mine of the same name, is a motorist enclave and a social island. Beyond the bypass roads there are the districts of Bismarck and Schalke-Nord, which suffer enormously from unemployment and poverty. While the structural and social decline

continues there, the marina offers a way out for people who can afford it.

The social polarisation of the city has paradoxically led to the fact that the so-called junk real estate – i.e. houses in which nobody wants to live anymore because of the poor maintenance – have become popular for immigrants from Romania and Bulgaria for about ten years. These people often accept these poor living conditions, because they only have a temporary job. Their work is so badly paid and hard that no one else wants to do it. One can speak of structural exploitation, which also means that the people from Southeastern Europe pay far too high rents for the poor accommodation. The residence of these migrant workers has led to a great deal of strife in the neighbourhoods in question, which, in turn, has further burdened the already disadvantaged districts and has led to further stigmatisation of these neighbourhoods.

Bismarck, once named after the colliery, is now the place where, on the one hand, a middle-class enclave has emerged and, on the other, a poor area has established itself in which the cultural integration of migrants has to be achieved. Since 2015, Gelsenkirchen has also been involved in accepting refugees, mainly from Syria. After decades of shrinking, the Ruhr area, which has a long history of integration and also a lot of experience with the reception of migrants, has to deal again with the task of creating the social infrastructure for the integration tasks through the Romanians and the refugees. After schools had been closed and downsized in many places, a new construction is now being pushed. The 'sports paradise' and other facilities are still available for social leisure activities. It is to be expected that the new building will also be constructed with the sensitivity to accessibility to all people. Even so, even the smallest entry fee is likely to be hefty for many new immigrants. If one drives to the Rhine–Herne Canal today, they will again see many people jumping into the waterway, which is now hardly used any more. It is mostly migrants and refugees who enjoy this free refreshment. At the edge of the canal, one can have a picnic with



**Photograph 3.** Reusing the canal

Source: the Author's archive.

friends or families, and some people unpack their inflatable boats (Photograph 3).

## Discussion

The Rhine–Herne Canal shows that the social significance of water has changed since industrialisation. Clean water as a vital source was of primary importance in urban planning during the development of the Ruhr area, and yet the construction of the canal and the expansion of the industrial landscape were both formative. The largely socially homogeneous – i.e. poor – residents appropriated this canal themselves, which gave them a feeling of togetherness and freedom. Thus, the canal became part of a spatial orientation and it represented a self-image of an egalitarian working-class culture. Despite the attempts to modernise cities in a reform-oriented and socially democratic manner, this has largely been lost through de-industrialisation. This is easy to understand with regard to the importance of water. The attempts to create spaces through the ‘Zentralbad’ and the ‘Sportparadies’, in which places are provided for an inclusive urban society, became too expensive in the long run. In effect, the baths mutated into places that were also affected by stigma and decay. With the decline of the reform-oriented spa culture, the Rhine–Herne Canal was rediscovered.

This time, however, people appropriated the place in a socially selective manner. While the middle class have found an island place to live and tend to spend their leisure time in the Stölting Marina, migrant children in particular return to the canal to jump into the refreshing water in summer for free. The fragmentation of the city continues in its joy of water, and difficult questions of social justice are thus addressed (cf. Finewood, 2015). In a city with limited financial resources, the question arises as to for which place – and thus also for which social group – the communal finances are legitimately used. Will the strong interests prevail over the weaker ones in the allocation of funds? In addition, a question arises as to whether the joy of water can again be used to set up a room that brings different social groups back into contact, at least for the time of a joint visit to the pool. Certainly, one cannot expect too much from the new construction of the baths in Gelsenkirchen in this respect, but the enthusiasm for water of all social groups in the city offers starting points for an integrative perspective.

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Dorota Jopek

## Water Spaces as Urban Activity Nodes\*

### Abstract

*Objectives:* In the contemporary cities there are two main development challenges. The first one is related to changes in residents' lifestyle (e.g. social and physical activity). The second one is associated with those aspects of climate change which have severe consequences for the city dwellers' safety and comfort. The conducted analysis determines the potential of particular forms of water areas and their development in creating local centres – nodes of activity.

*Research Design & Methods:* The subject of the conducted scientific research was the water areas of Cracow. Fragments of the Vistula waterfronts were selected as an example of a linear element, and water reservoirs were chosen as surface elements. The study is based on observations and interviews conducted during field visits.

*Findings:* The analysis of Cracow's water spaces has shown that not all of them can create activity nodes, which is mainly due to particular areas' high seasonality of use. The city's natural areas' development and use must be carried out with full respect for their natural values. The nodes of urban activity should not be identified only with the flagship public spaces of the city, such as the main squares and parks. These places should be created throughout the entire city, with access to all city residents, i.e. those living in more or less populated areas. Such spaces may be different in their spatial form, but should have a common denominator, namely social integration.

*Implications / Recommendations:* The article suggests that the potential of creating nodes is related to a specific place's multi-functionality, its influence range, and its ability to generate users' activity. The urban nodes' polycentric system needs to be considered during the development planning. The system's main aim should be to integrate all city areas by means of a communication network that would be of good quality and quantity.

*Contribution / Value added:* The presented approach opens up possibilities for analysing urban connections and functionality.

*Keywords:* urban nodes, blue-green infrastructure, public spaces, waterfronts

*Article classification:* research article

*JEL classification:* Y80

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## Introduction

Water is the basis of the cities' ecosystem functioning, which co-creates the blue infrastructure system. Its multifunctional forms can also be diversified, i.e. either natural or shaped by humans. Water in the urban context is most often associated with greenery, creating a green-blue relationship that should always be considered<sup>1</sup>. This example of synergy creates a broad framework for urban planners, who, by urban design, create a healthy and friendly environment for city residents. They shape the inhabitants' daily existence and thus influence the quality of their life in various dimensions. That is why such spaces have become a crucial element in the process of contemporary, dense cities' development. Quoting Webe Kuitert, Januchta-Szostak issues a reminder that "water is a changeable friend and friendly enemy" (2010, p. 96). Therefore, both positive and negative effects can be associated with the presence of water in an urban area. As a natural factor of the city landscape, water is subjected to forces of nature, which must be respected in land management. Climate changes and the decreasing amount of water resources in Poland<sup>2</sup> meant that water could not be treated only as a "decorative" element of an urban space. The role of water in the strengthening of local centres can be very beneficial. Linear water forms can create a well-connected system of a city's public spaces that increase their accessibility. Such a system should include public spaces at both citywide and local level. The latter ones are significant in shaping

the local identity and a sense of belonging to the area's community.

This article aims at showing the potential of the city and water in shaping the urban activity nodes throughout the city. The subject of the conducted scientific research included the water areas of Cracow. Fragments of the Vistula waterfronts were selected as an example of a linear element, and water reservoirs were chosen as surface elements. As a result of the analysis, it was possible to determine the potential of individual forms of water areas and their development in creating local centres, namely nodes of activity. The study is based on observations and interviews conducted during field visits.

## City and water

Since water resources used to be one of the significant factors in deciding on a location of cities, the relationship between city and water has a long history. In the 19th and 20th centuries, that union was dominated by economic functions, since water was an essential element of transport and industry. For many years, the city was perceived as a composition of human-made elements. In this context, water had only practical dimension due to excessive pollution, which was an unattractive and sometimes even troublesome addition to the cityscape. According to De Meulder (1997, pp. 48–55), the era of "clean urbanism" was associated with the absence of water in urban design, often hidden in underground pipes or canals, reduced to an element of technical infrastructure. As De Meulder and Shannon (2008, pp. 5–6) note, it is not so much the reappearance of water in the centre of urbanist interest that is understandable. Still, the omission of this topic during the heyday of urbanism in the 19th and 20th centuries seems strange. Considering the over 2,000-year-old tradition of building cities, water – artificial or natural – was the keystone of the built urban system. Water as an element of urban spaces became popular and was repeatedly discussed in scientific publications, which affected the water

<sup>1</sup> The need to treat water and greenery together as a blue-green infrastructure was one of the conclusions of the discussion panel as part of the Mobile Session no. 5 during the 6th Congress of Polish Town Planning (20–22.06.2018, Gdynia).

<sup>2</sup> According to the expertise prepared on the initiative of the Living Earth Coalition – and in cooperation with the Heinrich Böll Foundation and the WWF Poland Foundation – it is in the group of countries threatened with water deficit, and national water resources are almost the smallest in Europe (Borek et al., 2020).

presence in urban projects<sup>3</sup>. Kazimierz Wejchert wrote about water as an urban composition element in the following way:

water – whether as a permanent reservoir, lake, pond, swimming pool or as a river, is one of the fascinating and constantly changing elements of the urban spaces. Reflecting the colour of the sky and walls, giving the floor and ceiling a common tone increases their height. It binds the image together, in which there are real and reflected vertical lines in the water surface. The variability of the water surface depending on the lighting, wind, watercolour is rich material for the urban composition. (1997, p. 99)

As noted by Nyka (2013, pp. 118–119), in the 1980s, along with the recovery of abandoned industrial areas, the topic of integrating the built cities and the natural environment became more and more popular. This unifying view of nature and culture includes visual aspects related to cities' identity, history, spatial form, or architecture. The issues of natural revitalisation, i.e. restoring the balance of urban ecosystems, are also fundamental. This term means a set of activities aimed at creating a friendly urban environment. The critical element of such spaces is providing residents with carefully maintained cultural and natural heritage (Przesmycka, 2005, pp. 53–59).

## Urban spaces

For many years, the words of Jane Jacobs that 'the city is people', or that of Jan Gehl that 'cities should be for people', have been repeated. Such statements expose that shaping urban space should take place with consideration of the needs and preferences of future users. Regardless of how different these needs are, it is necessary to point out those that seem universal. Therefore, there are two main leading design conditionings. The first one is related to changes in residents' lifestyle (e.g.

<sup>3</sup> Worth mentioning are, among other titles: Pluta, 2018; Haupt, 2011; Nyka, 2013; Januchta-Szostak, 2009; Kusińska, 2017; Zachariasz, 2014).

social and physical activity), while the second one is associated with those aspects of climate change which have severe consequences for the city dwellers' safety and comfort.

Unexpected situations such as the COVID-19 pandemic became a reason for engaging in reflection on urban space. These unlikely circumstances emphasised what kind of spaces cities need most. Space is an essential factor in shaping optimal psychophysical living conditions, which gained an additional dimension during the pandemic. The events of 2020 confirmed that cities implementing residents-friendly space development could function much better in a difficult period. In this context, worth mentioning are programmes that ensure equal access to essential services, strengthening the functioning of local city centres, building social ties, and supporting various forms of social activity. The recapture of city space for people is also related to creating public spaces, pedestrian and bicycle citywide networks, and green areas accessibility within ten to twenty minutes for all residents. These activities positively impact the improvement of the quality of city life (places of physical activity, therapeutic gardens) as well as environmental issues (air pollution, heat islands). The effects of the pandemic are already noticeable in how urban space is perceived or designed, but all the consequences are long-term<sup>4</sup>. All the social distance requirements – especially those related to blue and green infrastructure – emphasised the importance of the public space. Apart from offering greater open space accessibility, they allow residents to interact with nature or engage in various sports and recreational activities. When domestic and foreign trips are limited, recreational spaces in cities take on

<sup>4</sup> These changes will certainly impact the shaping of space, including in the field of work (especially in the office) or trade. The obligation of social isolation accelerated the development of remote work systems or virtual purchasing by several years or more (depending on individual countries or cities).

a new dimension by means of shaping leisure time and holiday space<sup>5</sup>.

There are different forms of water in urban spaces. In developing cities' water areas, their specificity should be taken into account – in particular their ecological values. The function equated with water areas is the recreational function, which includes various bathing areas with city beaches and sports infrastructure. They are associated with all forms of greenery arranged as parks, squares, or developed rivet waterfronts. Apart from these spaces, there are areas where humans act as observers with a minimum of their interference. They have the most outstanding natural values, which should be retained and protected.

### Water space as a node of activity

Waterfronts generate the unique character of urban spaces. Anna Januchta-Szostak (2011, pp. 146–149) defines two basic spatial systems: linear and nodal. Additionally, she points to a particular type of nodal water public spaces, namely bridges. The uniqueness of these structures is that, on the one hand, they provide the possibility of

efficient and collision-free communication (...) because bridges not only hold the banks together but also create gates along the waterway, which is also a public space. On the other hand, (...) bridges as viewpoints provide a unique opportunity to perceive river banks. Simultaneously, the bridge itself is usually a landscape dominant, exposed by

<sup>5</sup> The impact of the pandemic on urban space was the subject of the scientific seminar organised by the Sociology Section of the PTS on May 28–29, 2020, where the author as well as Professor Karwińska delivered a joint lecture entitled “Crown-city: In search of the concept of a “coping” city”. This topic is also the subject of ongoing research and analyses on the ways of designing and using urban spaces in the pandemic-struck era; examples include ‘Planning for post-COVID cities’ (<https://www.rtpi.org.uk/research/2020/december/planning-for-post-covid-cities/> – accessed on January 4, 2021) or ‘Community ties’ (<https://knightfoundation.org/wp-content/uploads/2020/05/Community-Ties-Final-pg.pdf> – accessed on May 20, 2020).

the water foreground and reinforced by a reflection. (Januchta Szostak, 2011, pp. 146–149)

Therefore, rivers, formerly treated as physical barriers in the cities' spatial structure<sup>6</sup> are now more appreciated for their landscape values. They provided openings or vantage points, allowing one to perceive the city from a unique perspective. The definition of an urban node is often associated with the term of the centre as an area with a high concentration of buildings and functions, the intensity of social activity, and transport accessibility. The node can thus be defined spatially and functionally in the urban tissue, combining the diversity of urban functions and activities. Sometimes, one of the functions becomes dominant, as is the case with communication or commercial-service functions. However, the common denominator of a well-functioning node is always people and the intensity of social interactions. Usually, this intensity is related to the satisfaction of the residents' needs. Jan Gehl (2013) defined three types of social activities in space, namely: *necessary activities*, related to the fulfilment of people's duties (e.g. going to work), *optional activities*, resulting from people's choices regarding the area in which they want to stay (e.g. playing sports), and *social activities*, i.e. choosing a place that offers opportunities for social contacts. Guranowska-Gruszecka and Łaskarzewska (2018, pp. 10–11) indicate the difference between urban nodes and nodes of the city. They point out that the former are characterised by the concentration of functions, i.e. activities related to urbanity, while the latter are part of a multi-layered metropolitan structure. As examples of urban nodes, they list, among other things, city centres, district and neighbourhood centres, areas around public transport stops, university campuses, science parks, and technology parks<sup>7</sup>. In this study, the scope of analysis is limited

<sup>6</sup> These qualities had already been noticed by the aforementioned Kazimierz Wejchert (1974).

<sup>7</sup> The author had previously undertaken an attempt to define urban activity nodes (Jopek, 2018).



to urban nodes – here referred to as the nodes of urban activity – because their main attribute is the activity factor, i.e. social integration.

City users' needs regarding access to nature are related to the city's new development challenges. Hence, urban green spaces linked to recreation become key spaces with the most excellent activity and urban integration. Recently, the interest in cities' water areas has increased, as evidenced by the many revitalisation projects in these areas. In general, city waterfronts also gain an additional value, namely the possibility of creating attractive bicycle and pedestrian communication networks.

### The city and the quality of life

Jacek Szotysek (2018) points out that “the quality of life shaped by the city's surroundings has a significant impact on people's happiness” (p. 29). He also notes that due to “this issue interdisciplinary approach, (...) environmentalists will, for example, point to the cleanliness of the environment, logisticians on the issues of mobility and accessibility, economists on the issues of social security, and sociologists on social cohesion” (Szotysek, 2018, p. 31).

Marcin Wnuk (2013) speaks in a similar vein:

The historical determinants of research on the quality of life are rooted in ancient philosophy when representatives of two main philosophical currents dealt with the phenomenon of perceiving, understanding and explaining happiness. The quality of life was then equated with happiness, and the further development of this approach resulted in its transfer to the field of psychology and other social sciences. (p. 285)

Urban space is an active factor influencing and significantly shaping human behaviour<sup>8</sup>. To paraphrase Winston Churchill's thought – first, we shape space, and then space shapes us. The

broader context of this original statement, including buildings and other urban elements of landscape – such as greenery or water – is a significant sign of change in city development planning. Currently, the quality of the urban landscape is buildings and natural but urbanised space elements. Also, in urban areas of increased density, the adverse effects of insufficient care for the natural layer of the urban space became noticeable. Greenery plays a fundamental role in creating a friendly and healthy urban space for people as well as in minimising the harmful effects of urban islands of heat, noise, air pollution, etc.

The spatial development method creates place identity and transforms a physical space into a meaningful place. The variability of the criteria for assessing the quality of life is related mainly to the variability of socio-economic conditions; their importance depends on many factors, including the size of the city<sup>9</sup>. At the same time, it is doubtful whether the tendency to create attractive urban spaces also entails specific threats. Bierwiazzonek (2018, pp. 43–44) points out that shaping public space is a kind of reflection of the era. The turn to the attractive functionality of public space for residents in contemporary cities is not surprising. The consumer's roles – and especially roles of the “consumer of impressions” (Bauman, 2000, p. 99) – have been mainly replaced by civic attitudes and a reflective view of individual identity and relations with the surrounding world. Thus, cities and their public spaces are constructed by consumption. A preventive measure for this consumerist attitude to urban spaces is social participation, i.e. dialogue with local communities and awakening social responsibility for space; this will offer a chance to create space and places which are important and identified as one's own.

<sup>8</sup> The influence of space on human behaviour is an interdisciplinary research issue. In the field of urban planning, one can recall research and theories e.g. by Wejchert (1974), Lynch (1960), or Bonenberg (2010).

<sup>9</sup> The quality of life in the city is the subject of many interdisciplinary research projects and scientific considerations, including Szotysek (2018).

## The blue node spaces of Cracow

Cracow's hydrological system is based on the Vistula and its tributaries, which conditioned the city's development for centuries. In addition to the river system, an essential element of Cracow's hydrographic system is stagnant water reservoirs, both natural and artificial, created through human activity. Apart from their natural values (including natural habitats), they have great landscape values and fulfil significant recreational functions. Water reservoirs located in the city of Cracow include: Zakrzówek, Zesławice, Zalew Nowohucki, Staw Dąbski, Przylasek Rusiecki, Zalew Bagry, Staw Płaszowski, and Stawy Bonarka.

In line with the spatial differentiation of water areas (Table 1), it was assumed that only linear and surface landscape components might show the potential for creating activity nodes<sup>10</sup>.

Table 1. Type and form of water elements in space

Physiognomic components	Water forms
Spot components	small water forms with some surface features (e.g. small ponds), fountains, other decorative forms
Linear components	rivers, streams, creeks
Surface components	reservoirs, lakes, ponds, swamps, seas, oceans

Source: own elaboration.

For this study, the following two groups of criteria for water areas were adopted in order to define the potential of space within the blue-green infrastructure in the context of creating activity nodes<sup>11</sup>:

<sup>10</sup> This analysis does not include point elements because of their size. It is assumed that they can be an element of an activity node, enriching its functional, compositional, or aesthetic values. However, this aspect requires a separate analysis.

<sup>11</sup> These criteria were defined in reference to the features that municipal local centres should meet (see: SARP, 2015, p. 8). However, due to the specificity of the development of water spaces in Cracow, it was found that the concept

### a) the main criteria:

- contain an element of generally accessible public space; – in the case of green areas, this can include, among others: landscape interiors within them, meadows, sports and recreational spaces around water reservoirs or along rivers, city gardens (including community gardens);
- are located in the vicinity of a residential development (500 metres from pedestrian access);
- have good transport connections with other parts of the city, especially in terms of pedestrian and bicycle connections;
  - are multifunctional;

### b) additional criteria:

- are connected with residential areas (they are located not far from places of residence, i.e. approx. 10–15 minutes within walking distance);
- are frequently visited by a large number of users from various age and social groups;
- they are arranged in an attractive and functional way, creating friendly and safe conditions for rest and recreation for all users.

The most critical factors in creating places for social activity include accessibility, location, transport facilities, and multi-functionality. *Accessibility* is related to unlimited space use; the fulfilment of this criterion covers areas managed by public entities as well as private areas that offer public access. *Location* concerns the spatial and functional situating within the city structure; it is related to the primarily residential vicinity, whose inhabitants become potential and permanent users of the place. In the case of water spaces, *transport facilities* to create local sites of activity mainly concern the accessibility of walking and cycling. In this context, the quality of communication connections is also essential, i.e. safety and the quality of communication routes. Places that can be accessed through wide and high-quality

of a node of an urban activity is more reasonable for individual locations, which nonetheless remains in close relationship with the concept of a 'local centre'. Hence, the above-mentioned item was the source material for the formulation of one's own set of criteria.

pavements, and which offer recreational and green areas, will be visited more often. The adequately designed space should also be inclusive and accessible to the elderly, the disabled, or people with young children. In linear elements, mainly perpendicular connections that create links with the neighbouring areas and other parts of the city are considered. Last but not least, an area's *multi-functionality* is about the coexistence of various functions (the analysis assumed that there should be at least three of them); in the case of water areas, the most frequent activities are recreational (walking), sports (opportunities to play sports, including water sports), natural (valuable natural resources), cultural (cultural objects and sites presence), and commercial (catering, shopping, and service facilities).

Additionally, three additional criteria were formulated. The first is about the connections with residential areas, i.e. about a 10–15-minutes-long walking distance from the dwellings. This factor was considered necessary as one which generates a permanent group of users for whom a given space is an everyday living space, independent of tourist seasons. A second criterion is area popularity among users from different age and social groups. The intensity and diversity of forms of activity and social contacts shape the urban character of the analysed space. The third criterion is the area's attractiveness and functionality, which affects friendly and safe space creation for rest and recreation for all community members.

The last evaluation criterion is related to users' opinions expressed during field interviews or surveys<sup>12</sup> on the following features of individual spaces: friendliness, safety, activity offer, attractiveness, and functionality.

<sup>12</sup> It was assumed that the opinions expressed during the conversation/interview were of greater value when the established relationship helped to obtain more thoughtful answers.

## The Vistula as an example of Cracow's linear component<sup>13</sup>

The linear form of watercourses creates the potential for creating continuity of urban areas, including public space systems and urban greenery. Different spatial and functional characteristics of waterfronts<sup>14</sup> largely determine their development. Therefore, there are many places along rivers that create nodes which generate various forms of social activity. One can also call them the keystones of urban space systems. Because of waterfront areas' unique character, public spaces and public buildings located there often constitute the spatial dominants of the city.

As a linear landscape component, the Vistula is the main element of Cracow, flowing from the west to the east over 41.2 km. The strategy of exploiting the values of the Vistula River in shaping the city's development was initiated after 1989 as a result of Poland's socio-economic changes<sup>15</sup>. Since then, the transformation of the Vistula embankments have included many investments, the implementation of which was in line with the idea of creating the "Cracow's living room" [Pol. "*Salon Krakowa*"]<sup>16</sup>. It covers new museums

<sup>13</sup> The concept of river parks in Cracow based on the Vistula and its tributaries – implemented by the ZZM UMK – should be mentioned here. These activities increase the attractiveness of riverside areas and improve the accessibility of green areas, creating activity nodes. However, the purpose and object of the analysis undertaken in this study is only a designated section of the Vistula River.

<sup>14</sup> For example, the diversity of the nature and conditions of development based on the examples of the Vistula Boulevards in Cracow, the Thames riverfront in London, or Manzanares in Madrid was discussed in Jopek & Martyka, 2018.

<sup>15</sup> The concept of the river park system in Cracow has a long history, which has been revisited to a different extent – first in theoretical works, then in planning (see: Ptaszycka, 1957; Bogdanowski, 1974, 1996–97; planning documents 1994, 1999, 2014).

<sup>16</sup> This term was used, *inter alia*, in the document of the Local Development Plan entitled "Bulwary Wisły" [in:] Resolution no. LXXXI / 1240/13 of the Cracow City

and cultural centres (e.g. the Manggha Museum, Cricoteka), new connectors (e.g. the ‘Bernatka’ pedestrian and bicycle bridge) or the revitalisation of postindustrial areas (e.g. the Kazimierz shopping centre, Zabłocie<sup>17</sup>). The areas along the river have also been enriched with new parks. The Stacja Wisła park in Zabłocie as well as the Grzegórzecki<sup>18</sup> Park were created on the local communities’ initiatives. Worth mentioning are also Cracow’s Vistula Boulevards’ unique landscape openness. It is related to the natural function of this area, namely the ecological corridor of the city, constituting, for instance, a vital element of the entire city ventilation system.

The urban form of the areas adjacent to the Vistula affects the waterfront development. The highest intensity development was the main reason for the scope of the conducted analysis, which is the section of the Vistula River from the Rudawa River estuary to the Ofiary Dąbia Bridge. The most important components along the chosen area have different characteristic due to their functions, spatial character, and infrastructure/related connection type. Two main parts are distinguished: cultural (Wawel, Cricoteka, the Manggha Museum of Japanese Art and Technology) and recreational (including Park Dębnicki, Planty F. Nowicki, Park Stacja Wisła). The spatial nature of the elements was determined by means of assigning them to a group of spot (e.g. buildings) or surface components (e.g. parks). The type of functional and infrastructure-related connection is associated with the quantity and quality of available links between the waterfront area and the facilities and spaces which are related indirectly. In terms of transport, due to the presence

Council of September 11, 2013, on adopting the local spatial development plan for the Bulwary Wisły area. However, its genesis dates back to a much earlier time.

<sup>17</sup> This topic was discussed in detail by Agnieszka Matusik (2016).

<sup>18</sup> The symbolic opening of the park took place on September 1, 2018. The Zielone Grzegórzki Association representing the local community submitted a park development plan by BO 2020 (No. 180). It proposed to preserve the natural values of that former military area and create a municipal ‘forest park’.

of a bicycle route along the waterfront, the analysis refers only to perpendicular connections (mainly access to pedestrians, bicycles, and public transport).

In the analysis of the Vistula Boulevards (Figure 1), the main goal was to determine the potential of creating urban nodes along their course.

Characteristic development sites were designated and grouped into four main analytical categories: 1) infrastructure-related connections enabling pedestrian and bicycle traffic (bridges, footbridges); 2) public facilities and spaces located directly along the waterfront (e.g. Wawel, Cricoteka, the Manggha Museum of Japanese Art and Technology); 3) facilities and areas functionally related to the waterfront in an indirect way, i.e. those located along its strip but not directly connected to the boulevards (e.g. Planty F. Nowacki, Dębnicki Park); 4) facilities and areas functionally related to the waterfront owing to good transport connections, but located at a greater distance from them (e.g. the Ghetto Heroes Square, the Dębnicki Square, the Wolnica Square).

The first category of analysis concerns communication links with regard to pedestrian and bicycle traffic. There are seven river-crossing possibilities of this kind in the selected scope of the analysis, i.e. six road bridges and one footbridge (two railway bridges that do not provide any pedestrians or bike connections have been excluded). They all create the main determinants of shaping urban activity nodes along the Vistula waterfronts. However, the most popular and integrating crossing is the Father Bernatek footbridge, located at the height of Kazimierz and Stare Podgórze. Since the bridge was open to the public in 2010, the areas located in its vicinity on both Vistula banks have become places of increased urban activity. It is related to, among other things, the gastronomic offer created in this area, but also to a convenient walking routes and cycling connection. An additional advantage of these spaces includes attractive viewpoints (e.g. a panoramic view of the Old Podgórze and Kazimierz, as well as Cricoteka). The second analytical category covers public facilities and spaces directly along the waterfront,

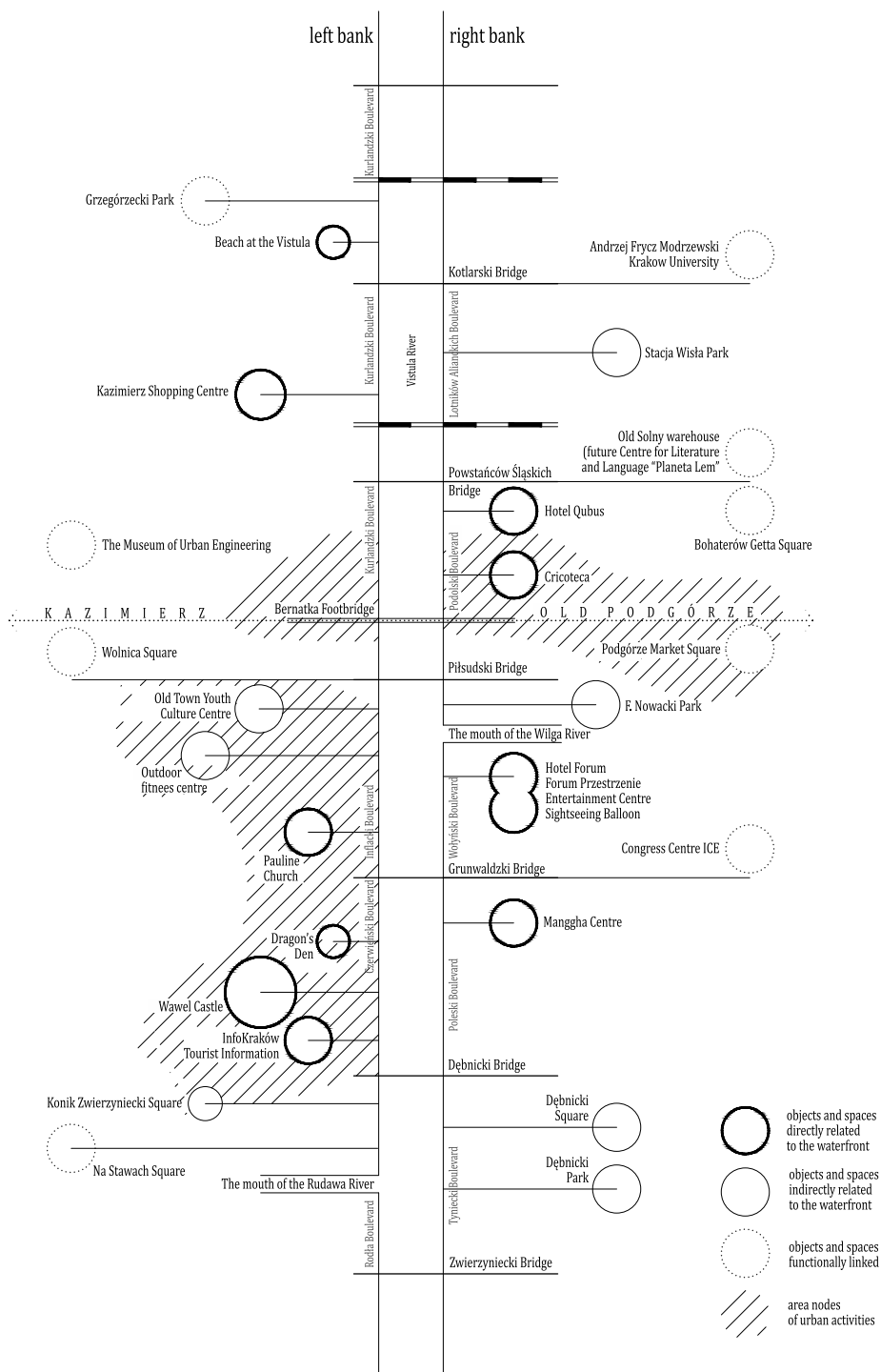


Figure 1. The main development components of selected part of the Vistula Boulevards in Cracow

Source: own elaboration.

which generates residents' and tourists' activity. They can constitute distinctive landmarks and Cracow's flagship attractions that significantly contribute to these spaces' popularity. However, it should be remembered that an activity node is usually shaped by more than one building. Hence, the form and functions of the surrounding areas and the quality of transport connections are essential elements of nodes' development.

The analysis shows that among all the spaces assigned to the second category, only in the Manggha Centre of Japanese Art and Technology there are not enough factors to shape the urban activity nodes, despite its high cultural and aesthetic values. Due to the Centre's location, the quality of connections with other parts of the city, and the elite cultural offer, it is not an urban activity node but, rather, an essential and distinctive element of the landscape of Cracow's boulevards. The third category consists of buildings and spaces located in the areas adjacent to the waterfront, but not having a direct visual or functional relationship with it. One example can be the Dębnicki Market Square or the F. Nowacki Planty, which can constitute functions enriching the adjacent area of the coastal area's activity node. The fourth analysed category involves objects and areas not located directly on the boulevards, but closely related to them due to their location and function. This group includes important public spaces creating functional and communication urban systems related to the coastal areas of the Vistula. Their role in shaping integrated systems of public spaces is particularly noticeable when connections with places are classified as belonging to the second analytical category and diagnosed as nodes of urban activity. One example is the sequence of spaces located on the right bank of the Vistula: Bulwar Podolski near Cricoteka – a square at the corners of Nadwiślańska Street and Józefińska Street as well as Brodzińskiego Street and Staromostowa Street – the Podgórze Market Square<sup>19</sup>.

<sup>19</sup> In the area of Stare Podgórze, the sequence of public spaces does not end at Rynek Podgórze and continues

The analysis shows that along with the researched fragment of the Vistula riverbanks in Cracow, two areas (no. 1 and no. 2) have features characteristic of urban activity junctions. The extent of the indicated areas results from the specificity of the landscape of Cracow's boulevards. Areas of greenery along the Vistula's waterfronts create a unique natural character, which is in contrast with, for example, the built-up Thames' waterfronts in London. Therefore, a junction is a single object or urban interior, but a group of junctions comprises functionally- and communicatively-related elements. Areas no. 1 and no. 2 meet all the previously defined criteria of urban activity nodes. The advantage of these areas is their location, as it is connected with the oldest buildings in Cracow, which ensures good communication links as well as functionality and composition. Historical urban layouts create sequences of defined urban interiors with great spatial value, making them attractive places for users. However, this is not the case with area no. 3, where Konopnicka Street creates an unfavourable system of connections with the neighbouring areas. As previously mentioned, the Vistula's waterfronts in Cracow are seasonal in terms of the intensity of their use. Due to their natural character, the number of visitors is closely connected with the season or weather conditions. Therefore, the analysis focused on the number and the type of the functions. Area no. 3 was defined as the one most seasonality-dependent when it comes to the offer of activity and the number of users. Thus, this area did not meet the criteria related to these aspects.

through successive urban interiors. However, as part of the analysis focusing on the quay areas, indicating the Podgórze Market Square as a space related to the Vistula River aimed at emphasising the role of an appropriate shaping of the connectors' functions. Activation of this area – both in terms of the presence of space users and the functions generating this activity (in this case mainly catering) – results, among other things, from creating an attractive pedestrian and bicycle connection with the left bank of the Vistula, namely the Father Bernatka Footbridge.

Table 2. Nodes of urban activity on a selected section of the Vistula Boulevards in Cracow

Spaces and objects related to the given rea		Publicly available urban areas	Multi-functionality (min. 3 functions)	Good connectivity (mainly walking and cycling)	Links with residential areas	A large number of users	Area attractiveness
<b>Area 1</b> Wawel (with the Dragon's den), tourist service centre with the accompanying space, restaurants on barges	Plac na Groblach, Jubilat Shopping Centre, hotel and catering facilities along Powiśle Street and Zwierzyniecka Street	x	x	x	x	x	x
<b>Area 2</b> Cricoteka, restaurants at Nadwiślańska Street, Józefińska Street, Brodzińskiego Street, and Staromostowa Street	the Podgórze Market Square, public facilities, but also an indirect area on the left bank of the Vistula River	x	x	x	x	x	x
<b>Area 3</b> Hotel Forum, Forum Przechowanie, an amusement park, a sightseeing balloon	ICE Congress Centre, the Manggha Centre	x			x		x

Source: own elaboration.

The conducted field interviews (106 in total) with the users of the particular spaces<sup>20</sup> revealed a high assessment of all the three defined areas. This assessment concerned the attractiveness of the development of the discussed regions, the activities offer for representatives of various age groups, a sense of security in them, and functionality.

### Cracow's surface waters

The surface waters in the region include mainly artificial water reservoirs usually created in old mined quarries after finished exploitation. They include Bagry, Płaszowski Pond, Dąbie,

the reservoir in Zakrzówek, and the reservoir in Przyłasek Rusiecki. These reservoirs are popular places for water sports and recreation such as swimming, diving, and fishing. Additionally, most of these places are used for environmental education. As a result of improving a wide range of provided activities, reservoirs are becoming more and more popular among Cracovians as leisure places. The high demand for green and aquatic recreational places in the city is reflected in social projects submitted, among other things, as part of the civic budget (e.g. the development project for the Bagrów area). The growing popularity of these areas also carries the risk of a negative impact on their biodiversity. The constant development of these areas may pose a very high environmental risk. The most important and frequent one is the lack of local plans which would sufficiently protect these desirable areas (e.g. housing).

<sup>20</sup> One of the criteria for selecting the users was the place of residence, which ensured the possibility of a regular use of the space.

The surface-water areas of Cracow also include the areas of swamps, meadows, wild ponds, riparian forests, etc., which are precious natural areas of great educational value<sup>21</sup>. This group includes, among other things, a pond in the Liban Quarry or a wood stream in the Borkowski Forest. These places do not have the potential to create activity nodes in the classic sense, but are more and more appreciated by the inhabitants of Cracow. Mentioning them in the context of the creation of nodes as frequently visited places can even seem to be a kind of provocation; human activity in these areas would undoubtedly contribute to their degradation and would probably take away their unique ‘value of wildness’. However, I strongly believe that the concept of an urban activity node can be understood in a broader context, i.e. it can also be a place connecting the local community and shaping the identity of a given site<sup>22</sup>. In the case

of areas of wilderness, the natural values of these places are unique in the urbanised landscape of the city. Therefore, it is worth protecting them through educational activities. They cannot and should not officially become the nodes of activity, but when their value is acknowledged, they can get protection from improper exploitation. The rich awareness of the city’s natural values and their significant role in shaping Cracow’s ecosystem is slowly growing.

The study (Table 3) included six main water reservoirs in Cracow; they were analysed according to the previously formulated criteria. Due to the high seasonality of these spaces, only lakes located within walking distance from the residential areas can generate user activity outside the summer season. However, the level of this activity is not sufficient to create an activity node. Water reservoirs that gather the most significant activity

Table 3. Features of Cracow’s surface waters

Surface waters	Publicly accessible urban areas	Multi-functionality (min. 3 functions)	Good communication links (mainly walking and cycling)	Links with residential areas	A large number of users	Attractive development the terrain
Bagry	x	x	x	x	x	x
Zakrzówek	x	x	x	x		x
Staw Płaszowski	x			x		
Zalew Nowa Huta	x	x	x	x	x	x
Staw Dąbski	x		x	x		
Przylasek Rusiecki	x	x				x

Source: own elaboration.

<sup>21</sup> This topic is taken up by the ‘Children in Nature’ association, which deals with nature education with regard to nature protection, as well as with ways to include it in the spectrum of urban greenery to benefit the city and the community.

<sup>22</sup> The issue of urban activity nodes was also taken up, among other authors, by Jopek (2018) as well as within edited volumes (e.g. Guranowska-Gruszecka & Łaskarzewska, 2018).

of the inhabitants are those located in the vicinity of residential buildings, providing convenient access for pedestrians and cyclists, as well as offering bathing areas and opportunities for water sports. The fulfilment of the last criterion – i.e. the one concerning, among other things, the attractiveness of the development – was determined (similarly



to the analysis of the Vistula River) based on observations and field interviews (68 respondents). In this case, the majority (76%) of the opinions were positive.

Therefore, the most important conclusion of the analysis is that Cracow's surface waters have a minimal potential for creating nodal areas within the city structure due to their specific functionality.

## Conclusion

Social and natural aspects are essential pillars of the development planning of modern cities' spatial and functional structure. Designing urban polycentric system of activity nodes and their connections favours social integration and organises the city structure. The positive impact of greenery on many aspects of people's lives is well-known. The development of the city's natural areas as well as their use must be carried out with full respect for their natural values. Nodes of urban activity should not be identified only in terms of the city's flagship public spaces such as main squares and parks. These places should be created throughout the city and accessible to all city residents, i.e. those living in both more and less populated areas. Such spaces can be different in their spatial form, but should have a common denominator, namely social integration.

Water spaces are an essential element of the urban space. Together with greenery, they form a close, blue-green, synergistic relationship. Waterfront areas related to the hydrological network offer the possibility of improving green areas' accessibility throughout the city, also in Cracow. Apart from sports and recreational functions, it is also essential to emphasise their educational role by means of revealing natural and cultural values. A sense of belonging to – and responsibility for – a heritage must be cherished and protected over the next generations.

The analysis of Cracow's water spaces has shown that not all of them can create activity nodes, which is mainly due to particular areas' high

seasonality of use. The potential of creating nodes is related to the multi-functionality of a given place, its range of influence, and its ability to generate users activity. The urban nodes' polycentric system needs to be considered during the development planning. The system's main aim should be to integrate all city areas through a communication network of good quality and quantity.

There is no doubt that a river in the city plays a unique role. Therefore, a city's nodes created along waterfronts have a significant value in connecting the city structure to its parts. Other advantages of a well-designed city network can be about natural and cultural values, better protection, and opportunities for scenic explorations.

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Agnieszka Bugno-Janik, Marek Janik

## City and Water: The Problem of Trauma in the Process of Developing Urban Resilience

### Abstract

*Objectives:* In the paper, the authors study the socio-cultural, spatial, and functional relationships of city and water in the context of the paradigm shift that is taking place in urban development.

*Research Design & Methods:* The following qualitative methods are used: field observation, participatory observations, transdisciplinary analyses, and case study.

*Findings:* The historical development processes and the resultant collective traumas that have developed in Gliwice were analysed. Some substantial links and correlations have been discovered.

*Implications / Recommendations:* In the sphere of the local cultural background, there are echoes of traumatic events which, to a large extent, have shaped subconscious beliefs and self-defence mechanisms. It is necessary to take this part of reality into consideration while working on city development plans.

*Contribution / Value Added:* The article illuminates the background and mechanisms of some of the processes shaping the relationship between the city and water. Collective traumas play a significant role in these processes, and the fundamental changes that are key to building urban resilience are strongly dependent on working on it attentively. The authors formulate the concept of a trauma network as a significant element of the urban system.

*Keywords:* city regeneration, urban resilience, river, blue-green infrastructure, collective trauma

*Article classification:* research article

*JEL classification:* Y8 Related Disciplines

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## Introduction – cities in need of a change of consciousness

At the material level, cities are a physical manifestation of an urban community's life. As with a living organism, some elements of the city may be in a state of ailing, so that their vitality is perceived as weakened and, as a natural reaction, we want to revitalise them – to heal, revive, restore their performance. The quality of the urban fabric, like that of a living organism, can be perceived through the characteristics of the dysfunctions and illnesses that affect it, both physically and psychologically.

The urban space created by human societies contains elements of processed nature which, in the modernist perspective of the process of space production, is still treated mainly as a resource pool. Such a way of thinking is still surprisingly vital, with its roots firmly ingrained in the biblical “subduing of the Earth”<sup>1</sup>, which became the basis of modern civilisation, as Lynn White outlined in his famous text titled “The Historical Roots of Our Ecologic Crisis” (1967). White's article aroused great controversy by attacking one of the key paradigms of Western civilisation. But is this paradigm still defensible? The river – or, more broadly – water is one such urban natural resource, the state of which shows more and more clearly that such an exploitative way of thinking, valuing reality, has already run out. The attitude to the role of nature in the city is gradually evolving. The predictions concerning climate change and its destructive effects, the pace of weakening regenerative capacity, and the destruction of natural ecosystems all make a radical change in the perception of the nature–culture relations as a fundamental issue for survival.

From the point of view of social change agents<sup>2</sup>, an in-depth understanding of how a change of consciousness takes place in urban communities is now becoming a fundamental issue in times of the climate crisis. Experience shows that on the road to creating new ways of taking action, there is mental resistance and a shutting off to the direct experience of reality, which is often the greatest difficulty to overcome. The search for the causes of this resistance, encountered in real situations of participatory action, led the authors of this article to the theory and practice of working with trauma. The preliminary results of our enquiries form the basis for the considerations set out in this text. In this outline, using the example of a river in the city, we would like to look at the dynamics of trauma operating in the urban organism, and to try to describe the situation of the urban system, whose multidimensionality appears to us as a result of the combination of individual and collective traumas. Our reasoning is based on the achievements of several scientific disciplines. As architects-urban designers working for changes in the way decisions are made in cities, we see the need to go beyond the traditional framework of different disciplines of science pertaining to cities (and especially beyond the framework of our own field) towards integrating them. As our attempts to work with specialists in various fields show, reaching out to related scientific disciplines provides an in-depth yet fragmented picture of the reality. Oftentimes, the opinions of experts do not converge, do not complement each other, do not co-create a coherent picture. Specialists are also rarely willing to strive towards a common description of a selected fragment of the reality. This encourages us – representatives of the field which for its basic activity (designing real changes in urban space) needs a coherent, integrated, and deepened picture of the situation – to personally

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<sup>1</sup> “God blessed them and said to them, ‘Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground’” (*Genesis 1:28*, b.d.)

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<sup>2</sup> I.e. people active in their communities (activists, influencers) who, by their actions, initiate and accelerate changes in social attitudes towards important current problems.

explore related fields and make specific use of their achievements. Such actions are often controversial among specialists, but at the current stage of scientific development we do not see a better way to speed up the process of integrating the achievements of different fields. Our attempts to integrate them result in a kind of eclecticism and, of course, significant shortcomings; it is difficult to be a specialist in many fields. Moreover, the language we use is incompatible with the set of meanings adopted in various disciplines, such as the concept of “public space”, the meaning of which is so difficult to agree on for architects and sociologists – and we know it from our own experience – that it only seemingly means the same thing for representatives of both fields.

In the first part of the article, we will look at the process of changing the nature–culture relationship in the urban environment and especially at the radical change that has become one of the foundations of modernity in European culture. The river in the city seems to be a phenomenon extremely suitable for illustrating this process, primarily via its technical-practical, ecological, and cultural symbolic dimension. This first part aims to illuminate the background, the changing cultural landscape, the freshest layer of which can seem, to the average resident of the modern city, like something natural, almost eternal. In fact, however, it is rather an effect of an unusual episode in the relationship between culture and nature. We are looking at a process that we are trying to modify through design, so in the next section we will introduce a systemic perspective, which, in our opinion, is essential to thinking about the city as a whole, including the question of urban resilience. The river is important here in three ways: as a key element of the urban ecosystem, as a symbolic representation of the relationship between culture and nature, and as a spectacular presence of living nature in the urban fabric. The way we see it, what most often blocks opportunities to instigate changes in the attitude of residents to the river – and, more broadly, nature – in the city is the mechanism of emotional entrapment in unhealed

and unresolved traumas<sup>3</sup>. Traumas in the city are interconnected and multi-layered; we present here a diagnosis based on our research conducted over the course of several years. Our chosen case of the city of Gliwice, Poland, provides us with rich and interesting material, allowing us to look at the complexity of the situation as a kind of a synergy of collective traumas.

### **Water as the foundation of urban life and culture – modernistic degradation**

Water availability has always been one of the key factors in setting up cities. Water, essential for everyday life, was drawn from wells and springs, but rainwater was also used, collected in various types of tanks, which was common especially in Southern Europe. The basic dependence of the quality of life of city dwellers on access to natural water resources in the city or its immediate vicinity was undeniable. Therefore, the location of the city by the river or (in a different way) on the sea coast was much more important in the development of opportunities. In addition to being an inexhaustible water supply for living needs, rivers were transport routes that allowed one to reap the benefits of trade, being as they were a place of acquiring food, a source of energy, but also that which improves defensive values.

In the history of European cities, rivers have been used intensively and widely. Extensive networks of urban canals forming venetian-type structures allowed for an impressive development of craftsmanship, which was the basis of the success of large weaving and cloth-making centres in Western Europe (Sowina, 2009). Until the end of the 19th century, the use of rivers, water supply, and management in cities had been an important element in shaping social relations. Their significance and use changed with the development of civilisation, but water was a constant factor present in the urban landscape. More or less

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<sup>3</sup> For an elaboration on the development blocked in traumas on the national scale, see: Bielik-Robson, 2016.

extensive networks of canals co-creating the urban space that one can admire today in several European cities (e.g. Amsterdam, Bruges) were a fairly common element of the structure of historical cities. The situation changed significantly at the end of the 19th century.

Lucyna Nyka (2013) draws attention to that moment, explaining that in the 19th century, canals in cities, which were no longer needed for transport and were epidemiologically dangerous, started to be buried on a mass scale. As the researcher notes, an important premise for the removal of watercourses from the space of the cities of that time was the increasingly large-scale urban development activities aimed at straightening out winding, narrow, and medieval streets. Moreover, the specific cultural situation of that time, the opposition of nature to culture – combined with the development of water engineering and urban planning regarded as a scientific activity – caused rivers in their previous understanding to disappear from the field of interest of urban planners. It is worth taking a closer look at that change, as the beliefs and convictions formed at that time still largely determine the current relationship to water in the city.

The turn of the 19th and 20th centuries in the history of Europe, but also of the world, was a groundbreaking moment for many reasons. As historians call it:

Hobsbawm: “[...] every historian is struck by the fact that the revolutionary transformation of the scientific world view in these years forms part of a more general, and dramatic, abandonment of established and often long-accepted values, truths and ways of looking at the world and structuring it conceptually” (1989, p. 256).

Davies: “Europe’s political unease was matched by many of the cultural trends of the *fin de siècle*, which are often subsumed under the omnibus term of Modernism. Modernism involved a series of fundamental breaks with tradition that went far beyond the usual ebb and flow of intellectual fashion. As one critic was to write, ‘The aim of five centuries of European effort is openly abandoned’” (1998, p. 841).

It is difficult to determine exactly what had the most significant impact on the changes in the life of cities and the processes of their multifaceted transformations launched at the beginning of the 20th century. Undoubtedly, scientific and technological achievements were crucial: electrification, unprecedented engineering capabilities, the emerging new mobility, and communication capabilities changing perceptions of space. The discoveries of medicine were also important, and advances in bacteriology were a boon for the movement of hygienists, which was reflected in the demands for urban development. It is likely that Darwin’s theory and entry into the general intellectual circuit of the concept of unpardonable “struggle for being” as “laws of nature” could have become a handy argument for freeing one’s moral conscience from the brutalisation and commercialisation of economic life. The shape of economic relations was also influenced by increasingly fierce competition for the last, uncolonialised lands and the birth of the global world. Perhaps, however, the most significant changes were brought about by the development of psychology, mainly Freudian psychoanalysis. Freud’s concepts, alongside the development of biology – especially the theory of evolution, which put man in line with animals – was a Copernican revolution in human self-perception. The scientific questioning of its subjectivity and its causality – the essence of urban culture – seems to be the biggest blow to traditional European urban communities<sup>4</sup>.

With the development of modern capitalism at the turn of the 19th and 20th centuries, economic rationale gradually began to dominate all other values, from a means to an end – in the spirit of Protestant ethics and Weber – and became an end in and of itself. The effects of this process of changing the understanding of rationality – harnessing it to increase profit for the sheer sake of making profit itself – were initially mainly

<sup>4</sup> A detailed analysis of the process of this change in European culture is carried out by Agata Bielik-Robson (1997, p. 72 and beyond).

social, becoming a subsoil for the lush development of socialist ideas. The natural world remained an inexhaustible reservoir of raw materials and goods for exploitation. It was not unfounded; in view of the completely different scale and capabilities of civilisation at the time, human actions did not pose a threat to the planetary ecosystem.

The progressive dominance of “rationality” – understood in the spirit of Darwinian evolution (in terms of the primacy of effectiveness in competing over other qualities) – economics, technical utility, functionality, and efficiency has, over the decades, led to a widespread belief in its naturalness, in broad discourse granting the principles of liberal economics the unjustified status of universal science.

“This is an example of naturalising processes that are political or social. This naturalisation consists in the fact that what is de facto within the reach of human will or interference is made part of processes of a fatalistic nature, equal to natural processes over which man has no influence (storms, floods, earthquakes)” (Szahaj, 2014, pp. 95–96). Historical accounts make it possible to see that modernisation brought, in addition to indisputable scientific and technological development, a heavy load on a set of severe collective traumas that have had an inhibitory effect on human beings’ ability<sup>5</sup> to feel a connection with nature. It was not until the middle of the 20th century that the development of ecology, especially deeper ecology, drew attention to this aspect of modernisation. However, due to its focusing on the destruction and suffering caused by humans, whilst ignoring the suffering experienced by people, the discourse of ecology has a limited potential to change this situation.

How did the cultural change of the 19th century and the further development of modernism affect cities and, in particular, the water situation in the city? The nascent modern worldview has brought new cognitive perspectives. Scientific urban

theories have emerged, most often based on new scientific findings and ones that shed new light on, e.g., health issues and the impact of external conditions on the functioning of organisms. In particular, hygiene has become a basis and a leit-motif in scientific urban concepts. European health congresses and exhibitions presented urban problems as the most urgent ones to resolve. Symptomatically, the first associations of urban planners appeared at hygienic associations (Czyżewski, 2009). In the most famous and detailed concept of the time – namely Ebenezer Howard’s Garden City – there is an interesting thread about water. As Adam Czyżewski (2009) notes, two versions of the Howard plan – that from 1898 and that from 1902 – differ with regard to the presence/absence of iris fields and water channel networks, which Howard had initially arranged in his exposition as a thoughtful source both for generating electricity and providing a pleasant aesthetic experience by highlighting cascades. In his extremely interesting study – and following the development of the Garden City Movement against the background of the cultural changes of the era – Czyżewski points to Howard’s utopian, circular, metabolic idea (in some way representative of the spirit of that time), which, after all, lost to the pragmatic principle of growth. The concepts referred to by Czyżewski – namely extensive discussions on the disposal of urban pollutants (mainly faeces) with the ease of a neophyte, through the issues of dealing with corpses – go into eugenic ideas, revealing, in an alarming combination of logic and consequences, the dark side of rationalism and intentions. At the same time, however, the economic processes of the rapidly globalising world gradually washed out of the Weberian *wertrationalitat* values other than the purely mercantile<sup>6</sup>.

<sup>5</sup> For an elaboration on the deep-rooted effects of the trauma of industrialisation, see Obschonka et al., 2018.

<sup>6</sup> Numerous concepts and real attempts to neutralise and at the same time use urban sanitation as a fertiliser have failed due to the economic unprofitability of these methods in view of the proliferation of water-flush toilets and the mass import into Europe of *guano* from South America (Czyżewski, 2009, p. 67).

Rationality subordinated to hygiene rules, the economic process, and new technical possibilities can all be clearly seen in all the concepts of the city ideal from the turn of the centuries. The urban concepts developed by Garnier, Soria, Milutin, and Henard took up the challenge of reinventing the city, according to revised knowledge of the world and man, adapting the layout to new needs, requirements, but also new opportunities related to the development of technology and industry. An important element of these concepts were green areas, considered an essential component of the urban landscape for a good quality of life. Contact with nature and the possibility of resting among trees appeared in different ways as one of the key elements of these plans.

Interestingly, water was treated slightly differently in the said concepts: it was not, as one might assume, part of soothing, idyllic parks. In Garnier's plan of the Cite Industrielle, the river appears in the immediate vicinity of the city, but its interactions with the city are significant. The hydroelectric power plant, waste treatment site, industrial plants, slaughterhouses, and freight railway station are all places of contact and integration of the river into the urban domain. It was as if its strength had had to be harnessed by an even greater force of civilisation, and its main features were reduced to power (often destructive) but also exploitable as e.g. the river's ability to remove that which is unnecessary and unclean<sup>7</sup>.

Therefore, the rationality of the beginning of the 20th century – the times of unlimited production of industrial waste and pollution of rivers – encouraged treating rivers in the city either as wastewater (and closed into underground canals to be removed from the field of expanding cities), or as transport routes for industry. This approach thus returned them to the peripheries, developed in industrial zones. This way, many cities

turned their back on rivers – the canals with dirty (unhygienic) water were infilled, the watercourses pushed underground disappeared from the public space. Today, the majority of European inhabitants cannot even imagine the level of significant changes in terms of the presence of water structures that Europe underwent in the last century.

### **Nature, culture, and a change of consciousness**

Water is one of the foundations of the ecosystem, i.e. every biological form of life on Earth depends on its availability and quality. The apparent abundance of water in most developed countries did not induce people to pay much attention to the issue of water resources, which led to a significant pollution of inland waters as well as seas and oceans. As has been mentioned, with rapid technological developments, rivers in cities have been reduced to the transporting and cleaning roles. Another problem is the degradation of many aquatic ecosystems, often to a dramatic extent. Water is just one example of the critical condition of the planetary ecosystem. Even more worrying signs of environmental degradation through increasing 'anthropo-pressure' concern a declining biodiversity, the disturbance of biochemical cycles of nitrogen and phosphorus circulation, and climate change (Rockström et al., 2009). It is becoming increasingly clear that the relationship between culture and nature requires radical reformulating. As the awareness of the dependencies between the elements of the global ecosystem and the possible catastrophic effects of Earth's processes is growing, strengthening urban resilience is becoming an important part of the policies of many cities around the world.

#### *Resilience, or the ability of the system to survive*

Resilience is a concept whose genesis dates back to the 1970s and involves the study of ecological systems and their ability to react and adapt to

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<sup>7</sup> A rich set of symbolic meanings related to water (e.g. purification, renewal, power) fits perfectly with the modernist location and role of the river in the city plan.



change (Holling, 1973). Quite rapidly, it was introduced into psychology, where it determines the ability to cope in crisis situations as well as the ability to quickly recover balance after traumatic events. For several years, the concept of resilience, as part of systems thinking, has been used in research on the functioning as well as in planning of the development of cities. In recent years<sup>8</sup>, with the increasing uncertainty an unstable situation in both socio-economic and environmental dimensions, urban resilience has become particularly important in current practice, mainly within the scope of risk management (Coaffee & Lee, 2016).

The concept of resilience is rooted in a systemic understanding of the reality. In this view – which now seems to be the most promising research prospect to embrace the complexity of the situation of the modern city – one can see it

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<sup>8</sup> The literature on the resilience of ecological and socio-ecological systems is already very broad and also concerns the theoretical foundation for implementing this approach in the practice of urban policy. Here, one can find different approaches and differently distributed emphases. A large part of the material is devoted to increasing resilience (in terms of sustainability and risk management) – e.g. Coaffee and Lee (2016). Other approaches try to capture the more general, holistic conditions of urban system resilience, determined by the structure and characteristics of its key elements. One interesting development in this trend is the development of the Stockholm Resilience Centre (see Biggs et al., 2015). The authors are attempting to synthesise the existing body of research by narrowing the framing of resistance to the issue of the preservation of ecosystem services. Such a limitation to a fundamental yet gripping scope allowed the formulation of seven principles of resiliency. Three of them – namely ‘maintain diversity and redundancy’, ‘manage connectivity’ and ‘manage slow variables and feedbacks’ – address the specifics of a complex adaptive system. The other principles – namely ‘foster complex adaptive systems thinking, ‘encourage learning’, ‘broaden participation’, and ‘promote polycentric governance systems’ – relate to efforts towards mental change. The authors repeatedly point out that – when too strong – the characteristics of the system’s resistance can become counter-effective and lead to excessive stiffness as well as the loss of the possibility to change (the so-called rigidity trap).

as an open socio-ecological system, characterised by considerable complexity and adaptability (Complex Adaptive System)<sup>9</sup>. Resilience here is a property, the ability of the system to cope with sudden changes, both “external” and caused by tensions within<sup>10</sup> the system. The high level of resistance allows the urban system not only to quickly recover from the disturbed balance, but, above all, to adapt and transform by adjusting to new circumstances and finding opportunities for development in them. Urban practice is currently dominated by the “rebalancing” approach, but the full use of the systems thinking seems to be the “evolutionary” approach, which is slowly gaining attention from planners (Coaffee & Lee, 2016). The latter approach is aimed at navigating the process of change rather than strengthening durability and recovery after possible destruction.

Resilience in natural systems develops through the evolutionary pathway of slow expansion of connections, complexity, and redundancy. In socio-ecological systems such as the city, there is, on the one hand, a similar evolutionary process<sup>11</sup>. On the other hand, through human capacity to transcend biological constraints, the resilience of such systems can be increased through conscious, deliberate, and community-based actions in different spheres. For our considerations, it is important to conclude that resilience (whether psychologically understood in relation to the human individual or treated as a property of the system which the city is) is intertwined with the mechanisms of trauma. This is what Rachel Yehuda, a leading trauma

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<sup>9</sup> The systemic approach considered in this text is the development of a system approach such as ‘black box’, a ‘metabolic machine’, from the late 1960s and the early 1970s. The current approach aims at a coherent representation of the urban reality as a socio-ecological, open system characterised by heterogeneity and interscalar dependencies (see: Cadenasso et al., 2013).

<sup>10</sup> Since this discussion concerns an open system, the concept of the outside and within the system refers to arbitrary boundaries that separate – largely artificially – a fragment of the socio-ecological reality.

<sup>11</sup> See, e.g., Shane, 2013.

researcher, claims: “[...] some have argued that the diagnosis of PTSD is too limiting, and some have argued that it’s too expansive, but one thing is for certain — post-traumatic stress disorder is one kind of response to trauma, and there are probably many others, including resilience” (2015). Resilience can increase as a result of a trauma, but in order for this to happen, trauma requires a lot of work. In the case of untreated traumas, the resilience of the system might even decrease. Resources (both material and mental, cultural) are then used mainly for its mechanisms: reproducing established, unconscious patterns of action or comprehending reality. This effectively blocks the flexibility of reaction, openness to new situations, and creativity, all of which constitute the basis of resilience.

The systemic view, revealing as a coherent whole nature and culture/civilisation (socio-ecological system), provides an opportunity to meaningfully change the destructive consumerist approach to reality by means of exploiting the key motivation of the individual benefit for it. What is the crucial and, at the same time, the most difficult element of this change is the necessity to broaden the awareness and the understanding of ourselves, to change the perspective from ‘myself-in-a-world-that-is-resource’ to ‘myself-as-part-of-the-world’. This transition seems possible only by recognising and directly experiencing the different links and interdependencies that bind the social world to the ecosystem. An indirect step, which is already taking place, is the identification of the urban ecosystem as part of the urban economy; the term ‘blue-green infrastructure’ is increasingly found in urban development documents. While remaining in the modernist paradigm of using nature for human benefits<sup>12</sup>, this approach to urban ecosystems allows for a gradual increase in awareness of their value, role, and importance for the lives of people inhabiting a city. However, it is only through personal commitment to urban ecosystems on the part of both policy makers and other actors

in urban life that significant change will occur. Such commitment can be the result of direct experience, i.e. daily communion with nature co-creating the urban milieu, not only in the sphere of aesthetics but in the very essence of the phenomenon of urban life. To experience nature is to feel its changeability, its connections, its dependencies, the coherence of the biosphere of which we are a part. The river is a great medium here; renaturalisation, i.e. the introduction of the non-human actors (plants, animals) into the urban environment, can make the river an “agent of change”. What is known about ecological and social systems indicates that this is a desirable direction, but for some reason it is still dominated in many places by a technical approach coupled with not acknowledging the negative effects of this immoderate and exploitative attitude.

#### *Trauma as a possible cause of resistance*

Trauma, in psychological terms, is a long-term psychosomatic reaction arising when a sudden event that exceeds a person’s emotional capacity – or a long-lasting or repeated difficult situation – triggers specific defence mechanisms<sup>13</sup>. These mechanisms work by, amongst other things, partially or completely cutting people off from experiencing the situation, which takes place through dissociation, denial, situational amnesia, which allows one to mentally (and often physically) survive, but in severe cases it can lead to long-term, limiting effects in the form of perpetuating behavioural changes, reducing consciousness, or splitting of normally integrated mental functions<sup>14</sup>.

<sup>13</sup> Literature on the study of trauma, the process of getting out of it, psychotherapeutic methods, and the adaptation of trauma theory in related fields of knowledge is extremely rich. Key authors of these studies and publications include – apart from Judith Herman and Rachel Yehuda – also Bessel van der Kolk, Peter Levin, and Stephen Porges, to name but few.

<sup>14</sup> “Traumatic events produce profound and lasting changes in physiological arousal, emotion, cognition, and memory. Moreover, traumatic events may sever these normally integrated functions from one another. The traumatized person may experience intense emotion

<sup>12</sup> See, e.g., Nassauer, 2012.

From the point of view of our considerations herein, the socio-cultural dimension of trauma is also important, especially the moment when reactions repressed through natural defence mechanisms come to light<sup>15</sup>. As Judith Herman writes: “Clinicians know this privileged moment of insight, when repressed ideas, feelings and memories surface into consciousness. These moments occur in the history of societies as well as in the history of individuals” (2015, p. 2). Two things can then happen: (i) collectively recognised trauma can be healed in the process of – as Ciano Aydin (2017) writes – active forgetting, which in its essence is its integration into history, which takes place through recognition, story-telling and later transfer to the symbolic sphere and ritualising commemoration if necessary; (ii) the trauma, in spite of its breaking through to consciousness, may not be socially recognised, because there will be no favourable socio-political situation. In the latter case, as Herman shows when analysing more than a hundred years of research on trauma, the process of its healing will not start, but the mechanism of collective denial, and silencing, will begin. Traumatizing actions and automatic reactions to them will be reproduced indefinitely in this and subsequent generations, having a particularly negative impact on resilience, because “traumatized people feel and act as though their nervous systems have been disconnected from the present” (Herman, 2015, p. 35).

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but without clear memory of the event, or may remember everything in detail but without emotion. She may find herself in a constant state of vigilance and irritability without knowing why. Traumatic symptoms have a tendency to become disconnected from their source and to take on a life of their own” (Herman, 2015, p. 34).

<sup>15</sup> Here the authors of this article assume that cultural trauma, as presented in the classic work titled *Cultural Trauma and Collective Identity* (Alexander, 2004) is, in practice, a certain stage of healing the trauma, which we understand as a psychological, cultural, and social continuum. Here we come more closely to the account presented in the *Interdisciplinary Handbook of Trauma and Culture* (Ataria et al., 2016).

The psychologically limiting mechanisms of unhealed trauma, both individual and collective, intertwine in acts of communication, creating interconnected, multilayered networks of culturally established beliefs and meanings, as well as social relations of dependence – and often domination – from which there is no escape. It seems that at this moment in history, each new trauma is interrelated with previous traumas, i.e. it directly or indirectly results from them. Owing to epigenetics, it is already known that trauma can be transmitted from generation to generation at the biological level through a biochemical influence on the way the body reads the information contained in DNA (Yehuda & Lehrner, 2018), and not exclusively through cultural contents or direct transmission by behaviour. Recognising the working of a network of collectively unprocessed, unhealed traumas operating at the subconscious level in the urban system is possible by observing the trauma-specific effects (here we focus on the selected ones):

- the **emotional** effect – inadequate to situations (“hysterical”), exaggerated reactions in situations of difficult decisions (over-reactivity, foreboding or anaesthesia, indifference, lack of response)<sup>16</sup>, or a type of dementia when making

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<sup>16</sup> For instance, during the development of the concept of modernisation of the Niepodległości Square (the so-called ‘Plenty’ – the site is a kind of small park) in Ruda Śląska Godula – in the course of a participatory meeting – large and difficult to control emotions were caused by the fear that on the occasion of modernisation old trees will be cut down (such a possibility had not even been considered and we had informed about it from the beginning). The residents found it difficult to focus on other issues, as they had already experienced the traumatic felling of beautiful old trees on the market a few years earlier. It seems that there are traumas associated with the relationship of domination; the inhabitants have nothing to say, they are notoriously surprised in many cities in that the trees, forming the areas of rest and contact with nature appreciated by all – are cut down without emotion (emotional anaesthesia of decision-makers). The decision to cut out, in turn, has the character (as we learned in different cities) of the denunciations of residents fearing that old trees are life-threatening (quote “during the storm they fly like matches”), i.e. there

decisions in specific ranges<sup>17</sup>; compulsive repetition of actions that have repeatedly appeared to be based on erroneous, anxiety-exaggerated premises, with opposite effects to the desired ones;

- the **mental** effect – (often city-specific) “lack of logic”, characteristic simulation of certain actions, inconsistencies of the declarative layer with the operational layer (e.g. an urban narrative going against the facts);
- the **social** effect in the form of disturbed relations between local authorities and residents (domination instead of democracy);
- the **ecosystem** effect as a relationship of dominance over the natural elements of the ecosystem;
- the **cultural** effect as a specific attitude to the historic urban fabric, e.g. disrespectful (because the new is better) or hostile (because it is foreign).

By culturally processing successively uncovered networks of traumatic meanings through revealing causes, interpreting cultural contents, naming, and building a new narrative, we can free ourselves step by step as individuals and social groups from successive layers of individual and collective trauma, and establish a healthy relationship with reality and with each other. In this sense, one can see the reception of the books by Jan Sowa (2011) and Andrzej Leder (2014) as one of the most important and therapeutically opening experiences of recent years. The works include *Fantomowe ciało króla* and *Prześlona rewolucja*, respectively; they quickly introduced into the discourse the wording

are probably some old fears here (there are currently not many deaths due to the falling of trees).

<sup>17</sup> For instance, the problem of local authorities assimilating information that container settlements or the placement of people with the status of “social welfare ward” in specific ghettos on the outskirts of the city does not solve the problem of poverty, but actually exacerbates it. There seems to be a trauma concerning the origin or experience of poverty – to move the poor beyond the horizon, to quickly deal with the issues, to avoid having contact with poverty – which could trigger hard experiences inherited from previous generations.

allowing one to describe the situation still present in our socio-political system in the context of their origin (e.g. the serfdom-style of relations in most institutions in Poland). Appropriate naming, as we already know from Freud, is a necessary first step in the process of recovering from trauma, especially one inherited from previous generations<sup>18</sup>.

## Trauma and the life of the city

Working to change the relationship of individuals and the urban community to the river – or more broadly – flowing water, also as rain, through the city, seems like a desirable pro-development action. In our opinion, however, opening up to the current way of understanding the high value of water in the city requires the necessity to first have worked through a lot of trauma, which is just beginning to manifest itself in urban discourses, which, by realising the kind of suffering that is behind it, can help to trigger the healing process.

In order to present our observations and thoughts, we have chosen the city in which we live and where we try to work towards its development, namely the city of Gliwice. For more than twenty years, we have been involved in various ways in activities related to urban space, and in significant investments changing its character. Some of our activities also include research<sup>19</sup>. We take similar actions in other cities of the region, which gives us room for comparison in terms of ways, capabilities, and characteristic traits of the operation of different urban organisms.

As part of observing urban processes from the position of a resident, we have the opportunity to look at the specific situation of social relations

<sup>18</sup> Working through the social traumas that define the quality of our personal lives requires searching for and developing a language that will allow us to call that which hurts us in a way closest to where our pain comes from. Otherwise, to express pain, the causes of which we are unable to find in memory, we will compulsively and constantly use the same empty platitudes which do not have the strength to release us from trauma (cf. *Rozmowa z prof. Andrzejem Lederem*, 2017).

<sup>19</sup> See: Janik, 2016; Bugno-Janik & Janik, 2012.

in Gliwice. The grassroots activity of the inhabitants, the awakening public sphere – in which signs of cultural trauma and possible ways of working through them begin to emerge – are effectively suppressed or marginalised by the city authorities, while at the same time the urban fabric is constantly treated in a way that expresses outdated modernist values with an astonishing lack of respect for a large part of the city's cultural heritage.

The city authorities, supported by a “silent majority”<sup>20</sup> of residents, act in the belief of the extremely progressive nature of the vision of the city. However, the subsequent “successes of the city”, publicised in many ways, reveal mental blocks resulting in the adoption of anachronistic determinants of prosperity.

Evident historical situations, though still not revealed in the discourse – e.g. re- or ex-patriation, cultural uprooting, war, living “in the house of the enemy” – are absent, repressed, often denied, and “covered up” by the “forward-looking narrative”. This narrative, constructed in the post-war period, probably brought relief to the trauma of resettlement by means of directing attention to the work of establishing a “new beginning” and “creating a future”, by pushing aside difficult emotions related to the past (Janik, 2016). However, clinging tightly to the “future-building narrative” becomes, paradoxically, a significant obstacle to development, blocking the process of overcoming trauma; or, as Frank Seeburger (2016) puts it, it hinders the opening up to trauma which would allow the integration into the (individual and collective) consciousness; in other words, it prevents the “active forgetting process” (Aydin, 2017, pp. 125–137).

The stubborn repetition of the narrative of the “archaically” understood future keeps Gliwice's urban discourse in conceptual terms anchored deep into the 20th century. In a sense, declarative content – the city's official promotional slogan, namely “The future is here” – is a kind

<sup>20</sup> This is what the local elections show, in which the same team has won since 1993.

of magic spell that effectively obscures the fact that the concept of modernity to which it refers becomes an oxymoron; a modernity that is unconventional, transgressive, present (invoked), and absent (because it belongs to the future and in a mental sense has not yet occurred) at the same time. This flickering of meaning quite effectively protects the entire propaganda structure from falsification and at the same time, on closer inspection, reveals the hidden traumas, most likely the trauma of backwardness, resulting, among other things, from the contact of repatriates from rural areas in the east of the pre-war Poland with the civilisation achievements left by the Germans in Gliwice. The trauma of “living in the enemy's house” also seems important here; on the one hand, it resulted in ‘de-germanising’ and ‘re-polonising’ actions, and on the other hand, it deprived residents (the vast majority of whom were resettled people) of the sense of laying down roots and a good functioning of the urban community. In this context, an “escape to the future” appears as a strategy of denial, a defensive mechanism that distracts one from a story which is hard-to-work-on<sup>21</sup>.

Since the end of the 20th century, many European cities and world rivers have been experiencing their renaissance. They are rediscovered as an extremely attractive element of urban public spaces, a great basis for recreational areas, but also as an opportunity to revitalise waterfront areas and radically change water management. Projects such as the IBA Emscher Park, the Brillancourt Park on the outskirts of Paris, and the Gowanus Canal Sponge Park are examples of developing – on the basis of a change in approach to the river and its biological reconstruction – new forms of cooperation and participation, or co-design.

Gliwice, from its very beginnings has been associated with water. The name itself echoes

<sup>21</sup> Of obvious importance here is also the national scale (similar situations have repeated in many cities of the ‘Recovered Lands’ [Pol. ‘Ziemie Odzyskane’]) as well as the political dimension of systemic actions. Here, however, the authors of this article focus on the local specificity of Gliwice.

the Slavic word ‘*gliw*’, which denotes the wet land. The Kłodnica river, flowing through the city centre, initially with backwaters and a branch of Wilde Klodnitz, powered by several streams (in the centre is Ostropka and Doa) was used to power the Kłodnicki Canal connecting the city (and running further to Zabrze) with the Oder, which was extremely important during the rapid industrialisation of the cities of Upper Silesia. In the centre of Gliwice, there was a city port which – together with the canal running through the city parallel to the river and the Ostropka stream flowing in the axis of Dworcowa Street – made water a significant element of the urban landscape. As in other European cities, the gradual displacement of the river from the city began in the early 20th century. Even before World War II, the bed of the Kłodnica river was regulated, Wild Kłodnica branch was covered and Ostropka was covered, and is now part of the rainwater sewer network. The city port and canal were liquidated (the last fragments were infilled in the middle of the 20th century). A section of the metropolitan highway, the Drogowa Trasa Średnicowa, was planned (in the 1950s) and implemented a few years ago in lieu of the old canal. In the general consciousness of the city’s inhabitants, today the Kłodnica river represents effluent (not unjustifiably), with which contact should be avoided. This is confirmed by the development of the river’s surroundings. A few sections of walking paths running along the crest of the embankment are an exception to the generally backward-to-river inverted urban functions. Since the Kłodnica no longer performs any economic function, it occupies a rather marginal place in the consciousness of the inhabitants, although it is sometimes referred to in the pre-modern or even archaic poetics, such as “Gród nad Kłodnicą” (“Borough on Kłodnica River”). Older residents’ stories about “once fishing in Kłodnica” or “when I was a student (1950s), we used to go on dates on the Kłodnica River” do not resonate in the social consciousness anymore. One is surprised to see views of the picturesque river and city canals in photographs taken a hundred years ago.

Unexpectedly, in recent years, the issue of water in Gliwice has become very topical and arouses lively emotions. The impetus for heated and extended protests came from the plans to build flood prevention reservoirs on the Ostropka stream, overwhelming the suburban landscape, and especially the large reservoir on its tributary – the small Doa creek. The investments, planned with a modernist flair, and – from the point of view of recent analyses by hydrologists – significant exaggeration, have become a result of unprecedented grassroots activity.

Social protests erupted in Gliwice (more than 5,000 signatures via Internet and 2,000 via a paper petition to abandon construction) and revealed an extent of social activity which had been unknown in the post-war history of the city.

The main reason for the protests, as noticed by the city authorities at first in public discourse, was the threat to “individual interests”, rooted in modernist values: the group of most actively protesting residents are those who live in the immediate vicinity of the areas dedicated to retention tanks, and who use them as recreational places. They clearly feel that this will cause a decline in the quality of their place of living. Paradoxically, therefore, the modernist belief in the importance of recreational places surrounded by greenery for the quality of life in the city became the cause of – from the perspective of the city authorities – the anti-modernist revolt. In the first phase of the protest, when looking for arguments against city authorities’ plans, the residents reach the acquis of post-modern solutions, in which, where possible, the riverbed is re-naturalised and flood-control solutions are an extension of the natural retention, i.e. the retention of rainwater in underground or small above-ground reservoirs and rain gardens, increasing the permeability of the pavement and increasing the number of plants and tanks not encased in concrete; understanding and cooperating with nature and not subduing it to the mankind.

However, the arguments and actions developed in the post-modern vision of the world do not

reach the decision-makers' mentality, which seem to be overwhelmed by the "fog of irrationality" expressed in the repetitive slogans about saving the city from flooding, without noticing either other possibilities for achieving this goal or other threats exacerbated by technocratic solutions. The information that the inhabitants are not against flood protections but against the way in which they are implemented is not able to reach the minds of those representing the city authorities, as can be seen in the repeated statements of the mayor<sup>22</sup>. Symptoms of trauma are different for both sides of this conflict – the city inhabitants react strongly (sometimes hysterically) at the emotional level, which does not prevent them from thinking rationally in the direction of seeking alternative solutions. The city authorities, on the other hand, are most often emotionally numb, but also over-reactive (they feel attacked), but the main problem is one of blockage at the mental level; there is no sign of the possibility of discussing an alternative solution. The problem of blocked communication at the mental level is aggravated by the distorted relations between the local authorities and the inhabitants, which is one of domination and control rather than cooperation and participation. Therefore, the second stage of the inhabitants' actions takes another form, appropriate to the identified situation, namely merit-based, expert criticism of the city authorities' actions. The inhabitants realise that the authorities – despite declaring a modernist vision of the world – *de facto* only imitate this way of thinking. Thus, residents commission independent expertise from hydrologists, who show errors in the design of the tank (the oversizing of the tank is significant).

<sup>22</sup> A fragment of the text from the leaflet informing about the results of the petition against the construction of the tank: "We do not accept that Wilcze Doły [the name of the site – M. J.] should fall victim to the construction of a dry retention reservoir according to a scaled-up design based on outdated data. We demand reliable public consultations to work out a reasonable alternative to this project – with respect for nature and the opinion of the citizens of the city of Gliwice".

Will the next steps result in a process of healing the trauma? It is not known yet. However, it seems that diagnosing the extent to which symptoms of trauma occur can help them take effective action. It is known from the study of individual trauma: when symptoms are revealed, the case is very delicate and requires a professional therapeutic approach. First of all, the situation demands the awareness of a traumatised person that their symptoms qualify for the necessary treatment, before an expected change in attitude (a healthy approach) to the problem can be expected. In the case of collective trauma, where the disruption of relations (domination instead of equality<sup>23</sup>) is an additional complication, the influence of the inhabitants on the behaviour of the representation of the local authorities is marginal; it becomes impossible to make the other side of the conflict aware of the need to change their approach. At this point, the solution seems to be a personal change in the position of authority. Such attempts (outside the normal election procedure) have already been made twice in recent years, but without success. However, the referendums, organised as a result of great efforts of active citizens, did not bring the expected result due to the legal construction invalidating the referendum because of insufficient participation. Many residents do not feel the need to get involved, which, in our opinion, is the most widespread symptom of trauma resulting from relations of domination, the source of which is still to be

<sup>23</sup> Residents are treated to a mock consultation and are not allowed to have their say; surveys are carried out with questions structured in such a way that negative answers can only be seen as the result of aversion (a symptom of trauma: the inability to imagine other solutions); there is no room for the expression of substantive opinions; and residents are not allowed to have their say during city council meetings, which is disputed on legal grounds. However, the activities of the residents do have an impact and two projects are prepared to "decorate" the completed reservoir with greenery, which are presented as alternatives to be voted on, while the size of the reservoir and the way it was created are questioned on their merits.

found in the period of serfdom<sup>24</sup>. The residents who did vote were overwhelmingly in support of dismissing the mayor.

The observations of the situation in Gliwice revealed a network of related traumas, the main threads of which are presented below (albeit the authors acknowledge that this is a simplified depiction)<sup>25</sup>:

- **the trauma of centuries of violent relations of domination** is multi-faceted and requires closer research, but already on the basis of primary observation it can be noticed that the actions of the authorities, which ignore the opinions of the inhabitants, are consistent with Leder's diagnosis (2014); their origins go back to the times of serfdom, and some of them are certainly the result of unprocessed relations of domination in the previous political system. Since the beginning of the protests with regard to the retention reservoirs, but also in other similar situations, the city authorities have placed themselves in a position of domination, disregarding the opinions of residents, trying as much as possible to avoid direct meetings with residents and at most feigning public consultation (controlling speech, ignoring critical statements, stigmatising those considered to be "agitators" and "freaks"). In situations of high and continuous pressure from residents,

<sup>24</sup> It should be mentioned here that the partly low turnout was probably the result of the defensive tactics of the circles supporting the authorities, implemented through the campaign called "I Am Not Going to Their Referendum".

<sup>25</sup> Urban traumas, as we chose to define them, are part of a continuum of trauma that manifests itself in the city. Among them are mass traumas (cf. Alexander, 2004), i.e. traumas that affect many people, activate in different situations synchronously, and yet do not form a cultural trauma, because they have not revealed themselves in the public discourse, lacking an agreed interpretation. From a psychological perspective, however, it is precisely the "implicitness" of the trauma – the repression – that determines its destructive effect; as already Freud had shown, revealing (telling) the trauma is already the first stage in the process of recovering from it.

city representatives use various domination strategies that reveal their fear of direct contact, probably perceived as a confrontation. Unjustified anxiety, avoiding contact, and striving to control the situation are all clinical symptoms of trauma. In the city, this trauma is most acute from the point of view of both active citizens (agents of change) and, more broadly, from the point of view of urban resilience, because it blocks the development of a healthy, democratic urban community, in which participation and activity of residents plays a fundamental role (e.g. by launching group creativity, solidarity, cooperation), and local authorities play a supporting role. Situations stemming from the trauma of domination also have a re-traumatising effect: almost every personal or group contact with the local authority on a controversial issue is an experience of humiliation.

- **the trauma of an unintegrated systemic change** manifests in the inability to change the relationship between the local power and the residents. Despite the regulations, there is still a division: we (the residents) versus they (officials, councillors, city authorities), combined with a sense of powerlessness of the inhabitants towards power. This is reflected in the pretence of consultation while decisions are taken outside the knowledge of residents.
- **the trauma of uprooting** affects residents (or their families) who were resettled in the city after World War II. The trauma of exile and of having to leave their place caused many of the "repatriates" to emotionally "not move" to Gliwice (Zagajewski, 1991), treating this city as only a temporary residence. The rooting was hampered by the cultural strangeness of the "enemy house", as well as the socio-political system, on the one hand minimising urban self-government, while on the other strengthening the unified national identity at the expense of the multicultural mix (Kubit, 2010) that could constitute the leaven of the urban community (Janik, 2016). As a re-



sult, a very strong incentive is needed for a NIMBY-type reaction<sup>26</sup> to appear, because the inhabitants do not feel connected to the city (in terms of the sense of being co-hosts). The process of recovering from this trauma requires a personal commitment to discovering the history of the city; being familiar with its history allows one to feel a connection to the place and to appreciate its value.

- **the trauma of cultural alienation** – the indigenous inhabitants (Silesians), remaining after the process of post-war population exchange, experienced the trauma of nationality verification, and later, in the process of the “re-polonisation” of the so-called ‘Reclaimed Lands’ [Pol. ‘*Ziemie Odzyskane*’], they constituted a group treated as culturally alien. The Silesian identity, when viewed superficially and through a simple polarisation, was glued together with the German identity, thus treated with suspicion, which resulted in its discrimination (Tracz, 2004) and suppression. In recent years, the situation has changed somewhat, but – as numerous examples show – the effects of this trauma are still present in Gliwice. Typical trauma-related symptoms blocking full participation in public life – shame, sense of inadequacy, fear of revealing socially undesirable elements of identity (cultural inadequacy) – cause the practice of distancing oneself from the discourse and the absence of this group of inhabitants in the “city consciousness”. This also makes it impossible for immigrant residents to use the “agency” of native inhabitants in the process of establishing an emotional relationship with the fabric and history of the city.
- **the trauma of modernisation** is about the disconnection from emotions and nature,

<sup>26</sup> NIMBY (not-in-my-backyard) – a reaction of protest against changes in the immediate environment which reduce the quality of life. In a traumatised community, the way the NIMBY reaction takes place can reveal the degree of traumatisation (how exaggerated the reaction is) as well as the quality of the relationship with the authorities (the inhabitants do not feel safe, included, etc.)

discussed earlier in this text; it is evident in the way cultural heritage is treated (the new is better than the old) as well as the environment (e.g. attitude to water or trees in the city, which is also the subject of protests similar to those discussed here), which is intertwined with the way of dealing with the trauma of uprooting, where directing attention to the future was presumably an important protective mechanism of trauma.

### **Conclusions – trauma networks<sup>27</sup> as a hidden part of the urban system**

Collective traumas do not exist in isolation from individual suffering. If one observes the community only through the manifestations of its life, i.e. activity revealed in public discourse, one does not need to come into contact with the suffering of specific individuals, representatives of the community. However, when conducting participatory activities with inhabitants, individual traumas are revealed in many ways and allow one to see more broadly how personal, mass, collective, and cultural traumas intertwine, stiffen or drive each other, and how a tangled network of trauma is formed, causing difficult-to-loosen tensions in the relationships that build the urban system. This network is holographic or perhaps fractal: zooming in on a network node allows one to see in it a magnified picture of the whole trauma, from personal through experienced in the local community to a larger-scale nation, country, and, finally, the whole world. In the perspective of the transformation of the urban fabric of Gliwice,

<sup>27</sup> In the system analysis, a thorough look at networks of connections (relations) between system elements can lead to the discovery of further invisible “layers” of the system (by analogy of consciousness and the subconscious) affecting known relationships between system elements. By introducing the term “trauma network”, we want to emphasise that trauma is not a single, “subcutaneous”, poorly perceived element of the system, but a whole subsystem, which is like an invisible “lining” of all relationships in the urban system.

the traumas resulting from modernisation and industrialisation are the most evident – e.g. in the situation of the river and city’s streams – as well as the trauma of uprooting and the unprocessed changes in the political system, manifesting itself in the inability to establish a partnership between the authorities and the inhabitants. In order to increase the resilience of the urban system, which is so necessary in uncertain times of a global crisis, the networks of trauma need to be loosened and the energy trapped in them needs to start to flow in order to fuel different parts of the system, and to stimulate collective creativity and cooperation.

Maintaining the focus on the inhabitants of Gliwice, the most clear are the traumas resulting from the displacement, uprooting, and cultural domination of the displaced over the indigenous people, although they are clearly linked to the traumas resulting from urbanisation or industrialisation, or, more broadly, undeveloped feudal relations.

The trauma networks we observe work in such a way that individual traumas reinforce each other and form stiff, distant, inflexible relationships, halting individual and social development, and weakening urban resilience: the trauma of cultural alienation does not allow citizens who are rooted in the city, but marginalised (Silesians), to openly tell its history to those who need to take root (descendants of immigrants or “incomers”). Thus, the process of assimilating the cultural heritage<sup>28</sup> of Gliwice’s identity does not work this way. In turn, the inhabitants who are not rooted do not feel their right to the city, a sense of entitlement to belong to this place, so they do not come forward *en masse* in its defence, and if a more mass reaction appears, it is often accompanied by huge, almost hysterical emotions<sup>29</sup> (typical of severe trauma), which do not

allow for the actual elaboration of new solutions, and which give free rein to the uncontrolled social authorities, trapped in the “future” narrative but also in their own traumas and mental patterns created in response to them.

In the case of Gliwice, the development of the situation of the residents’ protest against the construction of huge retention reservoirs in attractive recreational and natural areas shows that seventy-five years after the end of the war – one of the consequences of which was mass resettlements – successive generations of residents have begun the process of recovering from the trauma of uprooting, and at the same time they are rising up against the effects of the wider trauma of modernisation, which is the direct cause of the hopeless state of rivers in the cities. Those who are playing the role of active citizens (mainly a 30–40-years-old generation) can be considered as “new bourgeoisie” – to quote Paweł Kubicki (2016) – who begin to understand that the city is a kind of self-managed community of inhabitants, start to feel co-responsibility, and act against treating the city only as an economic resource at the disposal of the local authorities. They come up with practical proposals for solutions that make systems think about the city as vital in terms of a natural course of action. Thus, there is hope for the strengthening of urban resilience, which is so necessary in these increasingly uncertain times. The issue of water in the city can be a great opportunity for this, but only under one condition: the necessity to go through the process of healing traumas.

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meetings of other flood tanks in Gliwice, on the Ostropka stream.

<sup>28</sup> The process of assimilating heritage – from the heritage of the enemy to the assimilation into “our common European heritage” – is described by Jacek Purchla (2017). Wrocław, whose post-war history is also founded on the migration of its inhabitants, has gone through this process, unlike Gliwice.

<sup>29</sup> We had the opportunity to experience the situation of hyperactive behaviour of the citizens during consultation

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## *Public Governance / Zarządzanie Publiczne*

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