IDENTITY OF THE RIVER - CONTEMPORARY TRANSFORMATIONS OF URBAN EMBANKMENTS OF THE VISTULA RIVER

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Abstract

For centuries large European rivers have been the material for building the identity of states, regions, and individual cities. Their significance for the process of building of the European civilisation is unquestionable. These rivers have become one of the dominating factors deciding about the choice of locations for towns and settlements, as well as one of the key motors of their development. Linking cities and towns with one another, they influenced their forms and identities, creating formal and informal relations between them. As carriers of so many values, they have become fundamental elements of the natural as well as urban landscape. Through their prism an assessment of individual cities, as well as entire regions, is performed. The river, as a certain framegenic axis, changes its character while pursuing civilisation changes. The once dominating trade and industry-related aspect is complemented, and often dominated, be the recreational and tourist one.

Amongst such great European axes – watercourses as Loire, the Rhine, or the Tiber, one should also point out to Polish rivers: the Oder and the Vistula. The latter, and most of all the towns and cities stringed along it, will be the subject matter of this paper. Selected cities depicting the condition of the Vistula river over its entire course have been subjected to an analysis. These are: Cracow, Warsaw, Płock, Toruń, and Gdańsk. Programmes and strategies referring to the waterfronts are studied in terms of their common features with European tendencies.

The river, irrespective of the continent and culture, constitutes - and has always constituted - one of the most important motors of the development of civilisations. It could be a stimulus, but frequently it would manifest its destructive power, destroying, and often putting an end to towns and settlements connected with it. Building supraregional relations, rivers were becoming the foundation for the identity of urban layouts based on them.

Posing limitations and boundaries for the urban development, they influenced the process of defining their territories. By creating their own territory, in a way they forced some social

relations between subsequent systems, they stimulated the creation of what we can call territorialism, whose semantic axis will be the river. Adopting the definition by Paola Viganó, a territory is a set of borders, forces, and relations between entities[1]. It is a geographical space – a physical collection of characteristic qualities and properties. In this sense, territorialism is a combination of the physical aspect of urban structures and of the sociological aspect.

In light of territorialism, one can perceive urban planning somewhat differently, posing a question: what is the effect of the river on individual elements of the system, on subsequent cities stringed along it, for which it becomes a kind of a life-giving artery? Does the historical process emphasise or obliterate the features and relations testifying to the common synergic need of the urban structure and the river to co-exist? Perceiving the river and the region that surrounds it from the level of the macro-scale, it is clearly evident that its most important attribute is *continuity;* continuity understood as a structural domain, but also a functional, social and cultural one. Continuity of the natural landscape, based on the landscape of the river, may become a superior element, linking often defragmented urban structures, and in so doing becoming the basic factor of the spatial order, as well as the material that the quality of the entire region is made from[2]. In light of the progressive climatic changes, the river returns to the centre of interests of urban planners. The growing threat of floods, or the willingness to obtain energy, force technological transformations of the river landscape. This situation entails certain risks (destruction of the natural ecosystem of river valleys), as well as it creates positive challenges that stimulate to pursue new forms of residence, recreation, and land development around rivers. If we regard the city as a landscape, it will be most conveniently read from the perspective of the river – the river, which providing distance, at the same time emphasises the permanence of the urban structure and the dynamism of changes that accompanies it. The river, by becoming a type of connector between an urban area and an open area, may become a decisive element in the city sprawl. Being a communication axis, it may become a backbone for more or less chaotic urbanisation, stimulating the occurrence of such urban forms as 'city-regions' (in-between cities, Zwischenstadt). Here, the key importance seems to be attached to the protection of indigenous forms of urban settlement, characteristic for a specific river, in order to preserve the uniqueness and identity of river valleys and of urban complexes that accompany them.

Simultaneously, one could observe certain design tendencies towards river, changing over the recent years. Projects that refer to European rivers, manifest a definite shift from the resource approach to the ecosystem approach[3]. As a consequence of the former approach, within the scheme of the European Union legislation the so-called River Basin Districts have been established, illustrated in the graphic enclosure: 'Map of National and International River Basin District' (Fig. 0). Such an approach seems to be still dominating in the water management policy

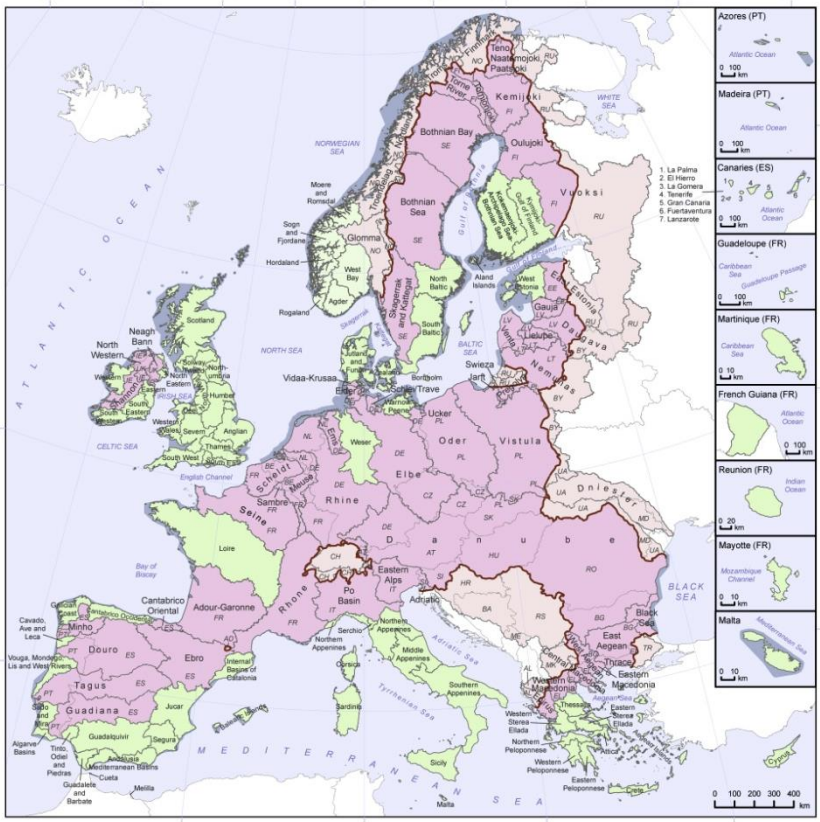
[1] Paola Viganò writes more on the aspect of territorialism in the context of the relation urban structure - topography in: Viganò Paola, "Territorialism", Harvard University, Graduate School of Design, Cambridge, 2014, pp. 10 - 22.

[2] Such an approach to urban design is clearly visible in the process of transformation of cities based on the Rhine river. Cf.: Hölzer Ch., Hundt T., Lüke C., Hamm O.G., "Riverscapes. Designing Urban Embankments", Birkhäuser Verlag AG, Berlin 2008.

[3] The topic of changes in the design approach to the river as a whole in landscape is presented in more detail in: Ribot Silvia, Driva Lida, Bra Dimitra, "Flooding Mechanisms: a New Ground for Water Management Policies", AA Landscape Urbanism, Architectural Association School of Architecture, London, 2014/2015, pp: 12 - 25.

in Poland. In the Union itself, especially in its western part, the latter approach has been implemented. In 2000 the so-called European Water Framework was established, which is a set of guidelines concerning all water management projects implemented in Europe. Eventually, a set of principle was formulated, defining what and to what extent is included in the scope of interests of the ecosystem approach. This approach has the character of a strategy that integrates land, water, and living resources management in order to preserve them and utilise in a sustainable way. A statement that is extremely valuable – and particularly interesting for this paper – is that man, with his diversified culture, is an integral part of the river ecosystem. The tendency to respect the natural character of the river has found its reflection in the national (local) legislation, as well as in specific urban projects. Both these scales of activity influence the shape of the contemporary city in a more or less direct fashion.

Figure 0. Map of National and International River Basin Districts



source:http://ec.europa.eu/environment/water/waterframework/facts_figures/pdf/River%20Basin%20Districts-2012.pdf

Against the background of the phenomena and tendencies referred to above, the following questions could be posed. What place of the development of European cities was occupied by the river? What is and was its influence on the process of shaping of urban structures? Does it stand a chance to become a bridge in the search of a connector between what is built and the natural landscape? By introducing elements of the open landscape in the city, does it allow to

implement the assumptions of a multifunctional, compact city? Does the activation of frequently dead banks of rivers contribute to the effect of city polarisation?

These questions can be referred to the situation of Polish river cities, which are currently being subjected to processes of transformation – processes which Western Europe has already experienced.

In this respect, issues connected with cities situated at the Vistula river, the largest river of Poland, and at the same time a river whose entire course is located within the territory of Poland, becomes particularly interesting for the Author. The Vistula river has always had a strong identity and identification, influencing the area connected with it. The first historical mentions concerning it appear as early as in the 7-5 B.C., and simultaneously its image was built through legends and stories.

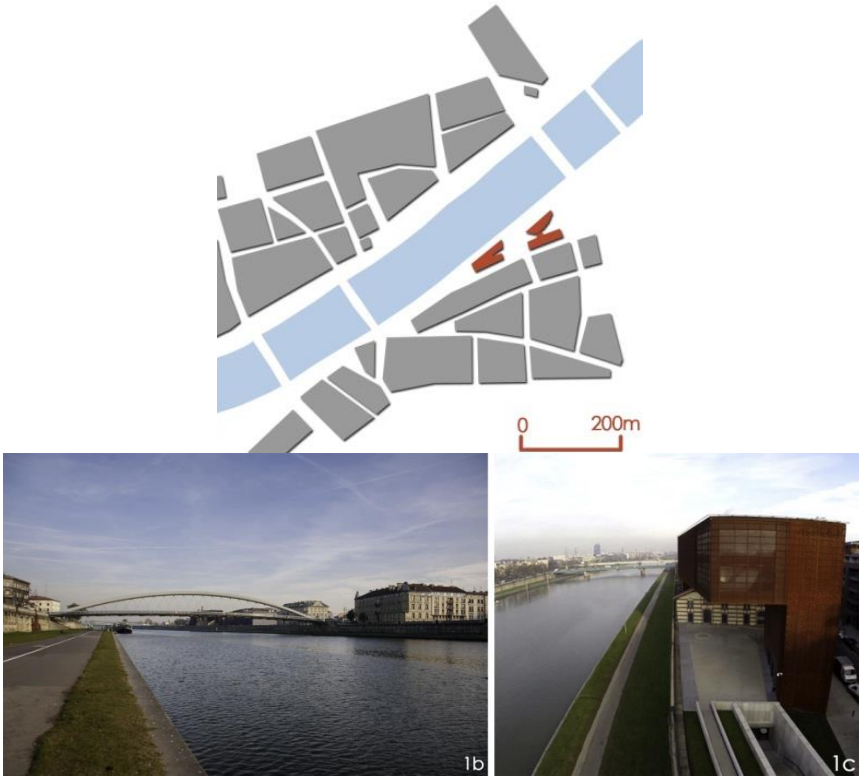
For the towns and cities basing on it, the Vistula river was becoming the source of their prosperity and their driving force over years of their history. For ages it was a natural axis of exchange of goods, concepts, traffic for the entire country. Today this role, due to civilisation transformations, has been changing. The character of this enormous axis, once connected with trade and industry, may become more dominated by recreational and cultural functions. Their vitality will be connected, however, with the quality of public spaces of subsequent towns and cities bound with it. What does this relation look like today? How many towns and cities have an active contact with the course of the river that still guarantees a good quality of life?

With reference to the definition of the ecosystem approach in the process of designing river valleys, where an integral part is the cultural heritage of man, this paper presents examples of selected cities located on the Vistula river, currently implementing projects which to various extents and in various scales pertain to embankments of the Vistula. At the same time, the selected cities illustrate the character of the course of the Vistula river in its individual characteristic sections – representing its Upper, Middle, and Lower Course. In all those examples one could speak of the phenomenon of polarisation of the urban structure – in its special case, which is the activation of embankments and their effect on the condition of the entire urban organism.

Cracow – activation of the left-bank edge of the Vistula river – cultural corridor

By the post-war period, Cracow was developing along the north – south axis, nearly perpendicularly to the Vistula river. By joining one of the last units, which was an Austrian town of Podgórze, Cracow became a city located on both banks of the river. It did not, however, secure cohesion in the public space of the city – the river still functioned more as a spatial and social barrier rather than a connector. The gradual increase of the popularity of the right-bank part of the city was eventually confirmed by the construction of a pedestrian and cycling crossing (Fig. 1b), linking Kazimierz with Podgórze, This project opened a new chapter in discovering of this part of the city.

Figure 1a. Cracow – relations of the urban structure to the waterfront, taking into account the size of the channel of the Vistula river. Diagram: A.Matusik. (legend: blue – course of the Vistula river, grey – urban structure, red – important public facilities) **Figure 1b.** Cracow – channel of the Vistula at the height of Podgórze. Photo: W.Matusik. **Figure 1c.** Cracow – the edifice of Cricoteka. Photo[4]



Today the Vistula Boulevards constitute a symbol of the city. In the local spatial development plan they are dubbed the 'salon of the city', whose furniture was to consist mainly of facilities and spaces of a cultural character. Thus this section of the Vistula river begins to play the role of a new cultural backbone of the city (in opposition to the traditional north – south axis of the city's development).

Until recently, the space of the boulevards was dominated by structures exhibiting high cultural values, such as the Royal Castle, the 'Skałka' Church, or the Monastery of the Norbertine Sisters. At the beginning of the 21st century, new structures joined these icons: Museum of Japanese Art and Technology Manggha[5], later on completed with the edifice of the Japanese

[4] source: https://www.google.pl/search?q=cricoteka&espv=2&biw=1366&bih=623&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiprcS1k-7LAhWJ1RoKHb1yChEQ_AUIBigB&dpr=1#tbm=isch&tbs=rimg%3ACRs84MGA00sjIjjDRZXu-G-6TzyerFshKuGPi86L2J-WYr9Lv3G49HuKWk_13XXzQH_1fhNezm-PtZobYOfhcxdR40sCoSCcNFle74b7pPEQxVeRZGXJtfKhIJPJ6sWyEq4Y8RIUSxDIA9whcqEgmLzovYn5ZivxEt5oN6zqSkZioSCUu_1cbj0e4paEasniBrfIdfEKhIJT_1ddfNAf9-ERsXun5rNC2HcqEgk17Ob4-1mhthEhRLEMgD3CFyoSCQ5-FzF1HjSwEdxUPs9JwWRA&q=cricoteka&imgrc=0tPZBXtH-lWLxM%3A

[5] Design by Arata Isozaki, Krzysztof Ingarden and Jacek Ewy, 1994.

Language School[6], the edifice of Cricoteka[7] (Fig. 1c), or Bohaterów Getta square[8], which opens the path to getting to know the tragic history of another city quarter located at the Vistula river, which is Zabłocie, currently being revitalised. An extremely interesting project is also the reconstruction of the forefield of the Wawel castle. The Powiśle Tourist Service Centre[9] is a facility accompanied by an embedded public space of an urban piazza, whose aim is to lead the pedestrian traffic smoothly from the boulevards towards Powiśle and Podzamcze streets. The structure itself, located below the level of the boulevards, is supposed to not collide with the skyline of the Wawel hill. The last icon, a bit distant from the river itself, although still associated with it, is the edifice of the new Congress Centre[10]. Despite so many individual investments, the Vistula Boulevards have not waited to see the implementation of an urban project which would define a new character of the undeveloped waterfront at the height of the quarters of Grzegórzki and Zabłocie (before the Dąbie barrage).

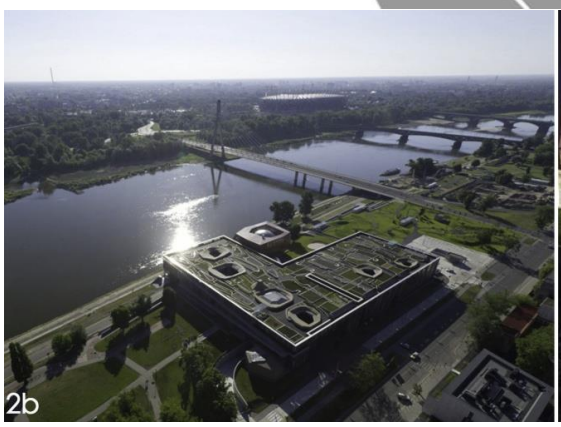
Warsaw – revitalisation of the left-bank boulevard from Żolibórz to Czerniakowski Port

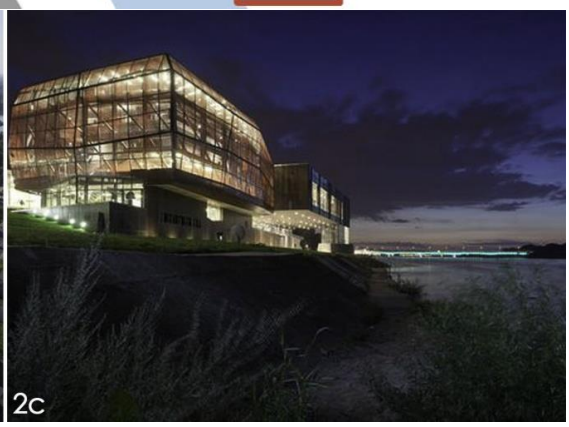
Warsaw, in spite of the fact that its centre is situated on both banks of the Vistula river, for quite a long time was deprived of any contact with the river. It was so due to the construction of the Wisłostrada highway, cutting off the city from the river. Currently, Warsaw has commenced the revitalisation or new development of both Vistula boulevards along nearly the entire section within the city. This broad programme is to be started with the implementation of a project of the city-centre section from Tamka street to Boleść street. The whole project will cooperate with subsequent local investments. The care for new solutions based on the philosophy of sustainable development is definitely worth attention. The entire project has been developed within the scheme of the Warsaw Water and Cycling Hub ‘Bike & Sail’, stage 1.

Amongst detailed designs the implementation of the Copernicus Science Centre attracts our attention[11] (Fig. 2b, Fig. 2c) along with the adjacent Discoverers’ Park[12]. This investment, implemented already before the closure of the local plans, defined the character of the waterfront, strongly emphasising the contact of the city with the natural landscape, and most of all with the Vistula river, making it accessible for users. The designing approach is best described by an excerpt from the author’s account: ‘the proposal of the design aims at the recovery of characteristic elements of the topography of contact points between land and water on the left urbanised bank of the Vistula river.[13]

[6] Design by Ingarden & Ewy Architekci, 2004.
[7] Design by nsMoonStudio (Piotr Nawarra, Agnieszka Szultk), Wizja sp.zoo (Stanisław Deńko), implementation 2014
[8] Design by Biuro Projektów Lewicki - Łatak, implementation 2005. The project won the first prize in the Urban Quality Award 2011 competition.
[9] Design by ASYMETRIA, 2006.
[10] Design by Ingarden & Ewy Architekci, 2014.
[11] architect: Rar2 Laboratorium Architektury, Ruda Śląska.
[12] architect: Rar 2, implementation: 2006 - 2010, source: http://coquimalachowskacoqui.com/park-centrum-nauki-kopernik-w-realizacji.html
[13] The entire description available on: http://www.sztuka-architektury.pl/index.php?ID_PAGE=27895

Figure 2a. Warsaw – relations of the structure of the city towards the waterfront taking into account the size of the channel of the Vistula river. Diagram: A. Matusik. (legend: blue – course of the Vistula river, grey – urban structure, red – important public facilities) **Figure 2b.** Warsaw – course of the Vistula river at the height of the Copernicus Science Centre, with the National Stadium in the background. Photo[14] **Figure 2c.** Warsaw – edifice of the Copernicus Science Centre on the embankment. Photo[15]





[14] source: https://www.google.pl/imgres?imgurl=http://pliki.propertydesign.pl/i/02/55/56/025556_1140.jpg&imgrefurl=http://www.propertydesign.pl/architektura/104/centrum_nauki_kopernik_kopernikanski_przewrot_w_architekturze,6867-25556.html&h=640&w=961&tbnid=7M3mOUP-vHj0cM:&docid=Cef_Yn-Z8sJ63M&ei=AVT-VoCbGIvtaoSRv-AD&tbm=isch&ved=0ahUKEwjAn8nqo-3LAhWLthoKHYTIDzwQMwg8KBYwFg)

[15] source: https://www.google.pl/imgres?imgurl=http://cdn18.archirama.smcloud.net/s/photos/t/4552/centrum_nauki_kopernik_12428.jpg&imgrefurl=http://archirama.muratorplus.pl/architektura/jan-kubec-architekt-centrum-nauki-kopernik-opowiada-o-swojej-nowatorskiej-architekturze,67_1317.html&h=347&w=640&tbnid=ecap2FCbIW2g6M:&docid=c-gweGBzFxg1-M&ei=Vs_-Vr3sD8nwaq6YvNgM&tbm=isch&ved=0ahUKEwi979e5me7LAhVJuBoKHS4MD8sQMwgeKAAwAA

Płock – yacht marina

The city of Płock has connected its spatial policy largely with the vicinity of the Vistula river. One of the priority goals has been a broad revitalisation of the embankments of the river, which in this section is the widest. A wide channel of the river, a broad embankment with a separate bay, and a vast escarpment at the river define the character of the city, becoming its greatest potential advantage at the same time.

Figure 3a. Płock – relation of the structure of the city to the waterfront taking into account the size of the channel of the Vistula river. Diagram: A. Matusik. (legend: blue – course of the Vistula river, grey – urban structure, red – important public facilities) **Figure 3b.** Płock – course of the Vistula river together with the yacht marina and the hill with the oldest part of the city. Photo[16] **Figure 3c.** Płock – pier against the background of the course of the Vistula river. Photo[17]

The design considered for this area aimed at the increase of the attractiveness of the embankment itself, as well as of the entire city, predominantly by the extension of the

[16] source: https://www.google.pl/imgres?imgurl=http://bi.gazeta.pl/im/df/22/10/z16917215Q.jpg&imgrefurl=http://plock.wyborcza.pl/plock/56,35681,17944235,molo-w-plocku,,2.html&h=566&w=620&tbnid=e3P1glGxqRd3VM:&docid=h5p63yOpzmoRhM&ei=EGH-VpnEBsy6swGn-blg&tbm=isch&ved=0ahUKEwiZjMCksO3LAhVM3SwKHad8DgwQMwhZKDYwNg

[17] source: https://www.google.pl/search?q=p%C5%82ock+przysta%C5%84+jachtowa&espv=2&biw=1366&bih=623&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiOnaGJsO3LAhXJXCwKHdAZCu8Q_AUIBygC&dpr=1#tbm=isch&q=p%C5%82ock+molo+Wis%C5%82a&imgrc=sdRqYfkgpPmHbM%3A

recreational and sports functions. The municipal plans for the period 2008-2010 included a complex of sports and recreational facilities along with the development of the Płock Vistula Embankment. The main catalyst for the activity was to become the yacht marina (Fig. 3b, Fig. 3c) (currently under construction) and enabling access to Sobótka reservoir by creating infrastructure around it with a training / social / technical backup facilities[18]. The unfinished revitalisation process waited to see its continuation. Currently the entire embankment along the section of 2.5km is to be included in the public space of the city. It became possible thanks to the implementation of new investments within the scheme of the Regional Territorial Investments, co-financed by the European Commission[19]. Within the scheme of this project, the entire embankment, together with the so far undeveloped surroundings of Sobótka, is to be revitalised. Along with the necessary infrastructure, such as roads, car parks and new facilities supporting recreational functions, a network of cycling lanes is planned, as well as a connection with the Vistula escarpment via an escalator or a lift. The latter investment would link the oldest part of the city, located ca. 50 metres above the river, with the new recreational grounds.

Toruń – Filadelfijski boulevard along the section from the road bridge to the harbour of the Academic Sports Association

Revitalisation of the section of the Vistula embankments in the direct vicinity of the Old Town in Toruń is nearly like touching its historical layout. Still legible and one of the most beautiful skylines of the medieval town is to be bestowed with a forefield of a relevant quality

Figure 4a. Toruń – relations of the structure of the city to the watercourse taking into account the size of the channel of the Vistula river. Diagram: A. Matusik. (legend: blue – course of the Vistula river, grey – urban structure, red – important public facilities) **Figure 4b.** Toruń – skyline of the historical city with Filadelfijski boulevard. Photo[20] **Figure 4c.** Toruń – design of Filadelfijski boulevard according to Riegler Riewe Architekci sp. z o.o. from Katowice. Visualisations[21]

[18] Data according to the information from the Department of Municipal Development of Płock: http://www.dane.plock.eu/ump/dane/wpi/412_39.pdf

[19] it is worth pointing out that the goal of the Regional Territorial Investments programme is uniform development of the region via investments of a subregional significance. In this respect, the programme of revitalisation of the waterfront of Płock inscribes in the improvement of quality, reception, and functioning of the public space in the scale of the entire Lower Course of the Vistula River. In 2014 the city of Płock and eleven neighbouring local governments, with counties of Płock, Gostyń and Sierpc, communes of Słupno, Radzanowo, Stara Biała, Nowy Dunin and Łąck, and towns of Gąbina, Sierpc, and Wyszogród, signed an agreement on the Regional Territorial Investments programme

[20]https://www.google.pl/imgres?imgurl=http://img.targeo.pl/i/cache/wikipic/tor/Toru_C5_84___Bulwary_Wis_C5_82y_01_JPG-seo.jpg&imgrefurl=http://mapa.targeo.pl/torun-bulwary-wisly-01-bulwar-filadelfijski-14-torun~5920636/zdjecia/adres&h=372&w=642&tbnid=hhQZV0WMmsVBCM:&docid=DTqzxu05fBwu2M&ei=imb-VszSGYShsAHF6rmYDg&tbm=isch&ved=0ahUKEwjMv5bBte3LAhWEECwKHUV1DuMQMwgdKAEwAQ

[21] http://www.torun.pl/sites/default/files/pictures/torun_i_nagroda_konkurs_bulwar_pow.jpg

The forefield, referred to as Filadelfijski boulevard (Fig. 4b), once a domain of military engineering, dominated by fortifications, now is to be oriented towards recreational purposes and is to become a sort of the salon of the city.

The winning design (Fig. 4c) assumes a minimum intervention into the physical space of the embankment. Special attention was put on the creation of social places, basing on solutions of a greenery system. The space of the boulevard is to be dominated by diversified heights of vegetation and vast lawns, completed with open and closed pavilions. Furthermore, road traffic has been limited by narrowing of the lane and the priority given to the pedestrian and cycling traffic. The project respects the previous urban investments, including in the proposed space the renovated embankment in the form of majestic stairs leading to the river.

Young City Gdańsk – a new quarter on post-industrial areas by the river

Gdańsk is an extraordinary city amongst other urban layouts connected with the Vistula river. Its structure has always spanned two rivers: the Motława and the Martwa Wisła (the Dead Vistula). It did not, however, build any urban structure along the latter. The historical layout of Gdańsk is connected with the Motława – it reinforced the moats of the municipal fortifications with its water. Along with the Radunia Channel, it created a system which provided the city with protection, as well as constituted backup for the industry of the city. At the end of the 17th century Gdańsk becomes one of the largest modern fortifications of Central Europe – its basic elements are the city of Gdańsk, the port, and a system of fortifications located along the Dead

Vistula and completed with the fortress of Wisłoujście. Until the end of the 20th century the waterfront will be dominated by military and industrial functions. Only the 20th century opens new opportunities to build a different landscape of the river.

To the north from the Old Town, within the territory demarcated from the property of the former Gdańsk Shipyard, the so-called Young City is to come into being (Fig. 5c). This quarter is to be equipped with a trade and service programme, completed with the residential and recreational functions. The entire planned area is divided into three zones: Galeria Stocznia, Kolonia Robotnicza, Stocznia Cesarska, and Marina. The two latter units will create the waterfront landscape of the final part of the Dead Vistula in the future, and thus it will be the last section in the entire Vistula delta that is so urbanised. The entire area will be connected with the city of Gdańsk by municipal investments: the main traffic axis – Wałowa street, and the European Solidarity Centre (Fig. 5b). This edifice reflects the climate of this place and what has shaped the 'ecosystem' of this part of the Vistula for a long time – the 'ecosystem' perceived as the co-existence of the natural landscape and man along with his history and activity.

Figure 5a. Gdańsk – relations of the structure of the city to the waterfront taking into account the size of the channel of the Vistula river. Diagram: A. Matusik. (legend: blue – course of the Vistula river, grey – urban structure, red – important public facilities) **Figure 5b.** Gdańsk – European Solidarity Centre in the premises of the former Gdańsk Shipyard. Photo [22]
Figure 5c. Gdańsk – course of the Vistula river against the vision of the new quarter, Young City, according to Garteh Hoskins Architects. Visualisation[23]

[22] https://www.google.pl/imgres?imgurl=http://r-scale-8d.dcs.redcdn.pl/scale/o2/tvn/web-content/m/p107/i/1f3202d820180a39f736f20fce790de8/71de460c-306a-11e4-b6ad-0025b511229e.jpg%253Ftype%253D1%2526srcmode%253D3%2526srcx%253D1/2%2526srcy%253D0/1%2526srcw%253D640%2526srch%253D360%2526dstw%253D640%2526dsth%253D360&imgrefurl=http://uoliuoli.blogspot.com/2015/10/europejskie-centrum-solidarnosci.html&h=360&w=640&tbnid=mhXnujQ1aSAhuM:&docid=s_kexlfUiIlzYM&ei=UHr-Vv3SKYmTsgHlob-QAw&tbm=isch&ved=0ahUKEwj9uoavyO3LAhWJiSwKHeXQDzIQMwg4KBUwFQ

[23] https://www.google.pl/search?q=gdansk+dawna+stocznia&espv=2&biw=1366&bih=623&source=lnms&tbm=isch&sa=X&ved=0ahUKEwjrgqvgu3LAhVJlCwKHSZAAEYQ_AUIBygC#imgrc=MkRTQyT8gwXH_M%3A

Summary

The composition of the city, relations between elements of its structure and landscape, are and have always been the subject matter of discussions and one of the most important civilisation dilemmas. They have reflected philosophical, economic and social tendencies. As Spiro Kostof emphasises[24], the river, coming into contact with settlement, provides it with an urban form and defines it. Today this form and its functional contents depend largely on the challenges faced by the global urban planning. It could be stated that probably the greatest challenges of the 21st century is combating the constantly growing pollution of the environment, including the constantly growing level of carbon dioxide in the atmosphere, and creating environmentally friendly structures and buildings. In the sphere of search there is the topic of the river as one of the fundamental elements that link the city with the natural environment.

The examples of transformations of waterfronts in Polish cities located on the Vistula river, presented in this publication, depict the scale and character of the changes in the spatial policy which currently come into being in the Polish reality. A comparative analysis allows to identify the basic similarities of the aforementioned projects between individual analysed cities, as well as to prove convergences with projects implemented on the European scale.

Starting from the macro-scale, one of the most crucial similarities is a consistent introduction of the natural landscape into the public space of the city. In this case the river becomes a certain ‘communication corridor’ between the suburban and urban landscape. It is connected with

[24] Spiro Kosfor writes more about issues connected with the evolution of urban systems towards rivers in the process of their historical development [in:] Kostof S., "The city assembled. The Elements of Urban Form through History." Thames & Hudson Ltd., London 1992, pp. 39 - 46.

specific decisions pertaining to traffic infrastructure (priority given to the pedestrian and cycling traffic) and with the selection of a relevant functional programme. Referring to strategies undertaken in terms of the programme itself, it could be stated that in most cases they are based on addressing the revival of the social activity of the city[25]. The informal character of these spaces, contrasting so much with the strongly urbanised urban space of the city centre, becomes a characteristic feature of these spaces. It could be stated that it is an effect evoked by the aforementioned tendency to preserve the natural landscape, or landscape with abundant greenery. Such a phenomenon is characterised by – for instance – solutions in terms of greenery undertaken along the waterfront in Toruń, or the noteworthy Discoverers' Park at the Copernicus Science Centre in Warsaw, defining the further character of the programme of the embankments in the centre of the capital city.

Another important aspect that links the aforementioned examples is the progressing polarisation of the urban structure as a result of the creation of a new space, rich in spatial and functional terms. This process could be two-way. In one case, new zones of public activity become a natural consequence of the development of the urban structure and are smoothly included in the public space of the city, forming no structural or functional discontinuousness. A good example of such a phenomenon is Cracow, where the revived waterfront contributes to the consistent broadening of the living public space to subsequent quarters located in the closest vicinity of the city centre.

An opposite example is an attempt to create a completely new activity zone, so far unrelated to the active public space of the city. Such examples comprise Płock and Gdańsk. In Płock the problem of the spatial and functional discontinuousness, necessary to be overcome, has been caused by one of the most important elements of the identity of the Vistula cities – the Vistula escarpment. Here the condition for a living public space of the waterfront to exist was the solution of considerable differences of height between the waterfront and the city centre.

The problem of lack of spatial continuity in Gdańsk consists in taking a decision about the construction of a new quarter on post-industrial grounds. The attempt to revive the waterfront of the so-called Dead Vistula, so far not connected with the public space of the city historically situated at its tributary, the Motława, becomes a challenge here.

Problems connected with the lack of continuity also appear on the supraurban scale. Perception of the Vistula river is not just the question of sectional projects focusing on individual cities located along its course. To a greater extent, it is a question of policy of cooperation of entire regions. In this respect, one could identify cooperation between individual communes, as well as activities undertaken by individual cities, but operating for the benefit of the supralocal integration. At this point one could mention the establishment of a system of water trams (e.g. Gdańsk, Cracow), or yacht marines, the operation of which allows for the occurrence of a system of 'water' public spaces, linking individual cities (e.g. Gdańsk, Płock, Warsaw).

Going back to the local aspect – this micro-scale in the context of the river – urban planning activities focusing on waterfront areas often refer to spaces indigenous for many cities. Their

[25] Building of this informal social activity in the aforementioned projects is largely dictated by what Jan Gehl defines as the richness of the 'choice activities', leading to potential 'social activities' – activities undertaking of which stimulates rich public space. Cf.: Gehl J., "Life between buildings. Using public space", Arkitektens Forlag. The Danish Architectural Press, 2006, pp. 9 - 14

extremely important aspect is the reinterpretation of historical skylines of cities. This intervention in the historical urban context not only entails spatial changes, but it also introduces a new way of social functioning within their area. Waterfronts, once dominated by industrial and defensive functions, now become a recreational domain, often completed with cultural functions, previously reserved for the very hearts of cities. Such processes happen in many cities, including Cracow, Warsaw, Toruń.

Polish cities, after years of negligence and misguided spatial policies, often dictated by political reasons, have been slowly making up their structural and functional backlog. Due to a political blockade resulting from the need to function in the communist bloc, Poland did not undergo such a strong period of transformations resulting from the moment of shifting from the industrial to post-industrial period. Blocking, or even freezing of urban planning processes has, however, some positive aspects to it. Currently, Polish cities can benefit from experiences of European cities in a tangible way. It seems that the investments which are being implemented now are – at least in their dominating part – convergent with the aforementioned ‘ecosystem’ approach, where the management of natural resources and urbanised space is to be executed in a sustainable fashion, protecting the existing ecosystem and building a new one, where the contemporary city resident can experience the integration of the natural environment with the cultural space created by him.

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