

URSZULA NOWACKA-REJZNER\*

## REMNANTS OF WATER FORMS AND FACILITIES IN THE AREA OF KRAKÓW ON A SELECTED EXAMPLE

### POZOSTAŁOŚCI ZAŁOŻEŃ I OBIEKTÓW WODNYCH WE WSPÓŁCZESNEJ PRZESTRZENI KRAKOWA. PRZYKŁAD PRĄDNIKA CZERWONEGO

#### Abstract

The aim of this article is to present, on a selected example, the problems pertaining to the areas of valuable natural and cultural assets which are being absorbed by the ever-growing urban fabric. Prądnik Czerwony – a district of Kraków, has been selected as an example for the above presentation. The boundaries of this district encompass the areas that in the past used to be parts of three historic villages – Prądnik Czerwony, Olsza and Rakowice, and they still have some preserved facilities of considerable natural and cultural value. The article discusses the spatial transformations of these areas. Special emphasis has been put on the monuments of technological culture that have been preserved in the area of the district and on the principles of their conservation in the urban planning documents valid for this area.

*Keywords: Kraków – Prądnik Czerwony, Żabi Młyn, Młyn Rakowicki, leats*

#### Streszczenie

Celem artykułu jest przedstawienie na wybranym przykładzie, problemów dotyczących terenów o cennych walorach przyrodniczych i kulturowych, wchłanianych w obręb rozrastającej się tkanki miejskiej. Jako przykład rozważań wybrano dzielnicę Krakowa Prądnik Czerwony. W granicach tej dzielnicy znajdują się tereny, które w przeszłości należały do trzech historycznych wsi: Prądnika Czerwonego, Olszy i Rakowic, z zachowanymi obiektami o znacznej wartości przyrodniczej i kulturowej. W pracy omówiono przemiany przestrzenne tego obszaru. Szczególną uwagę zwrócono na zachowane na terenie dzielnicy zabytki kultury technicznej i zasady ich ochrony w obowiązujących dla tego obszaru dokumentach planistycznych.

*Słowa kluczowe: Kraków – Prądnik Czerwony, Żabi Młyn, Młyn Rakowicki, młynówki*

\* Ph.D. Eng. Arch. Urszula Nowacka-Rejzner, Institute of Cities and Regions Design, Faculty of Architecture, Cracow University of Technology.

... humans themselves through their activity ... have presented themselves to us as the most powerful factor which modifies the influence and limitations of nature to such a great extent that they are justly considered the most important factor in a geographical environment...<sup>1</sup>

## 1. Introduction

Throughout the centuries, humans have been transforming the geographical environment, using its individual elements to satisfy their defensive, economic or aesthetic needs. It is the hydrographic conditions of areas that have been especially exploited.

In Europe, transforming the existing hydrographic conditions and using the power of rivers and streams for economic purposes goes back to the 5<sup>th</sup> century. First mills appeared at that time. They became more common and their occurrence more widespread in the 11<sup>th</sup> century, and between the 12<sup>th</sup> and 14<sup>th</sup> centuries, the range of their use was subject to considerable growth<sup>2</sup>.

The occurrence of the first mills in the area of Poland which was documented in historic sources dates back to the 12<sup>th</sup> century<sup>3</sup>. These were water mills and mills using wind power for their operation. They have been performing their economic function until present times, yet the water and wind power has been slowly replaced by heat energy and subsequently, electricity.

In the 13<sup>th</sup> century, there were 102 mills<sup>4</sup> in operation in the region of Małopolska, which constituted 21% of the overall number of mills functioning in the area of Poland at that time. In Kraków, the very well developed and continuously extended water system of the area was used for *inter alia* economic purposes up to the times of the Swedish Wars. "... Right outside the city, on its circumference, were located the mills – at that time important production plants, using the water power for grinding grain to obtain flour, but also for many other purposes (groat cutters, sawmills, grinding, cutting and polishing facilities, water mills and forge bellows used in smithies etc.) (...) facilities for manufacturing fabrics, (...) finally tanneries adjacent 'at the water mill' to the former duke's tanners..."<sup>5</sup>. Some water mills in the area of Kraków were still in operation in the middle of the 20<sup>th</sup> century. Some private mills in the Prądnik and Dłubnia river valleys were among their number, as well as the former royal mill in Rakowice.

<sup>1</sup> T. Bartkowski, *Fizjografia Poznania. Początki i rozwój Starego Miasta w Poznaniu*, PWN, Warszawa 1977, 35.

<sup>2</sup> See: M. Dębińska, *Przetwórstwo zbożowe w Polsce średniowiecznej X–XIV w.*, Wrocław 1973, 239.

<sup>3</sup> More on the subject is to be found in: M. Wasiutyński, *Regal młynny w średniowiecznym prawie polskim*, Warszawa 1936, p. 9-10; S. Trawkowski, *Młyny wodne w Polsce w XII w.*, Kwartalnik Historii Kultury Materialnej, Year's Issue VII: 1959; M. Dębińska, *op. cit.*

<sup>4</sup> See: M. Dębińska, *op. cit.*, 78.

<sup>5</sup> See: *Kraków. Studia nad rozwojem miasta*, (ed.) J. Dąbrowski, Wydawnictwo Literackie, Kraków 1957, 134.

## 2. Outline of the history of the area which is now a part of the Prądnik Czerwony district

Prądnik Czerwony, at present a district of Kraków, comprises an area which in the past used to be part of three historic villages: Prądnik Czerwony, Olsza and Rakowice. A small stream Sudół Dominikański flows through the district cutting it almost in halves. The waters of this stream, as well as of the Bielucha river flowing nearby, played an important role in the history both of the Prądnik Czerwony and Rakowice villages.

The village of Prądnik Czerwony was first mentioned in 1105<sup>6</sup>. The village was founded under German law and occupied the area along the river Prądnik up to St. Nicolaus' church. Prądnik Czerwony, also called Wielki, Dominikański or Tyniecki, was bordered from the west by Prądnik Biały, also known as Biskupi, from the north by Węgrzce, from the east by Batowice, Mistrzejowice and Rakowice, and from the south by Dąbie and Grzegórzki. Initially it belonged to the Benedictine monastery in Tynec, who until 1418, was the owner of the Prądnik village community established in 1327, and it was subsequently taken over by the Dominicans<sup>7</sup>. Prądnik Czerwony was the place where rich burghers (e.g. the Cellari or Montelupi families<sup>8</sup>) had their farms, and so did the orders of Franciscans, Barefoot Carmelites and Jesuits; some of the land also belonged to St. Mary's Church in Kraków. As an area elevated in relation to the area of Kraków, and with an advantageous climate, it was also used by the city dwellers as an area of festive relaxation, strolls and shelter at the times of epidemics plaguing the city.

The rich water system existing in the area of Prądnik Czerwony was used for economic purposes. As early as in the Middle Ages, there was a mill on the river Prądnik, two ponds and a vegetable farm on the land belonging to the Dominican estate in the area of the present Albertine Sisters convent. Frequent overflows of the river and the consequential damage induced the Dominicans to move the farm to the area near St. John the Baptist's church in the present Dobrego Pasterza street. The so-called Dominican Mill, also called Żabi Młyn (*Frog Mill*) was built in the area of the farm. It operated with the use of waters from the Prądnik river (delivered to it via a leat) and from the Sudół stream flowing from the north. The mill that was built at the confluence of those two watercourses was originally made of wood. Destroyed during the period of the Swedish Wars together with the ponds and the leat situated in its vicinity, it was rebuilt and functioned until the end of the 19<sup>th</sup> century (Ill. 1).

Until the 17<sup>th</sup> century, Prądnik Czerwony also encompassed Olsza<sup>9</sup> together with its separate farming estate, where there is still preserved a classicist manor house with a garden, which used to belong to the Potocki family, the last owners of the village. At present, the manor and the park is listed in the Register of Historic Monuments as the so-called 'Garden in Olsza'.

<sup>6</sup> M. Tobiasz, *Rozwój przestrzenny Prądnika Białego i Czerwonego*, Scientific Journal, issue 4, Cracow University of Technology, Kraków 1965, 10.

<sup>7</sup> The baroque St. John the Baptist's chapel, preserved until today, was built on the area of the farm belonging to the Dominicans in 1642.

<sup>8</sup> The Cellari family built a Renaissance manor here towards the end of the 16<sup>th</sup> century, in the place of which the Pocieszka manor was built in the 19<sup>th</sup> century.

<sup>9</sup> In 1941, the north part of Olsza was incorporated in Kraków as its 42<sup>nd</sup> cadastral district. At present, the former village of Olsza is a part of the 2<sup>nd</sup> District of Grzegórzki and the 3<sup>rd</sup> District of Prądnik Czerwony.



Ill. 1. The Dominican Mill (*Frog Mill*) (photo by the author, 2010)

The boundaries of the present-day 3<sup>rd</sup> district of Kraków also encompass a part of the area that used to belong to the village of Rakowice. The first mention of this village, which until the end of the 1<sup>st</sup> Republic was a royal village, comes from 1244. In the 15<sup>th</sup> century, a farm, a royal manor and a mill called the Rakowicki Mill were established. The whole complex is still clearly discernible on a map from 1944. In the 19<sup>th</sup> century, the manufacture of chicory was founded in the area of the farm, which at that time was the property of Antoni Zazmanit<sup>10</sup>. In 1910, the area of the farm was bought by the Piarists<sup>11</sup>, who built a chapel and an Education Institution for boys. In 1912, an airport started to operate in the area of Rakowice which was gradually extended in the following years – it was the biggest and the most modern in Poland at that time<sup>12</sup>.

The existence of a royal mill in Rakowice is indicated by a paragraph in Jan Olbracht's privilege of 1500<sup>13</sup>, which "bestows one third of the profits from this mill and the remaining two royal mills located on the river Prądnik on the convent of canons regular in Kazimierz... Three royal mills (...) the first mill next to our village Rakowice, the second in Piasek opposite Mogiła behind the bridge near the house of Jerzy Morsztyn – a consul of Kraków, and the third one situated behind St. Nicolaus's church, between Jan Kisiling near Blech, a consul of Kraków..."<sup>14</sup>. The mill was built on the Olszecka leat, which diverted the waters of the

<sup>10</sup> The previous owners of the farm were the Zagórski family. After the Piarist Fathers' Archives.

<sup>11</sup> See: Land and Mortgage Entries Register L-1-11 K.B. Kraków – Rakowice, 385.

<sup>12</sup> The Rakowice – Czyżyny Airport was finally closed in 1963.

<sup>13</sup> This information is to be found in J.W. Rączka, *Młyny królewskie w krajobrazie Krakowa*, Part II, Urban Planning and Architecture Committee Files, vol. XIII, Kraków 1979, 13.

<sup>14</sup> See: J.W. Rączka, *Młyny królewskie w krajobrazie Krakowa*, Part I, Urban Planning and Architecture Committee Files, vol. XIII, Kraków 1978, 25.

Prądnik from the area of the weir in Bularnia, having previously moved the wheels of the Frog Mill owned by the Dominicans. “... Following the example of the Rudawka, a leat, called the Olszecka leat, had been built for the mill near the royal village of Rakowice, upon which several mills were built owned by monasteries which had their land there ...”<sup>15</sup>. The wooden building of the Rakowicki mill, which had not been destroyed at the time of the Swedish invasions, was replaced by a brick facility in the 70s of the 18<sup>th</sup> century, this facility performed its function incessantly until 1946 (III. 2).



III. 2. Fragment of the Greater Kraków Plan from 1910. One can see rivers Prądnik (Białucha) and Olszecka Leat, and buildings “Dominican Mill” (“Frog Mill”) and “Rakowicki Mill”:  
1 – “Dominican Mill” (“Frog Mill”), 2 – Rakowicki Mill (prepared by the author)

### 3. Modern spatial transformations of the area and the preserved monuments of technological culture

The southern part of the village of Prądnik Czerwony, at present located in the area of the 1<sup>st</sup> District, was incorporated into Kraków in 1910, the remaining part, as with Rakowice, found itself within the city boundaries in 1941. The areas that had been incorporated into Kraków<sup>16</sup>, were usually characterised by a rapid growth of development, which involved

<sup>15</sup> *Ibidem*, 25.

<sup>16</sup> The territorial and administrative growth of Kraków is discussed in R. Mydel’s, *Rozwój administracyjny miasta po drugiej wojnie światowej*, Publishing and printing house “Secesja” in Kraków, 1994.

*inter alia* a different character and degree of intervention into the existing water systems of the area.

Radical transformations of both areas took place after the 2<sup>nd</sup> World War. The extent and type of transformations that the water forms and connected facilities situated in the area of Prądnik Czerwony and Rakowice were subjected to were different. The forms and the degree of preservation of those facilities are also different.

In the years 1950–1960, a transportation construction project, important for the northern part of Kraków, was realised, connecting the area of Bronowice with Krzesławice. It was a big traffic route from Opolska Street, through Lublańska, Dłuskiego (now Gen. Okulicki) to Łowińskiego street. The aforementioned Lublańska Street cut the Olszecka leat into two parts at that time, thus separating its part connected to the Dominican Mill from the portion connected to the Rakowicki Mill. This division became even more permanent and strong in the first years of the 21<sup>st</sup> century, when Lublańska Street was modernised and an overpass was built in the area of the Polsad Roundabout.

Further changes in the network of water system in the area resulted from the construction of multi-family development complexes. The first complex of multi-family development in the area of the former village of Rakowice (Olsza II) was constructed in the years 1963–1975. A part of the Prądnik Czerwony housing estate, in Majora, Powstańców and Dobrego Pasterza, was built at the same time. Another part of the Prądnik Czerwony estate, in the area of Strzelców Street was built in the years 1981–1990.

The ponds at the Dominican Mill were filled up to enable the construction of the housing estate in the area of Dobrego Pasterza Street, the leat supplying the waters of the Prądnik to this area from the weir in Bularnia had been done away with earlier. Its course is still discernible on a map from 1979, and at present, its traces – in the form of a depression in the ground – are still preserved in the area of Dominikanów and Nad Strugą streets. The other two watercourses supplying water to the Frog Mill still flow in their original beds (Ill. 3).

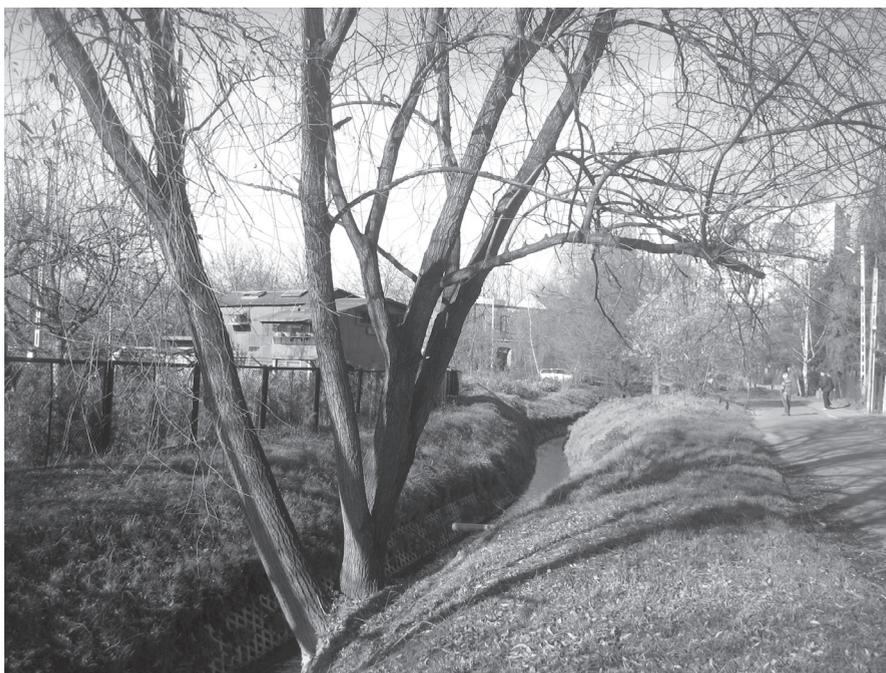
The area of drained land created by filling up the ponds at the Dominican Mill served as the ground on which *the Dominican Park* was established, which at present bears the name *the Enchanted Cab Park*. The park is a part of the park of the River Prądnik and its tributaries. A pond has been created in the central part of the park. This pond and a part of a watercourse flowing into it from the side of the mill is merely a poor substitute of the previous water system existing here. The system consisting of two ponds and a leat is still clearly discernible on a map from 1979. The designers want to remind the public of a dyke that used to encircle these ponds by elevating one of the park's alleys above the ground. The 19<sup>th</sup> century building of the Frog Mill on the other hand, at present rather decrepit, is intended by the designers, after the necessary repair and adaptation works have been completed, to perform cultural and educational functions.

Nevertheless, the Enchanted Cab Park occupies only a part of the area, around 2 ha, between Dobrego Pasterza, Kaczary, Olszecka and Lublańska, which in the City of Kraków's study of land use conditions and directions<sup>17</sup> was classified as a green area of general urban

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The subsequent changes of the city boundaries may be traced in: The Atlas of the City of Kraków (map No. 8).

<sup>17</sup> Studium uwarunkowań i kierunków zagospodarowania przestrzennego Miasta Krakowa, Kraków City Council, 2003.



Ill. 3. The waters of the Sudół stream flowing along Olszecka Street, the building of the Dominican Mill visible in the background (photo by the author, 2010)

type *meaning is unclear* and was to perform the function of a river park. The remaining part of the area adjacent to Lublańska street since 2008 has been gradually built up by a multi-family development complex called *The Enchanted Mill*. The development complex is being constructed in compliance with the land development conditions decision for the area obtained by the investor. The area which is being built up is exposed to flooding with the 'one-hundred years water' (Q1%) and is also disadvantageous from the point of view of acoustics<sup>18</sup>.

The building of the Rakowicki Mill, which as one of the few facilities of that type had been functioning in the space of Kraków until 1946, has met a different fate. In 1946, it lost its primary function and became a warehouse, which began its slow decline. The demolition of the building of the last royal mill in Kraków took place on the 7<sup>th</sup> November 1976<sup>19</sup>.

Waters of the Olszecka leat, which used to move the wheels of this mill, were let into the sewers. The outline of the Olszecka leat course in the section between Lublańska and Żarnowa streets is still discernible in the space of the housing estate as a water-less bed lined with trees which used to grow over the water flowing in it (Ill. 4).

<sup>18</sup> See: Resolution No. XXXII/1976/09 of the Kraków City Council of the 7<sup>th</sup> October, 2009 on adopting the local land use plan for the Sudół Dominikański area.

<sup>19</sup> See: J.W. Raczka, *Młyny królewskie w krajobrazie Krakowa*, Part II, *op. cit.*, 7.



III. 4. Water-less Olszecka Leat bed between the Polsad Roundabout and Młyńska Boczna Street  
(photo by the author, 2012)

#### **4. The principles of water forms and facilities conservation formulated in urban planning documents**

Quality of life in urban areas is to a considerable extent affected by the preserved elements of the cultural and natural environment of a given area. According to the acts of law with a binding force in Poland, the key role in their conservation, as well as in the proper use that is made of them in shaping urban fabric, is played by the urban planning documents of the commune, i.e. the city study of land use conditions and directions and the local land use plans.

It therefore seems important to survey the passages in those documents pertaining to the objects of natural and cultural value which have been preserved in the space of Prądnik Czerwony, especially the ones referring to water facilities and water form relics.

In the valid study of land use conditions and directions in the City of Kraków of 2003, the following *inter alia* were listed as cultural assets: “hydrographic networks embedded in the city topography (the course of the Royal Leat), dikes and traces of past ponds and water industrial facilities”<sup>20</sup>. And further on: “The following should be listed as the most important objectives of land use policy: preservation of the unique assets of the cultural environment as well as prevention of structure transformations and

<sup>20</sup> See: *Studium...*, *op. cit.*, 120.

land use types that might constitute a threat to its exceptional values contributing to the identity of the City”. Moreover, the network of rivers and streams of Kraków, together with their accompanying green areas, are to be protected as a system of river parks<sup>21</sup>. It is emphasised in the document that these areas should be “... permanently incorporated into the city spatial structure as areas free of development, facilitating social contacts and universal use of the resources of the environment. The main directions of their use are also hereby determined”<sup>22</sup>.

Twelve river parks are scheduled to be created in the area of Kraków. The river park of the Prądnik with its tributaries is to be one of them. The current valid *Ranking List of Municipal Investment Projects Pertaining to Greenery*<sup>23</sup> comprises 28 parks of a combined area amounting to 803.6 ha, including 15 fragments of river parks, and with *Park Rzeczny Rozrywka (The Entertainment River Park)* among them. This park, with an area of 36.6 ha, constitutes a part of the River Park of the Prądnik with its tributaries. On the area of the Entertainment River Park, there is a 7 km-long section of a stream bed together with its green surroundings, situated within the city boundaries. The area of this park is covered by the local land use plan *Sudół Dominikański*<sup>24</sup>. The plan is one of three local land use plans that are valid in the area of the district of Prądnik Czerwony<sup>25</sup>. Together they cover an area of 90.2 ha, which is 13.8% of the whole area of the district<sup>26</sup>.

*In the Sudół Dominikański* plan passed on the 27<sup>th</sup> November 2009<sup>27</sup>, “Protection of the natural environment and the landscape of the stream Sudół Dominikański (Rozrywka) has been adopted as the primary objective of the plan”, and the detailed objective was “... to ensure natural and functional continuity between the areas of the Dominikański park located in the southern part of the plan with the areas surrounding fort 471/2 Sudół, together with its greenery and a part of the areas of the forefields not sure what this is supposed to be to the east of the fort”<sup>28</sup>. A Conservation Office Protection Zone was marked out in the plan. It encompassed “... the so-called Frog Mill of the early 20<sup>th</sup> century at 18, Olszecka Street together with its surrounding park, which was created on the area of the former Dominican ponds...”<sup>29</sup>. The Frog Mill facility<sup>30</sup> is one of the very few historic industrial facilities of this type that have been preserved in the area of Kraków. The plan also includes a drawing with an outline of the Historical and Cultural Route of Prądnik Czerwony. A part of this route runs in the vicinity of the Frog Mill and the Enchanted Cab Park, and a small fragment

<sup>21</sup> See: *Ochrona i kształtowanie środowiska przyrodniczego*, [in:] *Studium...*, *op. cit.*, 174.

<sup>22</sup> See: *Kształtowanie struktury przestrzennej miasta*, [in:] *Studium...*, *op. cit.*, 139.

<sup>23</sup> See: Jednolita lista rankingowa inwestycji miejskich w zakresie zieleni, Evaluated by the Committee for Spatial Planning and the Environment Protection of the Kraków City Council – opinion no 174/2006 of 23<sup>rd</sup> January 2006.

<sup>24</sup> The area encompassed by this plan amounts to 70.8 ha, which is 10.8% of the district area.

<sup>25</sup> The other two plans cover the area of the Prądnik Czerwony cemetery.

<sup>26</sup> Until the 26<sup>th</sup> October, Kraków had 92 valid local land use plans, which together covered as little as 36.9 % of the city area.

<sup>27</sup> Resolution No. XXXII/1976/09 of the Kraków City Council of the 7<sup>th</sup> October 2009 on adoption of the local land use plan for the area of Sudół Dominikański.

<sup>28</sup> *Ibidem*, 2.

<sup>29</sup> *Ibidem*, 11.

<sup>30</sup> The Frog Mill facility is listed in the commune register of monuments. In 2006, the commune of Kraków bought from the Dominican Order in Kraków the land on which the Dominican Park is situated together with the Frog Mill building situated within and the building of an old stables.

goes along Dominikanów Street. The Natural Assets Protection Zone has also been marked out. It is prohibited to locate new facilities in the zone, and in the case of the existing ones, their use has been permitted as before, yet any possibility of upward or outward extension has been excluded. Moreover, natural greenery protection has been commanded, and any intervention into the natural shape of the Sudół Dominikański stream has been prohibited. However, regulation of the watercourse has been permitted with the reservation that if the banks and the bed of the Sudół Dominikański stream are to be strengthened, only natural materials should be used.

Moreover, six local land use plans are currently being prepared for the Prądnik Czerwony district<sup>31</sup>, covering the total area of 208.6 ha, which is 32% of the district area. One of those plans, the local land use plan '*The Area of XX Pijarów street*', includes a small part of the area where the waters of the Olszecka leat used to flow. The area covered by this plan is only 15.4 ha. The work on drafting this plan commenced following a motion of the Committee for Spatial Planning and Environment Protection of Kraków City Council of the 9<sup>th</sup> May 2011. A part of the area covered by the plan currently in preparation fell under the old plan 'Olsza in the area of Gen. Bor-Komorowski and Księży Pijarów streets' implemented in 1998<sup>32</sup>. The aforementioned motion indicated the need to amend this plan as it was difficult to apply in practice. The plan 'Olsza in the area of Gen. Bor-Komorowski and Księży Pijarów streets' did not take into account the need to protect the waterless yet still clearly discernible bed of the Olszecka leat and its surrounding greenery. This relic *consider changing to 'ruin'* of a water form, so important in the recent history of Rakowice, was only referred to in the plan as "greenery accompanying the watercourse together with the watercourse development"<sup>33</sup>. The plan 'Area of XX Pijarów Street' currently in preparation covers the meandering part of the leat's old bed and the best preserved greenery of the surrounding areas. It is the area between the Polsad Roundabout and Młyńska Boczna Street. The objectives of the plan do not include any formulation pertaining to the existence and the need to protect the traces of the area's old water system.

## 5. Conclusions

Even today, it is possible to find traces of old water forms in Kraków's spatial arrangement, which testifies to the extensive use of water characteristics for economic purposes<sup>34</sup>. Such traces take on different forms in the contemporary area of Kraków. They are neglected ponds, parts of leat beds, mill facilities or stretches of characteristic vegetation which used

<sup>31</sup> The District of Prądnik Czerwony occupies the area of 650 ha and is inhabited by 48,654 people. After BIP, 2012.

<sup>32</sup> Resolution No. CXXII/1093/98 of the Kraków City Council of the 17<sup>th</sup> June 1998 on the local land use plan for the area Olsza in the area of Gen. Bor-Komorowski and Księży Pijarów streets.

<sup>33</sup> See: *Ibidem*, 4.

<sup>34</sup> More on the subject of commercial use of the waters of the rivers flowing through the area of Kraków and its closest vicinity may be found inter alia in A. Falniowska-Gradowska, *Mieszkańcy doliny Prądnika w XVIII w.*; M. Tobiasz, *Rozwój przestrzenny Prądnika Białego i Czerwonego*; J.W. Rączka, *Młyny królewskie w krajobrazie Krakowa*.

to accompany water forms. In many cases, the only reminders of a water form existing in an area in the past are the names of streets and squares<sup>35</sup>.

“The character of Prądnik changes more every year, because the village has given way to the city; in a dozen or so years Prądnik’s old cottages and houses will disappear and share the fate of the distant and so different past of the area, of which we have very few historic relics and the memory of which has only been preserved in old files and documents. In the light of these historic records, Prądnik acquires its proper colours and throbs with life full of transformations, different for each generation. For the history of Kraków, the fates of Prądnik are of special importance and are tied to it by an unseverable knot”<sup>36</sup>.

This is how Mieczysław Tobiasz wrote about the area of the village of Prądnik Czerwony nearly half a century ago. Today the following relics of the past testify to the old character of Prądnik Czerwony: the building of the Dominican Mill, the so-called *Frog Mill* (*Żabi Młyn*), traces of the Olszecka leat in the area of Dominikanów, Nad Strugą and Olszecka streets.

In the area of the village of Rakowice, there is the still discernible bed of the Olszańska leat. The Rakowicki Mill does not exist any longer. In the place of the mill’s building, a housing tower was built at the end of the 70s, a car park and a green plaza have been put up (Ill. 5). The existence of a royal mill in this place is commemorated in the names of the streets: Młyńska (Mill street), Młyńska Boczna (Mill Side street), Żarnowa (Hand mill) or Sadzawki (Pool).



Ill. 5. The Rakowicki Mill used to stand in the place of the present car park and block of flats visible in the background until 1978. On the left, the water-less bed of the Olszecka Leat (photo by the author, 2012)

<sup>35</sup> E. Supranowicz writes extensively on the subject of the names of streets and squares in Kraków: E. Supranowicz, *Nazwy ulic Krakowa*, Institute of the Polish Language, Polish Academy of Sciences, Kraków 1995.

<sup>36</sup> M. Tobiasz, *Rozwój przestrzenny Prądnika Białego i Czerwonego*, Scientific Journal, issue 4, Cracow University of Technology, Kraków 1965, 87.

The preserved relics of technological culture in the area of Prądnik Czerwony, testifying to the former splendour of this area and its significance in the history of Kraków, should not only be seen as material remains of the past, but also as an important element in shaping the local identity of this part of Kraków. Therefore, there is an urgent need to counteract the decay of the existing objects of natural and cultural value of this area, which has not always been possible until now, *inter alia* due to a lack of relevant legal documents or efficient instruments for law enforcement. It must be strongly emphasised that legal regulations alone do not guarantee success, eventually it is the quality of the adopted solutions that decides.

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