

Tourism 2015, 25/2

Adam Bartnik Aleksandra Suwart University of Łódź Geosciences Institute Department of Hydrology and Water Management adam.bartnik@geo.uni.lodz.pl

THE FOUNTAINS OF ŁÓDŹ: THEIR RELEVANCE TO THE LIVES OF ITS INHABITANTS¹

Abstract: This paper presents the characteristics of the fountains of Łódź, their location in the public spaces of the city and changes in various time periods. Special attention is drawn to the function of fountains in contemporary cities and their social perception. Moreover, in the last part, the presumed reasons for their present distribution and typological variety are given.

Keywords: Łódź, fountain, inhabitants' leisure time.

1. INTRODUCTION

For the current city dweller among the most crucial needs are leisure and contact with nature. After many hours spent in uncomfortable conditions (noise, high temperatures and rooms filled with smoke) every organism demands a break. In consequence, it comes as no surprise that people are searching for calm and quiet places. Considering this, urban green areas have a significant meaning for them: parks, gardens, all kinds of squares and open areas filled with trees, bushes and flowers.

Additionally, water has a positive influence on physical and mental health (KOŻUCHOWSKI 2005). Not only does it improve the landscape's aesthetics, but also it is the source of diverse stimuli: auditory (e.g. the swoosh of surf), olfactory (e.g. the smell of iodine near the sea), gustatory (e.g. the taste of water from a mountain brook) and tactile (e.g. the refreshing effect of cold water). Its perception by our senses facilitates relaxation and leisure. For many years it has been used in increasingly modern ways; but one of the oldest is a fountain.

The word 'fountain' comes from Latin - from font, fontis - which means a spring (SZCZEPAŃSKA 2010). During the Middle Ages fountains were seen as sources of water, nowadays they are diverse hydrotechnical devices in various architectural forms and constructional solutions. They produce water from 'inside' under pressure, mechanical or natural, and

do not serve precisely utilitarian purposes. Almost in all languages this word sounds similar: fontaine in French, fuente in Spanish, fontana in Italian, fontäne in German, *фонта́н* in Russian, and *fontanna* in Polish. Fountains were known in all ages and today they function in every culture in almost every part of the world. They are found in the history of many cities, being witnesses to their development and their fall, and there are hundreds of wonderful fountains all over the world which can be fascinating tourism attractions. Their importance is so obvious that it does not need any explanation. However, their characteristics are worth introducing because they turn out to be highly attractive and many are wellknown tourism sites, the destinations of sightseeing tours.

2. ŁÓDŹ'S FOUNTAINS

Looking through archival photographs from the industrial period of Łódź it can be observed that at least a dozen were functioning then (Fontanny dla Łodzi... 2007). Before the war Łódź was a city generally deprived of both water supply and sewerage systems; rich industrialists sunk wells themselves to draw water and lead it to their factories (BIEŻANOWSKI

2005). Simultaneously, they often kept their households and gardens supplied, and incidentally delivering water to the fountains, which were built for decoration near their palaces (e.g. the fountain near Herbst Palace – currently a branch of the Museum of Art). They were integrated with parks, gardens and palace interiors as an element of decoration. The local water supply system delivered water from wells to the park fountains owned by the city council (e.g. in Sienkiewicz Park) (MOWSZOWICZ 1962) and their used water was then channelled into street gutters. Sometimes it was utilized to water nearby plants.

The water supply system of contemporary Łódź, which includes almost the whole city, enables a constant delivery of water for fountains while Lindley's sewerage system, through gravity, delivers waste water to the sewage treatment plant (BIEŻA-NOWSKI, 2005). Most currently working fountains (including all public fountains) are supplied in this way (from local intakes) and emptied into the city sewerage system. In addition, the diversity of their construction and architecture is significant.

2.1. FOUNTAIN CONSTRUCTION

The main effect of almost every fountain is jets of water from nozzles (TORBICZ 2008). Increasingly they are illuminated by coloured reflectors which enrich their effects, especially at night. The illuminations can be also accompanied by music (so-called musical fountains). Modern solutions, which are also used for $\angle dz's$ fountains, enable them to function safely at temperatures as low as $-5^{\circ}C$ (*website: ZWiK*) although actually, most fountains work only in the spring and summer seasons from 6.00 to 22.00. Indoor fountains stand out since they are active for the whole year during the opening hours of shopping malls, while the outdoor fountain in the *Manufaktura* square is the only one in $\angle dz'$ which functions in winter.

According to Torbicz's classification (2008) concerning construction, Łódź's fountains can be divided into:

- tiered fountains they have one or many nozzles placed inside the fountain basin; among them there are fountains with water curtains e.g. 'Wave' (Fig. 1A) and fountains with cascade elements e.g. St. Faustina Fountain (Fig. 1B)
- dry fountains without a water basin. Nozzles and reflectors are hidden under the fountain slab where water spurts as a clear or foaming stream before flowing by channels and cracks into tanks leaving the slab dry when the fountain is not working e.g. fountain on the playground at Kusocińskiego St (Fig. 1C);
- small architectural features with water elements called 'fountains' although they do not have their features for example 'drinking' fountains on Piotrkowska St (Fig. 1D);
- wall fountains indoor fountains with cascade elements looking like chimney pieces e.g. the fountain in Teschemacher Villa, Wigury St 12a (Fig. 1E);
- fountains on lakes or artificial ponds, e.g. 'The Golden Lily' on the pond in Reymont Park (Fig. 1F).



Fig. 1. Types of fountain in Łódź – descriptions in text Photo: A. Suwart

2.2. THE HISTORY OF ŁÓDŹ FOUNTAINS

For centuries fountains have been built in parks and squares, in big cities especially, as well as in gardens near the mansions of rich and influential inhabitants (KUSIŃSKA 2009). Urban parks and squares have always been attractive, but because of fountains they have become increasingly eagerly visited, especially during hot summer days. Fountains freshen the air and positively affect the aesthetics of their surroundings. This tendency is found in Łódź as well, where favoured places for fountain construction are urban parks, gardens, squares and other open areas. At the end of the 19th c. and in the first few decades of the 20th c. fountains were placed in the houses and the gardens owned by rich business magnates (Fig. 2, Table 1). Until 1930 there were more private than city parks (NOWAK 2006), surrounding or neighbouring the residences of such Łódź industrial tycoons as Karol Anstadt, Karol Scheibler, Ludwik Grohmann, Juliusz Heinzel and Józef Richter. Due to nationalization after World War II most of these became city parks open to everyone. Placing a fountain in the middle of a pond was remarkably fashionable at that time and despite there being more park fountains in the past, they are present in 6 out of 32 parks in Łódź at present.

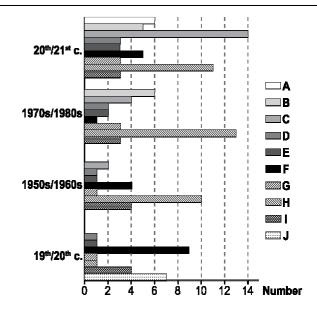


Fig. 2. Number of Łódź fountains and their location at different periods of time (for the 20th/21st c. *all* fountains found in the city were taken into consideration)

Fountains: A – in shopping malls; B – in playgrounds and housing estates; C – in open areas and passages; D – in other places; E – in city squares; F – in palace gardens; G – in hospital gardens; H – in city parks; I – in palaces and villas; J – in private parks Source: author

Year of Current Geographic Fountain Water No. on No Location construc-Owner water Fig. 3 coordinates type supply tion consumption 1 2 3 4 5 6 7 8 9 51° 46' 51' N in old Helenowski no longer approx. 1 Karol Anstadt floating n/d 19° 28' 7' E Park 1882 exists 51° 46' 56' N in old Helenowski no longer approx. 2 Karol Anstadt cascade n/d 19° 28' 11' E Park 1882 exists 51° 46' 50' N in old Helenowski approx. no longer 3 Karol Anstadt tiered n/d 19° 28' 1' E Park 1882 exists 51° 46' 54' N in old Helenowski no longer approx. 4 Karol Anstadt tiered n/d 19° 28' 5' E 1882 Park exists no longer 51° 45' 33' N approx. 5 in Źródliska II Park Karol W. Scheibler tiered n/d 19° 28' 29' E 1884 exists Edward Herbst local water 1st half currently 51° 45' 14' N near Herbst Palace, currently a branch supply 6 of tiered does not _ 19° 29' 4' E 72 Przędzalniana St of the Museum of network 1880s use water Art in Łódź connection 51° 45' 8' N Ludwik no longer 7 in Kiliński Park 1880s n/d _ tiered 19° 28' 25' E Grohmann exists in front of Finster's 51° 45' 41' N no longer 8 1880s **Teodor Finster** tiered residence, 28 n/d 19° 28' 11' E exists Dowborczyków St in front of 51° 44' 31' N 2nd half no longer 9 Ludwik Meyer tiered n/d _ Meyer's residence, 19° 27' 45' E of 1880s exists 6/7 Moniuszki St near Sterling Izrael Poznański 51° 46' 43' N 2nd half tiered no longer 10 Hospital, currently n/d 19° 28' 3' E of 1880s (probably) exists 1/3 Sterling St Sterling hospital

Table 1. List of fountains in Łódź

1	2	3	4	5	6	7	8	9
11	_	51° 48' 12' N	in Julianowski	1890s	Juliusz Heinzel	tiered	n/d	no longer
11	_	19° 26' 38' E 51° 50' 49' N 19° 28' 11' E	Park in front of Ludwika Heinzel residence, 166 Okólna St	1890s	Ludwik Heinzel	tiered	n/d	exists no longer exists
13	_	51° 45' 23′ N 19° 27' 43′ E	in Teschemacher Villa, 12a Wigury St	1890s	Wilhelm Teschemacher currently PTTK in Łódź	wall	water supply system in the building	currently does not use water
14	-	51° 46' 43' N 19° 26' 49' E	near Poznański Palace, 15 Ogrodowa St	approx. 1902	Izrael Poznański	tiered	n/d	no longer exists
15	-	51° 46' 22' N 19° 26' 55' E	in Poznański Palace, 32 Gdańska St	beg. 20th c.	Karol Poznański	wall	n/d	no longer exists
16	-	51° 45' 37′ N 19° 27' 28′ E	in Gustaw Kindermann's Palace 151 Piotrkowska St	beg. 20 th c.	Gustaw Kinder- mann currently the Prokuratura Apelacyjna	wall, cascade	water supply system in the building	currently does not use water
17	-	51° 45' 42' N 19° 27' 27' E	in Juliusz Kindermann's Palace, 137/139 Piotrkowska St	beg. 20 th c.	Juliusz Kinder- mann currently Klub Nauczyciela	wall, cascade	water supply system in the building	currently does not use water
18	-	51° 41' 24' N 19° 27' 45' E	near Kindermann's Palace, 20 Letniskowa St	approx. 1910	Juliusz Kinder- mann currently a private investor	tiered with the cascade elements	n/d	currently does not use water
19	-	51° 44' 26' N 19° 27' 46' E	in front of Steinert's residence, 274 Piotrkowska St	approx. 1910	Emil and Karol Steinert	tiered	n/d	no longer exists
20	-	51° 44' 49′ N 19° 27' 41′ E	near Schweikert Palace, 26 Piotrkowska St	approx. 1912	Wilhelm Schwei- kert currently Instytut Europejski	tiered, overflow	local water supply network connection	70 m ³ · mo. ⁻¹
21	-	51° 45' 51′ N 19° 27' 45′ E	in Sienkiewicz Park	1922	Łódź City Council	tiered	city water supply system in Sienkiewicza St	$3.20 \text{ m}^3 \cdot d^{-1}$
22	-	51° 46' 37' N 19° 27' 15' E	plac Wolności	1930s	Łódź City Council	tiered	n/d	$1.03 \text{ m}^3 \cdot \text{d}^{-1}$
23	-	51° 46' 43' N 19° 26' 49' E	in front of the Museum of the City of Łódź, 15 Ogrodowa St	1930s	Museum of the City of Łódź	tiered, with a closed water circulation	local water supply network connection	2.5 m ³ · mo1
24	-	51° 45' 37′ N 19° 28' 48′ E	in the Educational Garden of the Palm House, 61 Piłsudskiego St	1930s	Łódź Educational Garden	tiered, overflow	city water supply system in Sienkiewicza St	6.35 m ³ · d ⁻¹
25	48.	51° 45' 31′ N 19° 28' 50′ E	in Źródliska I Park	1950s	Łódź City Council	floating	the pond in the park supplied by the city	no longer exists
26	49.	51° 48' 17′ N 19° 26' 43′ E	in Mickiewicz Park	1950s	Łódź City Council	floating	the pond in the park supplied by the city	no longer exists
27	50.	51° 46' 24'N 19° 28' 39'E	in Staszic Park	1956	Łódź City Council	floating	the pond in the park supplied by the city	no longer exists
28	51.	51° 45' 44′N 19° 30' 44′E	in Widzew Park	1950s	Łódź City Council	tiered	n/d	currently does not use water
29	52.	51° 46' 47' N 19° 27' 10' E	in Staromiejski Park	1950s	Łódź City Council	tiered	water supply system in Zachodnia St	10.92 m ³ · d ⁻¹
30	53.	51° 46' 8′ N 19° 29' 19′ E	in 3 rd May Park	1950s/ 1960s	Łódź City Council	tiered	water supply system in Małachowskiego St	17.1 m ³ · d-1

1	2	3	4	5	6	7	8	9
31	27.	51° 45' 13′ N 19° 26' 22′ E	in Poniatowski Park	1950s/ 1960s	Łódź City Council	floating	the pond in the park supplied by the city	no longer exists
32	28.	51° 46' 25' N 19° 29' 1' E	near Barlicki hospital, 22 Kopcińskiego St	1950s/ 1960s	Barlicki hospital	tiered	from the hospital water supply system	1.5 m ³ · mo1
33	29.	51° 46' 2' N 19° 27' 19' E	Rubinstein Passage	1961	Łódź City Council	tiered	n/d	0.39 m ³ · d ⁻¹
34	30.	51° 46' 10' N 19° 27' 44' E	Łódź Dom Kultury, 18 Traugutta St	1968	Łódź City Council	tiered	n/d	no longer exists
35	31.	51° 43' 43′ N 19° 26' 54′ E	in Dubaniewicz Square	1970s	Łódź City Council	tiered	water supply system in Strycharska St	8.64 m ³ · d ⁻¹
36	32.	51° 46' 26' N 19° 29' 7' E	in Matejko Park	1970s	Łódź City Council	tiered	n/d	4.28 m ³ · d ⁻¹
37	33.	51° 46' 9′ N 19° 28' 9′ E	near Łódź Fabryczna railway station, Sałaciński Square	1960s/ 1970s	state railway (PKP) in Łódź	tiered	n/d	no longer exists
38	34.	51° 46' 19'N 19° 28' 13' E	Dąbrowski Square	approx. 1970	Łódź City Council	tiered	n/d	no longer exists
39	35.	51° 43' 53′ N 19° 27' 23′ E	near Kopernik hospital, 62 Pabianicka St	1970s	Kopernik hospital	tiered	from the hospital water supply system	10 m ³ · mo1
40	36.	51° 44' 29' N 19° 29' 28' E	in Podolski Park	1970s	Łódź City Council	tiered	n/d	currently does not use water
41	37.	51° 44' 29' N 19° 29' 39' E	in Podolski Park	1970s	Łódź City Council	tiered	n/d	currently does not use water
42	38.	51° 44' 31′ N 19° 30' 0′ E	in Podolski Park	1970s	Łódź City Council	tiered	n/d	$4.65 m^3 \cdot d^{-1}$
43	39.	51° 43' 38′ N 19° 27' 15′ E	near Organika factory, 21a Ciasna St	1970s	Łódź City Council	tiered	n/d	currently does not use water
44	40.	51° 47 3′ N 19° 25' 57′ E	7 Odolanowskiego St – 11 M. Gandhi St	1970s	Łódź City Council	tiered	n/d	currently does not use water
45	41.	51° 47' 39′ N 19° 22' 57′ E	Urody Życia Avenue – 25 Rojna St	1970s	Łódź City Council	tiered	n/d	currently does not use water
46	42.	51° 47' 41' N 19° 22' 31' E	24 Rydzowa St - 41 Rojna St	1970s	Łódź City Council	tiered	n/d	no longer exists
47	43.	51° 47' 43′ N 19° 22' 49′ E	16 Lniana St	1970s	Łódź City Council	tiered	n/d	currently does not use water
48	44.	51° 45' 21' N 19° 29' 15' E	58 Tymienieckiego St	1970s/ 1980s	Łódź City Council	tiered	n/d	no longer exists
49	45.	51° 47' 12' N 19° 25' 4' E	Żubardzka St – Inowrocławska St	1980s	Łódź City Council	tiered	n/d	no longer exists
50	46.	51° 45' 16′ N 19° 26' 50′ E	in Poniatowski Park	1980s/ 1990s	Łódź City Council	tiered	n/d	currently does not use water
51	47.	51° 42' 14' N 19° 28' 54' E	in front of Polish Mother's Memorial Hospital Research Institute 281/289 Rzgowska St	1988	Polish Mother's Memorial Hospital Research Institute	tiered	local water supply network connection	currently does not use water

1	2	3	4	5	6	7	8	9
52	9.	51° 45' 49′ N 19° 27' 31′ E	Schiller Passage	1994	Łódź City Council	tiered	water supply system in Piotrkowska St	3.38 m ³ · d ⁻¹
53	10.	51° 44' 46′ N 19° 28' 18′ E	140 Kusocińskiego St	2001	Łódź City Council	tiered	local water supply network connection	currently does not use water
54	11.	51° 47' 35' N 19° 26' 28' E	in Struga Park	2002	Łódź City Council	tiered	n/d	currently does not use water
55	12.	51° 46' 48' N 19° 27' 44' E	near Biedermann Palace, 1/3 Franciszkańska St	2002	University of Łódź	tiered	local water supply network connection	0.15 m ³ · mo1
56	13.	51° 46' 5′ N 19° 27' 12′ E	in the garden of the Mexicana restaurant 67 Piotrkowska St	2002	Mexicana restaurant	tiered	local water supply network connection	0.1 m ³ · mo1
57	14.	51° 45' 32' N 19° 27' 55' E	in <i>Galeria Łódzka</i> shopping mall, 15/23 Piłsudskiego St	2002	Galeria Łódzka shopping mall	tiered	n/d	n/d
58	15.	51° 44' 59′ N 19° 27' 39′ E	in front of the European Institute, 262 Piotrkowska St	2002	European Institute	tiered	local water supply network connection	5 m ³ · mo1
59	16.	51° 44' 40' N 19° 27' 47' E	in Reymont Park	2004	Łódź City Council	floating	pond supplied by a drilled well	n/d
60	17.	51° 46' 27' N 19° 27' 37' E	10 Włókiennicza St	2004	Łódź City Council	small archi- tectural forms with water elements	n/d	0.03 m ³ · d ⁻¹
61	18.	51° 45' 56' N 19° 27' 39' E	in Powstania Węgierskiego 1956 Sq	2006	Łódź City Council	dry	n/d	6.83 m ³ · d ⁻¹
62	19.	51° 46' 27' N 19° 29' 15' E	in front the Library of the University of Łódź, 32/38 Matejki St	2006	University of Łódź	tiered	local water supply network connection	40 m ³ · mo1
63	20.	51° 46′ 49′ N 19° 26′ 51′ E	in <i>Manufaktura</i> shopping mall, 17 Ogrodowa St	2006	<i>Manufaktura</i> shopping mall	tiered	water supply system in Zachodnia St	4.6 m ³ · d ⁻¹
64	21.	51° 46' 44' N 19° 26' 56' E	in <i>Manufaktura</i> shopping mall, Ogrodowa St 17	2006	<i>Manufaktura</i> shopping mall	dry	water supply system in Zachodnia St	n/d
65	22.	51° 44' 26' N 19° 27' 47' E	plac Niepodległości	2008	Łódź City Council	tiered	water supply system in Piotrkowska St	3.05 m ³ · d ⁻¹
66	23.	51° 45' 37'N 19° 27' 29' E	143 Piotrkowska St	2009	Łódź City Council	small archi- tectural forms with water elements	water supply system in Piotrkowska St	0.605 m ³ · d ⁻¹
67	24.	51° 45' 48′ N 19° 27' 28′ E	corner of Piotrkowska St and Schiller Passage	2009	Łódź City Council	small archi- tectural forms with water elements	water supply system in Piotrkowska St	0.605 m ³ · d ⁻¹
68	25.	51° 45' 2′ N 19° 27' 19′ E	corner of Piotrkowska St and Rubinstein Passage	2009	Łódź City Council	small archi- tectural forms with water elements	water supply system in Piotrkowska St	0.605 m ³ · d ⁻¹
69	26.	51° 46′22′ N 19° 27′21′ E	30/32 Piotrkowska St	2009	Łódź City Council	small archi- tectural forms with water elements	water supply system in Piotrkowska St	0.605 m ³ · d ⁻¹

1	2	3	4	5	6	7	8	9
70	1.	51° 46′20″ N 19° 28′12′ E	Dąbrowski Square	2009	Łódź City Council	tiered	water supply system in the east part of the square	5,70 m ³ · d ⁻¹
71	2.	51° 46' 35′ N 19° 25' 36′ E	28/30 Długosza St	2010	Łódź City Council	dry	water supply system in Długosza St	5.74 m ³ · d ⁻¹
72	3.	51° 45' 7′ N 19° 25' 1′ E	1 Kusocińskiego St	2010	Łódź City Council	dry	water supply system in Kusocińskiego St	19.22 m ³ · d ⁻¹
73	4.	51° 42' 12' N 19° 24' 50' E	245 Pabianicka St	2010	Port Łódź	tiered	n/d	n/d
74	5.	51° 42' 10' N 19° 24' 50' E	245 Pabianicka St	2010	Port Łódź	tiered	n/d	n/d
75	6.	51° 42' 12' N 19° 24' 52' E	245 Pabianicka St	2010	Port Łódź	tiered	n/d	n/d
76	7.	51° 44' 51′ N 19° 27' 16′ E	116 Żeromskiego St	2011	Łódź University of Technology	floating	from the water supply system	n/d
77	8.	51° 46' 42 N 19° 28' 56' E	8/12 Kopcińskiego St	2012	University of Łódź	tiered	local water supply network connection	30 m ³ · mo1

n/d = no data.

Source of data: author.

In the 1970s and 1980s when housing estates were growing, fountains started to be built in new places e.g. in squares near blocks of flats (Table 1). These fountains were one of the small architectural elements which were undoubtedly essential for people living on the estates along with playgrounds, benches and flower beds (SZKILADŹ, 1979). Huge green spaces near blocks of flats were highly important as they were a place to relax after work and for children to play. With the passing of time, fountains built on housing estates have ceased being utilised and only some remains are left.

It can easily be seen that since 1950 fountains situated on squares and urban open areas have been constantly introduced (Table 1). Nowadays, there are twice as many fountains functioning in those places as in city parks. Presumably the main reason was the 'Fountains for Łódź' project which has been in operation since 2004 by Łódź Water Supply and Sewerage Department, called ZWiK (WILCZAK 2008). Its main goal is to promote the Łódź water supply and to create the feeling that although Łódź is deprived of a big river, it is rich in water. Probably it was assumed that squares and open areas are more easily available and more representative than parks, thus for the last ten years the number of the fountains has been significantly higher. At the beginning of the 21st c. the building of shopping malls began and inside fountains have become an inseparable decorative feature which positively influences customers' feelings.

2.3. LOCATION OF FOUNTAINS

During the industrial period of Łódź, 24 fountains were working (Table 1) and there might have been even more, especially in the interiors of the palaces. As many as 21 were built on private investor's initiatives with nine in private gardens and another seven in private parks, four were built in industrialists' mansions and one in a hospital. Only three were built on the initiative of public institutions (in Sienkiewicz Park, on *Plac Wolności* and in the Educational Garden of the Palm House).

Although ten pre-war fountains have survived until today, only a half of them are still in working order. These were built by public institutions plus two in palace gardens. The Second World War contributed substantial damage to the city of Łódź and afterwards private mansions were nationalized. Most fountains in private gardens and parks have not survived until the present day.

After World War II at least 53 fountains were constructed (Fig. 3), but of ten no remains are now visible: four in parks (nos. 1, 2, 3, 7 on Fig. 3), three on housing estates (nos. 22, 24, 25), one by a railway station (no. 13), one in a square (no. 14) and one in an urban open area (no. 10). The fountains which have survived and were built after the war (there are 43 of them) can be divided into:

non-working – 11 with a lot of internal and external damage,

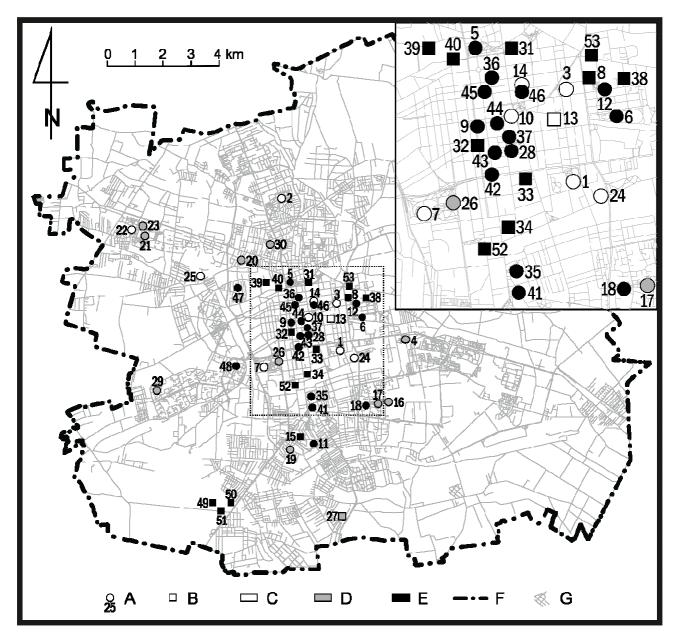


Fig. 3. Fountain locations in Łódź after the Second World War

Fountains: A – public – owner Łódź City Council, B – other public; C – formerly existed, D – existing but not working, E – existing and working; F – city boundaries; G – street network

Fountains: 1 - in Źródliska Park I, 2 - in Mickiewicz Park, 3 - in Staszica Park, 4 - in Widzewski Park, 5 - in Staromiejski Park, 6 - in 3rd May Park, 7 - in Poniatowski Park, 8 - in garden near Barlicki hospital, 9 - Łódź's 'Mermaid', 10 - in the urban open area near Łódź Dom Kultury, 11 - in Dubaniewicz open area, 12 - in Kopernik Park, 16 - in Podolski Park, 17 - in Podolski Park 2, 18 - in Podolski Park 3, 19 - in the urban open area near Organika factory, 20 - in a housing estate area in Baluty (Odolanowskiego St), 21 - in a housing estate in Teofilów (Urody Życia Avenue), 22 - in the housing estate in Teofilów (Rydzowa St), 23 - in a housing estate in Teofilów (Lniana St), 24 - in a housing estate area in the city centre (Tymienieckiego St), 25 - in a housing estate in Żubardź (Żubardzka St), 26 - cascade in Poniatowski Park, 27 - in front of Polish Mother's Memorial Hospital Research Institute, 28 - in Schiller Passage, 29 - in a housing estate in Retkinia (Kusocińskiego St), 30 - in Struga Park, 31 - in the garden at the front of Biedermann Palace, 32 - in the garden of the Mexicana restaurant, 33 - in Galeria Łódzka shopping mall, 34 - in front of the European Institute, 35 - 'The Golden Lily' in Reymont Park, 36 - 'The Lovers' bas-relief in Kamienna St, 37 - in Powstania Wegierskiego 1956 Square, 38 - in front of the Library of the University of Łódź, 39 - in Manufaktura - pools, 40 - dry fountain in Manufaktura, 41 - St. Faustina fountain, 42 - decorative 'drinking' fountain 1 (Piotrkowska - Roosevelta St), 43 - decorative 'drinking' fountain 2 (Piotrkowska St - Schiller Passage), 44 - decorative 'drinking' fountain 3 (Piotrkowska St - Rubinsteina Passage), 45 - decorative 'drinking' fountain 4 (Piotrkowska St - Jaracza St), 46 - 'Wave' fountain, 47 - Długosz open area, 48 - in playground in Retkinia, 49 - outdoors in 'Port Łódź', 50 - 'Jellyfish' in 'Port Łódź', 51 - 'Starfish' in 'Port Łódź', 52 - in open area near the Łódź University of Technology, 53 – in front of the University of Łódź Law Faculty

Source: author

 working – 32 and more than half (25) were built after 2000.

The owner of 37 of these fountains is Łódź City Council, 18 of them are still working, mainly in squares, urban open areas and parks as well as in playgrounds; the remaining 16 have been built thanks to other institutions. On the universities' initiative four are currently working (nos. 31, 38, 52, 53 on Fig. 3); three have been built on the initiative of the health service (nos. 8, 15, 27) and two are still working. There are also the fountains in shopping malls – at present six are working (nos. 33, 39, 40, 49, 50 and 51).

At this point it is worth mentioning projects planned but not carried out. The most interesting is Marek Lisiak's fountain project with a futuristic shape and designed to be built in front of the Philharmonic in Łódź (*Fontanny dla Łodzi...* 2007). In this place a modern 'boulevard' with an artificial river was designed, planned to flow from the fountain along Narutowicza to Piotrkowska St.

Stary Rynek however may be decorated with Jacek Janiec's 'chessboard fountain'. Water will gush out of several dozen illuminated nozzles placed below the surface of the square. New fountains in Helenowski and Poniatowski Parks are planned to be built by *ZWiK*.

Among those currently existing 37 are working, and 16 remain non-working (Table 2). In the past as well as at present, the greatest number are situated in the city centre – 22 with 19 of them still working. Among those not working are some nearly a century old including indoor wall fountains built in the old mansions and palaces of $\pounds dd'_z$'s industrialists.

District	Fountains			
District	working	non-working		
Bałuty	6	4		
Górna	7	3		
Polesie	2	2		
Śródmieście (city centre)	19	3		
Widzew	3	4		
Sum	37	16		

Table 2. Number of fountains in Łódź districts

Source: author

Compared to the city centre, there are few in other districts, with Górna and Bałuty in second and third places respectively. The presence of big shopping malls has a significant influence on the higher number of fountains there relative to the remaining districts. In Górna there is *Port Łódź* shopping mall with three working fountains, while in Bałuty – *Manufaktura* shopping mall has Europe's longest fountain at 300 metres. Polesie district has the least number – only

two. However, fountains are supposed to be used for leisure and there are many other recreational areas e.g. the largest park in $\pounds dz - Na Z drowiu$, the botanical garden and the zoo, thus there is no urgent need unlike in the high-density building in the city centre where there are no big leisure areas. The second reason why there are more fountains in Śródmieście is because most of them are built in the representative urban open spaces and squares situated mainly there.

The highest numbers of non-working fountains are in Widzew and Bałuty districts. In Widzew as many as three are in parks and Łódź's oldest fountain near Herbst Palace; on the other hand, three housing are in estates and one in a park in Bałuty.

Beyond the very centre of Łódź, fountains did not start to be built until the 1970s. This was connected with the enlarging of the administrative city boundaries and the building of new housing estates on the outskirts, simultaneously fountains were built. Although most housing estate fountains have not survived, but two of the newest were built on a housing estate away from the city centre on the initiative of Łódź City Council.

Thus a factor deciding location is the popularity and availability of a particular area as well as its representativeness and the opportunity for relaxation: parks, squares, urban open areas, shopping malls and playgrounds.

3. THE IMPORTANCE OF FOUNTAINS FOR THE LIVES OF THE INHABITANTS OF ŁÓDŹ

Fountains as small architectural features are generally accepted by society (JANUCHTA-SZOSTAK 2011) and can function in many ways. Thanks to their attractive and diverse forms which create favourable conditions for leisure and relaxation, open water surfaces have a positive influence on a microclimate, refreshing and purifying the air. What is more, the water movement in fountains negatively ionizes the air which significantly improves the mood of those nearby (KUSINSKA 2009).

Not only do so-called 'water curtains' purify the air from dust and reduce its temperature during hot days, but they also make noise tolerable taking part in improving the acoustic comfort in the city and as insulation against that noise. Many contemporary fountains are situated in squares and open areas where they improve the aesthetics, while secondarily they have a positive influence on moods.

The authors carried out a survey among two respondent groups to obtain opinions about Łódź's

fountains. The first consisted of people from 36 to 65 who were met near fountains while the second were University of Łódź Faculty of Geography students (19-35), together totalling 100.

The greatest number found aesthetic value the most important function, followed by recreation and microclimate. Only one person took acoustic comfort into consideration. Presumably, there might be a lack of awareness that fountains can function in this way e.g. *Fala* (Wave), situated in one of the main city squares, undoubtedly can function in a representative and decorative way. However, close by it can be noticed that the city noise from busy roads might be slightly drowned out by the 'swoosh' of spurting water.

Nowadays, fountains are an in-demand element in public space giving a feeling of joy, excitement and relaxation. As a matter of fact, every respondent agreed with these statements, each claimed fountains improve moods and are essential in an urban public space. However, it does not mean they can be built everywhere. Unfortunately, the construction of a fountain very often does not answer inhabitants' needs, for instance the fountain in the Koziny housing estate by Długosza St petitioned for by the local council (website: Fakt24). Although the revitalization of the untended open area was thought to improve the aesthetics of this estate and create a space of leisure for the local people, the residents asked for more urgent renovations repairing roads, laying a new pavement and painting the buildings, saying nothing about adapting the unkempt square. Hence, the fountain's construction instead of pleasing only made the inhabitants annoyed, if money was found, the pavements and roads should have been renovated.

Many inhabitants are not aware that at least 37 fountains are working in Łódź. Half of them think there are too few while only a quarter think there are enough. Not many mentioned that in one distinct there are too many while in another too few.

Aesthetic and technical aspects are thought to be sufficient by the majority of the respondents but they also noticed that some fountains look squalid and do not work during the season. There are at least 16 of these.

The construction of Łódź fountains is highly diverse from small 'drinking' fountains in Piotrkowska St to the huge *Fala* (Wave) fountain. It is a matter of taste if a particular fountain appeals to someone: some inhabitants like classical forms with basins while others are in favour of 'dry' ones. This is why many respondents answered that they liked fountains while others did not. According to the answers, the most beautiful, generally, are the fountains in *Manufaktura* shopping mall. A bit less popular are the 'drinking' fountains and others in Piotrkowska St including *Łódź Syrenka* (Mermaid). Students, asked if Łódź's fountains are suitably integrated into the urban space, generally agreed; no fountain was judged to be unnecessary and aesthetically disturbing. Among these however two said *Fala* (Wave) in Dąbrowski square was not appropriately suited to its position and actually its construction was the subject of much local argument as many articles and discussions on internet forums demonstrate. Some claim it does not match the old tenements in Narutowicza St while others just find it ugly and mentioned that its shape does not look like a sea wave as initially intended (*website:* Łódź, *nasze miasto*). There is no another fountain which arouses such controversy.

Some Łódź inhabitants are pleased because of its representativeness and originality, while others think a car park would be a better solution for this space. A further group would prefer the presence of a open area with densely-growing trees. In spite of many negative opinions, during the first fountain show crowds of people came to see it and even now for many of them it is a showpiece of the city.

The remaining fountains are more accepted by society. The one in Tuwima St is received positively as well as the fountains on Łódź's biggest playground in Kusocińskiego St which are adored by many children. A group of them playing with the streams of water can always be found there during warm days.

A majority of the respondents answered that a revitalization of Łódź's fountains is essential as it is a good option for a city lacking large rivers and lakes. Although people enjoy spending time in the vicinity of fountains half of them visit less than once a month. Presumably spending time near fountains might be connected with the home or workplace because it is easier to stop for a moment to relax near one when it is situated on the way home or to work.

Most of Łódź's fountains are situated in squares and open areas. However, when students were asked about the public space they would be most likely to spend their time they answered the city parks. Only a few ticked squares or shopping malls, thus, it can be said that people relax in public spaces whether there are fountains or not. The statement that shopping malls are visited because of the pretty fountains will not be true. When they want to relax they go, for instance, to coffee houses and the fountains are only a diversion.

However, based on the answers of a hundred randomly chosen people it cannot be explicitly judged how important fountains are for Łódź inhabitants, and the results of this survey only show particular opinions on this issue. Presumably, the fountains are only an interesting addition to the city space. People gladly spend their time near the fountain in Kusocińskiego St because of the playground situated there. The fountain is only an additional attraction and without it this place would be as frequently visited. People also meet near the fountains in Piotrkowska St (for many years said to have been Łódź's showpiece) however, it was not the fountains which made it so prestigious, but the historic tenements, shops, restaurants and bars. As before, fountains are an additional attraction. City parks are places for rest and relaxation after hard work but it is hard to say if parks with fountains are visited more frequently than those without them but for sure they are undoubtedly most desirable during hot weather.

Most of the fountains in Łódź have a decorative and representative function thus they are thought to be attractive city ornaments by almost all inhabitants. A few fountains give fun, for example, those in *Manufaktura* shopping mall or the 'dry' fountains in Kusocińskiego and Długosza Sts. Although it is not a factor which decides the attractiveness of a particular place, most fountains are generally accepted by city inhabitants.

4. CLOSING REMARKS

In spite of its name, Łódź (meaning 'boat') is by many inhabitants thought to be deprived of open water. Actually, this is not exactly the truth. Apart from a few small watercourses, which substantially contributed to the development of the city, there are a lot of small architectural features connected with water. From the end of 19th to the beginning of 21st c. at least 77 fountains were constructed, and currently (at the end of 2014) there are 53. Although every third example does not work, it can be said their number is considerable (at least 39 are working), especially compared with other cities of a similar size e.g. Wroclaw has about 30 fountains (website: fotoreporter24). What is more, Kraków City Council is the owner of 12 fountains (website: e-guide) while Łódź City Council has 20.

The technical and aesthetic condition of the fountains functioning in Łódź is generally very satisfying, but it should not be forgotten that they require constant care. The direct contact with water causes damage to the underground fountain system as well as externally (the basin and the shaft of the fountain). From time to time the pumps should be serviced; water and waste systems renovated or the feature restored. Fortunately, modern technology allows the adding of special detergents to water which help the devices to work much longer without malfunctioning. Despite this, each fountain requires periodic inspection, especially to clean the water basin. If this maintenance is not done, the fountain jet stops working and becomes dilapidated.

Most of Łódź's fountains currently working, which were built after 2000, are in very good condition including all those which are the property of Łódź City Council and in their representative and aesthetic aspect too. For instance 'Cauliflowers' in front of the University of Łódź faculties, the fountain near the Barlicki hospital or the fountain in Łódź's palm house.

Most non-working and deteriorated fountains are situated in the parks and housing estates which used to be popular locations but now they are losing significance, presumably caused by changes in city function. Industry, the dominant economic sector in Łódź then, favoured the need for places where people could relax after hard work near their homes. Fountains surrounded by greenery help people relax and allow them to cool down during hot days. Nowadays, Łódź is a city where services are the dominant economic sector thus the need for building such places is not so urgent, what is more, ways of spending leisure time have changed. More and more city inhabitants choose not to go to parks but to shopping malls which are not only places for shopping but also as recreational complexes. Among the youngest generation this change might be a product of progress in technology. In the 1990s the playgrounds and open areas surrounding blocks of flats were still full of playing children, nowadays most young people choose passive leisure in front of a television or computer screen. However, looking at the youngest Łódź inhabitants while they are playing in the fountain in the playground near Kusocińskiego St, different conclusions might be reached. It is enough to come here once during a summer day to see the joy and fun on children's faces because of the fountain there.

Communication development is also significant for the presence of fountains near housing estates. In the 1970s the availability of private transport was limited, not everyone had a car, and travelling for leisure beyond the city by public transport was too long and tiring. Thus, open areas located near housing estates for relaxation were highly important. Currently, almost every family owns at least one car hence going to attractive places situated far from home is not a problem.

All these factors contributed to the cessation of housing estate fountains built in the 1960s and 1970s. Presumably, these devices did not use a lot of water but did require maintenance, from time to time they broke down and should have been serviced. Because of this decreasing interest in fountains, both the estates and city local governments decided there was no point in repairing them. Local government management of public space is essential for the location of newly built fountains. *Zieleń Miejska* (the city parks department) is responsible for the maintenance of the urban open areas in Łódź, but Łódź City Council takes care of the fountains built there. Workers of *Zieleń Miejska* do not have the specialist equipment for pump maintenance or the water supply system, presumably that is why most park fountains look a bit forgotten.

The second issue is the almost complete lack of fountains on ponds in parks. In the 1950s and 1960s it was the most popular fountain type in Łódź, however, after some years they stopped being used. The main reason was presumably the necessity for maintenance. Water channelled from the pond into the nozzles was not always clean, different types of pollutants led to nozzles being blocked and in consequence they needed to be constantly repaired. Removal of the fountains from the ponds might have been caused by the theft of parts for scrap metal. With the passing of time their maintenance has become much too expensive for the city council.

Today, there are ponds in many parks in Łódź, but there are no fountains in them, a pity because the construction of these features is much easier and cheaper than 'classical' ones with water basins. In addition, no fountain influences the microclimate as positively as they do. Water jets shoot up especially high with this type of fountain, forming a mist around which gives a sense of refreshment as well as an optical sensation due to the refraction of the light creating a rainbow from time to time. It is worth mentioning that these fountains also work as aerators, aerating the water in the ponds. Water thrown high into the air undergoes oxygenation which improves the self-cleaning of water in a pond and positively influences the ecosystem. Not only do floating fountains have a microclimatic function, but also an ecological one. The city council should think about the construction of this kind of feature. Undoubtedly, they will be accepted much more among city dwellers than the occupation of space by completely new fountains.

In August 2015, after the collection of the data needed for this paper, the first mini graduation tower in Łódź started to be built (smaller but similar to those in Ciechocinek – for more please read AFFELT 2003). It is an eleven-meter-long wooden construction filled with blackthorn branches where iodized brine, delivered from a Polish health-resort, flows (website: *Radio Łódź*). The water droplets are dispersed forming curative aerosols, and inhabitants in the vicinity praise this new idea, although it is not a classical fountain, it should be classified as one because of its functionality. Apart from the fountains previously mentioned this type has the most glowing prospects for development.

Fountains visually improve public spaces. They enrich them with interesting decorative elements, especially essential in a city like Łódź. Not only are they ornaments for city dwellers, but also places for passive leisure and play. In cities similar to Łódź, fountains will certainly increase their tourism attractiveness.

FOOTNOTE

¹ The paper is based on research related to the MA thesis of Aleksandra Suwart, "The fountains of Łódź: their history and importance in the city's life", written under the supervision of Dr Adam Bartnik in the Dept of Hydrology and Water Management, University of Łódź.

> Translated by Weronika and Adam Bartnik

BIBLIOGRAPHY

- AFFELT W., 2003, Wooden masterwork of saline in Ciechocinek, Poland, Proceedings of the First International Congress on Construction History, Madrid, 20th-24th January 2003, ed. S. Huerta, I. Juan de Herrera, SEdHC, ETSAM, A.E. Benvenuto, COAM, F. Dragados, Madrid, pp. 142–149.
- BIEŻANOWSKI W., 2005, Z dziejów kanalizacji i wodociągów łódzkich, Biblioteczka Towarzystwa Opieki nad Zabytkami w Łodzi, 12, Zora, Łódź, 96 pp.
- Fontanny dla Łodzi folder promocyjno-informacyjny, 2007, ZWiK, Łódź, 14 pp.
- JANUCHTA-SZOSTAK A., 2011, Woda w miejskiej przestrzeni publicznej, Wyd. Politechniki Poznańskiej, Poznań, 315 pp.
- KOŻUCHOWSKI K., 2005, Walory przyrodnicze w turystyce i rekreacji, Wyd. Kurpisz S.A, Poznań, 196 pp.
- KUSIŃSKA E., 2009, Woda w założeniach architektoniczno-urbanistycznych, Wyd. Politechniki Krakowskiej im. Tadeusza Kościuszki, Kraków, 211 pp.
- MOWSZOWICZ J. (ed.), 1962, *Parki Łodzi*, Łódzkie Towarzystwo Naukowe, Łódź, 241 pp.
- NOWAK A., 2006, Parki miejskie w przestrzeni Łodzi, [in:] T. Marszał (ed.), Łódź: Wybrane zagadnienia zagospodarowania przestrzennego, Wyd. Uniwersytetu Łódzkiego, Łódź, pp. 31–46.
- SUWART A., 2013, Fontanny Łodzi historia i znaczenie w życiu miasta, manuscript of master thesis written under the direction of PhD Adam Bartnik in the Department of Hydrology and Water Management, University of Łódź.
- SZCZEPAŃSKA M., 2010, Fontanny a rekreacyjna funkcja miasta, Zeszyty Naukowe Wielkopolskiej Wyższej Szkoły Turystyki i Zarządzania w Poznaniu, Studia Pergiegetica, 4, pp. 149–159.
- SZKIŁĄDŹ J., 1979, Elementy zagospodarowania terenów osiedlowych, Zakład Wydawnictw CZSR, Warszawa, 102 pp.
- TORBICZ K., 2008, Konstrukcje i technologie fontann, Zieleń Miejska, 7–8, Wyd. Abrys, Poznań, pp. 52–53.
- WILCZAK M., 2008, Fontanny dla Łodzi, Zieleń Miejska, 7-8, pp. 54-56.

WEBSITES

e-guide, Szlakiem krakowskich fontann, Wyd. Bezdroża, http://eprzewodniki.pl/relacja-Szlakiem_krakowskich_fontann-1655.html, (accessed Apr. 2013).

- Fakt24, Marczyńska M., 2009, Droga fontanna zamiast... chodników, Ringier Axel Springer Polska http://www.fakt.pl/Drogafontanna-zamiast-chodnikow,artykuly,54192,1.html, (publ. 08.10.2009, accessed Dec. 2015).
- fotoreporter24, JBB, 2015, Wrocławskie fontanny czyli jesienna inwentaryzacja wodotrysków, FotoReporter24.pl, http://foto reporter24.pl/2015/10/03/wroclawskie-fontanny-czylijesienna-inwentaryzacja-wodotryskow/, (publ. 30.10.2015, accessed Dec. 2015).
- Grochowalska M., 2009, Fontanna na pl. Dąbrowskiego to szkarada czy ozdoba?, [in:] Łódź nasze miasto, Polska Press sp. z o.o.

http://Łódź.naszemiasto.pl/artykul/65769,fontanna-na-pldabrowskiego-to-szkarada-czy-ozdoba,id,t.html (publ. 06.11. 2009, accessed Dec. 2015).

- Radio Łódź, Gwizdała A., Berkowska I., 2015, Prawie jak w Cie chocinku. Retkinia z pierwszą osiedlową tężnią solankową, Radio Łódź, https://www.radioŁódź.pl/posts/17892-prawie-jakw-ciechocinku-retkinia-z-pierwsza-osiedlowa-teznia-solan kowa, (publ. 08.09.2015, accessed Dec. 2015).
- ZWiK, Fontanna idzie spać, Zakład Wodociągów i Kanalizacji Sp. z o.o. w Łodzi, http://www.zwik.Łódź.pl/fontanna-idziespac/ (accessed Dec. 2015).

Article received: 19 August 2015