

INDUSTRIAL SPACES FOR PUBLIC USE. “UBI AREA” IN COVILHA (PORTUGAL)

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Abstract

The paper presents a subject of creating public spaces in inner-city industrial areas, which are still the problematic brownfields. This is a continuation of the subject undertaken in the previous publication in ACEE* – dealing that time with the German example in Berlin – this time referring to a Portuguese case study “UBI Area” (the university area of Universidade da Beira Interior) in Covilha. This case of study reflects the city policy of sustainable long-term upgrading processes, where publicly accessible spaces shall play a key role in solving the problem. Such processes are correlated very closely with a typical cityscape of brownfields. The chosen example will present these city planning and cityscaping situation of the industrial brownfield. In Covilha the “UBI Area” against the background of the district Distrito da Ribeira da Goldra is the base for scientific research. Furthermore, the photo documentation and research in situ carried out in Portugal since 2004 are, next to the literature, source for the presented remarks. Conclusions illustrate the approach to the revitalisation process, presenting the situation of the brownfield. Transformation of former industrial areas into open public spaces is a new and current subject. The original feature in this case is the contrast of the present possibilities of opening in relation to the former isolation of the described area from the city fabric.

Streszczenie

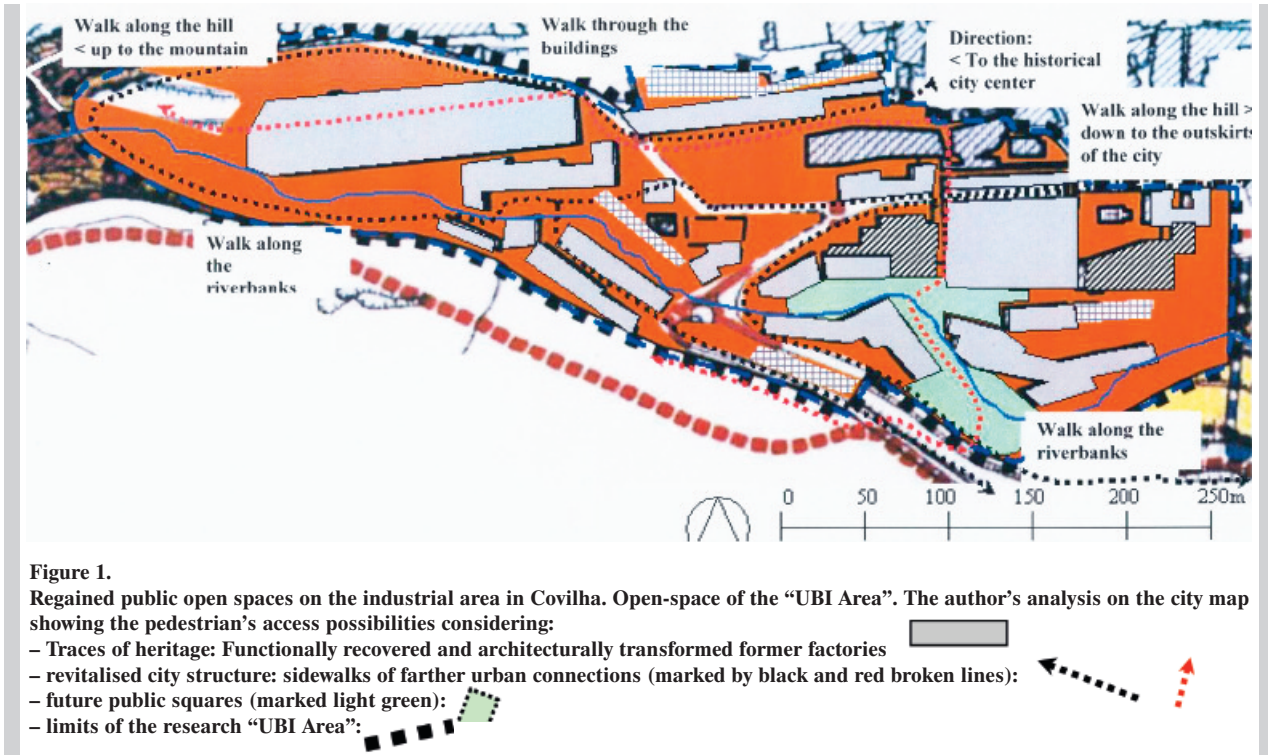
Artykuł podejmuje temat tworzenia przestrzeni publicznych na byłych terenach przemysłowych. Zagadnienie to okazuje się być stale aktualne. Przedstawiony materiał badawczy jest kontynuacją zagadnienia podjętego w poprzedniej publikacji w ACEE* – traktującego o niemieckim przypadku studialnym w Berlinie – tu odnoszącego się do portugalskiego obszaru “UBI Area” (teren uniwersytetu Universidade da Beira Interior) w Covilha. Podjęte analizy odzwierciedlają politykę miasta polegającą na wspieraniu procesów rewitalizacji o zrównoważonym i długoterminowym charakterze, w których przestrzenie dostępne publicznie mają odgrywać rolę kluczową w rozwiązywaniu danego problemu. Procesy te są ściśle powiązane z typowym krajobrazem nieużytków przemysłowych. Wybrany przykład przedstawia urbanistyczną i krajobrazową sytuację byłego terenu przemysłowego. Podstawą dla badań naukowych w Covilha jest wspomniany teren “UBI Area” na tle dzielnicy Distrito da Ribeira da Goldra. Ponadto, dokumentacja fotograficzna oraz badania in situ prowadzone w Covilha od roku 2004 stanowią, obok literatury, źródło informacyjne. Wnioski opracowania obrazują stosunek do procesu rewitalizacji. Przekształcanie byłych terenów przemysłowych na otwarte tereny publiczne jest problemem nowym i aktualnym. Cechą oryginalną jest w tym przypadku kontrast współczesnego otwierania w stosunku do poprzedniego wyizolowania omawianego obszaru z tkanki miejskiej oraz konsekwencje takiego procesu.

Keywords: Revitalisation; Industrial areas; Inner-town; Public spaces; Industrial townscape.

1. INTRODUCTION

Independent of the cultural and geographical differences between the chosen case studies in Berlin in Germany (presented in the last publication in ACEE) and in Covilha, in Portugal, the investigated guidelines

will show the similarity of problems connected with ex-industrial transformation. Such a scientific comparison shall allow to perceive the universalism of urban challenges in Europe, considering the subject and dilemmas instead of focusing on disturbing inter-country differences.



Information mentioned here is based most of all on official bibliographical sources, as The Council of Covilha (Camara Municipal da Covilha), CREA (Centre of Schooling) and UBI (University of Covilha), as well as on the in situ research.

2. OPENING INDUSTRIAL SPACES FOR PUBLIC USE

Industrial areas in Covilha possess spatial and visual potential. Recovered areas are placed within present central parts of a town, where the need for open public space is great.

Besides, traffic contact with town centre provides additional profits for science functions, which in this case accompany and functionally support the discussed areas.

2.1. Case study “UBI Area” against the background of the district Distrito da Ribeira da Goldra

The presented UBI Area was used in the past for woolen industry and was located in the southwest part of the town, in the district Distrito da Ribeira da Goldra.

The upgrading process of the formerly industrial site concentrates on introducing science functions in the

old factories and on opening the site for public users.

At present, during industrial transformations in Europe meaningful is the revaluation of public spaces, which constitute in many places such openness at the UBI Area.

This neglected land of historical industry along the River Ribeira da Goldra offers a wide area for new non-industrial functions. The riverbanks are becoming an attractive public ground.

Similarly, neighbouring former industrial sites, located traditionally along water streams, are being recovered nowadays as a new cooperating public spaces. Their strategic importance depends on shaping the neighbouring areas in connection with the riverbank and with their urban potential. Such a way of natural open space forming shall strengthen the spatial and functional features of the district and emphasise its situational urban identity.

An additional public space also exists along the surrounding roads and streets. They namely function as traffic but also as public spaces, constituted by linear elements linking district parts functionally and therewith also spatially. It is namely an element of connection between existing public places and city-spatial situations.

2.2. The period of post-industrial rehabilitation in the UBI Area

During the period of adaptive re-use and re-integration the renovation and modernisation of the former factories and the creation of open areas around them was a planned act. Nevertheless, and contrary to the planned industrialisation, the upgrading process is based on the existing (industrial) urban net. The re-used complex is now called the "UBI Area", and has a kind of unofficial post-industrial public square (cf. Fig. 1). It is the main point of the centrally located structure, and serves both as a path for pedestrians and a meeting point. It is a part of the wider open space system constituting more than half of the total area. It consists of dedicated footpaths and alternative crossings through the university buildings of a public character (cf. Fig. 2). The size of the researched open space is limited by the surrounding roads. This space is given its special value by the aforementioned transformed former wool factories, which are officially listed as local heritage and exist as a district landmark. The form of the open space is also shaped by

the university buildings, which were upgraded from the former factories and now serve as the Faculty of Informatics – Computer Science, Physics, and a new Faculty of Mathematics (cf. Figs. 6, 7, 8, 10).

Figs. 2-4: Opening of ex-industrial structures for public use. All these spaces of buildings belonging to UBI Area were inaccessible in the past period of industry. At present, they serve as a widely accessible public spaces. Photos (2-4): The author



Figure 2.
The new light and greenery by the inside footpath in the Faculty of Civil Engineering. The old factory transformed into science function

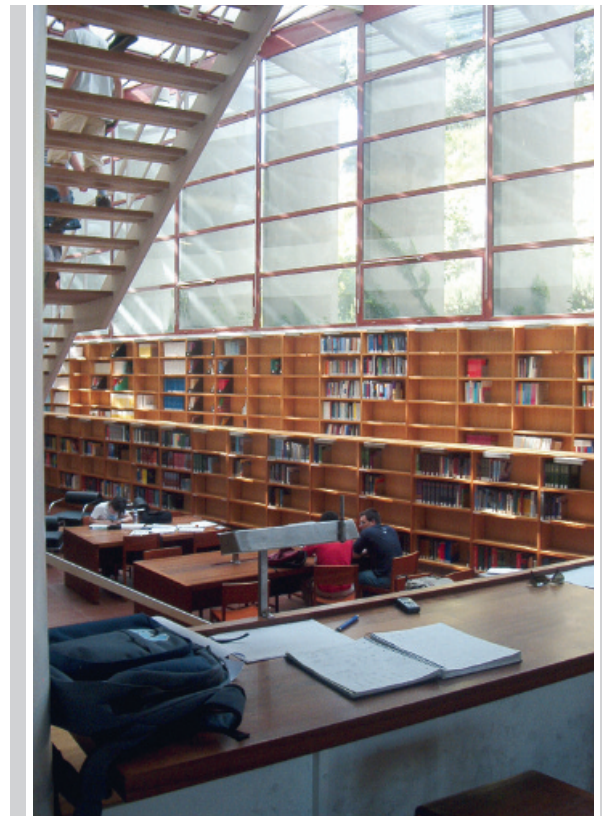


Figure 3.
The inside of the library belonging to UBI University. Behind the old industrial façade the new building was constructed



Figure 4.
Terrace and side entrance to the former woollen factory. Now the renovated structure shows its new esthetics. In the nearest neighbourhood: the green area and the river Ribeira da Goldra

In the recent image of Covilha the UBI Area is a representative case. It is a well-known urban space used most frequently by students and other visitors connected with the university. The process of rehabilitation has made the abandoned and destroyed wasteland a landmark in the city which functions appropriately and is still undergoing spatial transformation.

Since 1975 the old textile factories in the present UBI Area have been re-used for the needs of the university. During construction archaeological relics of the textile mill were discovered. The vats of the former dye-house, officially called “furnace and cylindrical vat works” were classified as part of the nation’s cultural heritage in 1982 [6]. Since then the process of rehabilitation of the former wool industry in the Ribeira da Goldra district has won special attention. Moreover, it was also the result of a new approach to the treatment of industrial heritage in Portugal at that time. It considered new ways of researching, conserving, and showing the heritage of architecture used in the past for industrial production [1].

It should therefore be mentioned that the so-called process of post-industrial rehabilitation, which maintains important heritage sites and considers the listing of industrial buildings, began in Covilha in the 1980s.

The spatial restoration and re-use of the Royal Cloth Factory marked the beginning of post-industrial re-use on a scale of the city of Covilha. The process was directed by the University of Beira Interior, which gained official education rights in 1986. At present, the UBI Area is active as a science complex transformed from a neglected industrial site. Most of the buildings are used by diverse university faculties, which is a strong functional contrast with the past, although the original industry of wool production still exists in some buildings directly adjacent to the UBI Area. Additionally, the industrial space has been changed from an urban planning point of view. The district, which was previously functionally and spatially closed, is gradually being opened for public use (cf. Figs. 5, 6, 7, 9). The area is spatially and functionally rehabilitated. The physical opening of the industrial site for public users has played a crucial role. The open space now comprises 62.40 percent of the site’s total area, has a representative central function, and is frequently used by the students and inhabitants. The surrounding factories now serve as woollen industry museums (cf. Fig. 4). The other buildings have been adapted by the UBI University for scientific functions – the Physics and Informatics faculties, which are architecturally connected with

the new Faculty of Mathematics (cf. Figs. 6, 7, 8).

The researched industrial complex is now used for scientific purposes, and the UBI Area possesses specific industrial elements such as factories, smokestacks, interior and exterior industrial facilities, open squares, and streets. The correlation of these elements still presents a specific industrial composition (cf. Figs. 13, 14).

2.3. Revitalisation process

At the time of rehabilitation one of the first courses – Textile Engineering at the UBI University, was located partially on the premises of the present Museum. The Polytechnic Institute of Covilha now occupies the buildings of the former Royal Textile Factory. This contributed to the preservation, upgrading, and conversion of the structure into a museum, as well as to the creation of the University of Covilha in 1992 [7].

At present, many of the former factories are being re-used for the museum, safeguarding important assets of cultural heritage [7]. Additionally, they function as a museological institution, space for education, research, communication, leisure, and as a centre of cultural promotion. The University of Covilha – Universidade da Beira Interior – is a leader of the community project ARQUEOTEX. It was approved within the framework of the European Regional Development Fund (ERDF) and aims at establishing an information network for the textile industry while considering the cultural heritage. The monumental building of the Royal Textile Factory’s Dye-house Nucleus is a landmark of the preservation of both Portuguese and European industrial textile history. It is currently the central building of the University of Beira Interior and marked as an industrial monument. Its establishment and official opening in 1996 was a step taken in order to turn Covilha into a textile eco-museum. In order to continue this purpose the UBI University started projects for the rehabilitation of the two rivers Ribeira da Goldra and Ribeira da Carpinteira, since the most significant nuclei of vernacular industrial facilities are situated along these rivers.

The industrial heritage of Covilha is being analysed within the framework of the re-use and re-integration programme Projecto Rota da La-Translana, which was approved in 2002 [5], [2]. The leading institute in Covilha is the mentioned Museum of Wool Manufacturing, which gathers documentation about the history of industrial architecture in the entire city and documents their later degradation and present

upgrading. The research embraced the district of Ribeira da Goldra as well as the comparable industrial district of Ribeira da Carpinteira, and the city centre Centro Historico, which contain old factories. The first step involved the investigation of the location and the present state of former factories, which resulted in a significant documentary map. The next step is the valorisation of the industrial and rural heritage that was connected with wool production in the region. The pictures of these factories were shown in 2005 during an exhibition in the Museum of Wool Manufacturing. The fact that the exhibition was open to the public was important, as this allowed every visitor see the industrial heritage of the entire city. Accordingly, the space of the presentation became a public space that served as an alternative path for the UBI Area. The Translana Project intends to prepare the Route of the Wool, which will include neighbouring towns connected with the industrial history of wool production (Castello Branco and Guarda). The route is a plan to recreate the ancient urban network of the former wool factories on a regional scale, and will also have an international scale, as it will include the nearest Spanish textile industry [8]. The route will connect sets of patrimonial values, considering 126 industrial units and productive facilities with a heritage character that have been geographically identified in Covilha.

Apart from the basic inquiries and documentation of existing relics of production, the goal of the programme is to safeguard industrial heritage, to popularise it in the region, and to preserve it for tourists and for cultural and scientific functions. The first phase of the project was finished in 2004 and the second phase was foreseen for 2005-2006. In order to along these rivers investigate undiscovered industrial locations in the region along these rivers, it is planned to create additional research institutes throughout the area. A visible result of this activity is the described rehabilitation process governed by the University in Distrito Ribeira da Goldra together with the Museum of Woollen Manufacturing as the head of research in the area. Participating partners in Portugal are the City Council of Covilha (Camara Municipal da Covilha), the Region of Tourism of the Serra da Estrella (a Regiao de Turismo da Serra da Estrella), and The Serra da Estrella Natural Park (o Parque Natural da Serra da Estrella). Both the Institute of Nature Conservation (O Instituto de Conservacao da Natureza ICN) and the Ministry of Environmental and Urban Planning (Ministerio do Ambiente e Ordenamento do Territorio) took part in

the industrial survey.

The other crucial actors are UBI – Universidade da Beira Interior, Museu de Lanificios (Elisa Pinheiro), Programa Polis da Covilha, and the Business Innovation Centre of Beira Interior CIEBI. The following projects should also be mentioned: Projecto Translana de La, Smas Programme, and the Arqueotex Project – ERDF Programme.

The other essential spatial programme in the UBI Area has been realised by the Programa Polis da Covilha since 2000 [9],[3]. It aims at the creation of green space, among other things in the Ribeira da Goldra river valley, and the construction of new buildings. The goal of the programme, i.e. the creation of parks and new architecture, will be achieved by demolishing original historical factories, independent of the level of their destruction. The projects assume that the sites hitherto occupied by these industrial buildings are valuable for new architecture, above-ground parking facilities, bridges, and other elements of urban infrastructure. The preservation of the industrial heritage is expressed by the maintenance of a few original industrial structures. These upgrading plans of the Programa Polis da Covilha have been accepted by the Ministry of the Environment and Urban Planning and by the City Council of Covilha. The biological improvement of local water sources is also being planned.

A book published by the Programa Polis presents a list of historical industrial buildings intended for demolition so that new structures in modern style may be created. This situation had been already commented on as “the fever of demolishing, whereby the designers of this destruction are not conscious of what they are to lose. ...The interesting places of the woollen history are disappearing in Covilha. ...the old buildings must be kept and rehabilitated in the modern reality... It would be important to preserve the heritage, until it is more profitable for the owners...” [2]. The inhabitants of Covilha “will get to know the new face of their city, which will have new structures and more green space...” [3].

Another feature of UBI Area is revitalisation of the neighbouring river Ribeira da Goldra.

By now the water quality has largely been improved, and yet in many parts the river is far from being in its original state. The City Council of Covilha has introduced an environmental programme called Smas for further improvement of water quality.

The Programme Programa Polis, which has been active since 2001, has as its goal the creation of open

space along the rivers. It involves parts of the industrial areas and attempts to develop a new image and new possibilities of using the formerly closed and destroyed areas. The regained footpaths along riverbanks are important urban connections on the city scale. They physically and spatially integrate the long and largely inaccessible river valley (cf. Fig. 8). The river's central part is still not accessible to the public but it nonetheless has an important natural potential, because it serves as a spatial connection for the entire linear industrial structure of the district. The broad green spaces between the UBI Area and the factory complex in the lower part of the valley are not used by the inhabitants because of the difficult hilly conditions and of the lack of appropriate land-use.

The creation of the aforementioned parks and new buildings is accomplished nowadays by 'clearing' the ground, i.e. removing the former factories. New square structures exist in the place of the former vernacular historical facilities, which were built along the river valley. Both spatial programmes aim at the adaptive re-use and re-integration of the researched district. They seem, however, to have contrasting goals as far as the preservation of the industrial heritage is concerned.

The subject of the local architectural heritage in Covilha and in the surrounding region of Serra da Estrela has also been theoretically discussed by scientists at the University of Covilha [10],[4]. The possibility of visiting the area "...in search of quiet relaxation and leisure activities..." [4] has created ideas for new and contrasting 'quiet' functions in the old wool factories. The architectural industrial form shall thereby express this quietness in the type of materials used during spatial rehabilitation and in their shaping. Such an approach may result in regaining the harmony of the industrial structure and cityscape. Discussions mention the need for cooperation ("support and awareness", [4]) among the three main actors. The authorities responsible for the region, the inhabitants, and tourists are able to maintain the existing local heritage making "this delightful corner of Portugal even more attractive" [4].

Fig. 5-8.
The former industrial space, today the UBI Area, is becoming a public space accessible for inhabitants



Figure 5.
The pedestrian zone of one of main streets in Covilha. People walk right next to woollen museum and cross the historical arc. Photo: The author



Figure 6.
One of university faculties surrounded by open space. Photo: The author



Figure 7.
Faculty of Mathematics and stairs leading to the new building.
Photo: The author



Figure 8.
How to connect the old factories with each other: The bridge over the river. Photo: The author

The present architectural heritage of Covilha consists mostly of old factories and industry-related buildings. The spatial continuity and the visual similarity of the different types of buildings is apparent. The former industry at the Ribeira da Goldra River exists together with remains of the historical mediaeval town walls. In the neighbourhood next to the old industrial areas there is the listed Church of Santa Maria from the 17th century and the Church of S. Francisco from the 14th century. Next to the former Royal Cloth Factory, which has undergone re-use and serves as the Textile Museum of the University of Beira Interior, there are relics of the Romanesque chapel of S. Martinho.

The architectural similarity of the unchanged original industrial style along the Ribeira da Goldra River constitutes a visual structural connection for the long district.

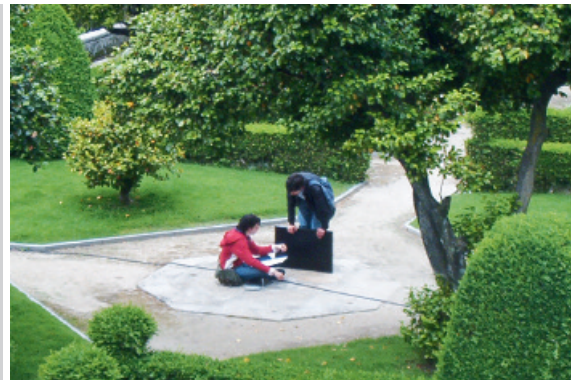


Figure 9.
The public open space created as a garden, frequently used by students of the university Universidade da Beira Interior. Photo: The author

3. TOWNSCAPE RESULTS

3.1. “UBI Area” in Covilha against the background of the district Distrito da Ribeira da Goldra

The analysis presents two kinds of cityscapes in Covilha: remote and adjacent cityscapes.

The remote views take in almost the total UBI Area and its nearest surroundings. The adjacent views take in parts of the remote view while the remainder of the researched space becomes the nearest surroundings. The first type of cityscape is necessary to show the quantitative features, distinguishing between the amount of original and new elements in the UBI Area. The second type of cityscape presents qualitative features, discovering the type of adjacent views. They permit new perceptions of the UBI Area, which consist of visual breaks and cityscape windows.

Most photographs of the remote cityscapes are taken with the camera facing south. They are considered to be the most representative pictures of the case study, and take into account the hilly topography of the investigated area and the typical (in these conditions) way of building.

The photographs of the visual break (cf. Fig. 11) and

the cityscape window (cf. Fig. 12) are taken from the northeast as the most representative examples as well, considering the location and mountainous nature of the topography. Other kinds of photographs might also have been taken (from the east or north), but geographic conditions and the architectural composition would make the view difficult to read. Therefore, the photographs and cityscapes of the UBI Area have been analysed from the north and partially from the west and southwest. Furthermore, it should be mentioned that the marked cityscape window was neither planned nor protected during the period of degradation. It still exists, however, during the period of post-industrial rehabilitation. The view is situated near the investigated area.

The cityscape analysis begins with a historical view over the city in about 1900. A typical feature of this view is a harmonious line created by the low and long industrial architectural structures and by some

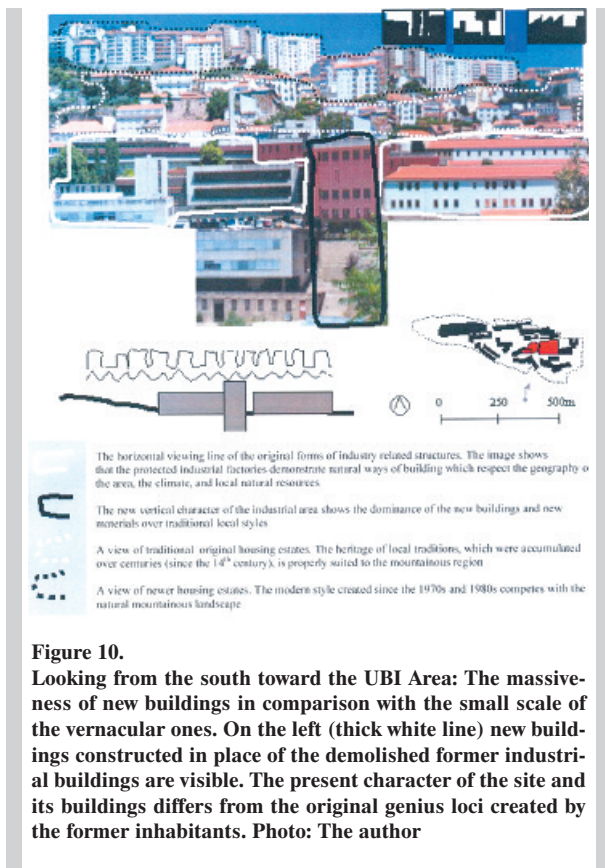


Figure 10.

Looking from the south toward the UBI Area: The massiveness of new buildings in comparison with the small scale of the vernacular ones. On the left (thick white line) new buildings constructed in place of the demolished former industrial buildings are visible. The present character of the site and its buildings differs from the original genius loci created by the former inhabitants. Photo: The author

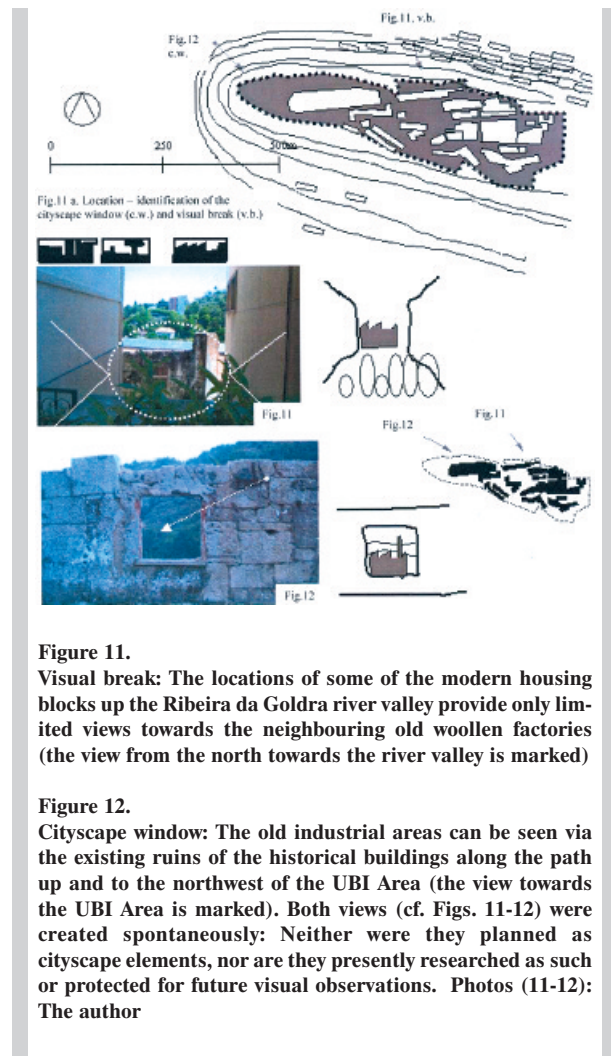


Figure 11.

Visual break: The locations of some of the modern housing blocks up the Ribeira da Goldra river valley provide only limited views towards the neighbouring old woollen factories (the view from the north towards the river valley is marked)

Figure 12.

Cityscape window: The old industrial areas can be seen via the existing ruins of the historical buildings along the path up and to the northwest of the UBI Area (the view towards the UBI Area is marked). Both views (cf. Figs. 11-12) were created spontaneously: Neither were they planned as cityscape elements, nor are they presently researched as such or protected for future visual observations. Photos (11-12): The author

surrounding buildings. The industrial architecture is matched to the hills in the Ribeira da Goldra river valley.

The intensive destruction of the factories and the situation of the industrial complex along the river valley are both visible. Here the horizontal line of the factories typical for the woollen industry of Covilha is evident. The historical flat and small-scale style of the city's architecture has to be compared with the large-scale, high-rise structures built in the 1970s, which changed the horizontal character to a vertical one.

In UBI Area it is possible to perceive that the spatial upgrading of the industrial areas leans more toward the currently international building style than toward the original indigenous character of the industrial settlements. Moreover, a perception of the remote view of the city is often possible thanks to the spaces of streets and the surrounding hills.

The original factories as well as new and renovated architecture can be seen in the photos (cf. Figs. 10,13,14), and serve as the basis for an assessment of

the relationship between original and new elements introduced in the course of the adaptive re-use and re-integration process.

One visual break and one cityscape window have been chosen (mentioned above) from many possible cases. They look into the research area from the outside, from the north. These adjacent cityscapes offer a view of the UBI Area (cf. Fig. 12) and of industrial buildings nearby (cf. Fig. 11), illustrating in an appropriate way the character of the places from where these buildings are viewed.

Several scientific discussions have taken place concerning the upgrading processes of the industrial areas along the Ribeira da Goldra River. These deliberations, however, refer mostly to the new functions that the transformed factories have, and analyse current university and museum offers [4], [2].

Other analyses focus on newer existing buildings and on planned ones, as well as on the infrastructure surrounding the industrial sites [9].



Figure 13.

"UBI Area" in Covilha: Cityscape effects of spatial recovery processes of the assigned area, cityscape part of former industrial area. Nowadays, recovered historical architecture and regained open public spaces are visible in the photo. It is a strong functional contrast to the past industrial image. Photo: The author



Figure 14. Results of spatial revitalisation process reflected in the cityscape of the “UBI Area”. Preservation of the industrial heritage presents in this case harmony of the cityscape line. View from the neighbouring pedestrian zone in the central part of Berlin allows the perception of the presented image. Accessibility of this cityscape permits visual analysis of ex-industrial public space. Photo: The author

Strictly rehabilitation-related programmes are presented by the UBI University, the Projecto Rota de La Translana, the Programa Polis, and Smas, City Council of Covilha. Themes are urban planning problems on a city and regional scale, as well as the transformation of industrial architecture. The upgrading of the riverbanks for open space is also acknowledged [9]. A remark about the “...conservation of the landscape and natural values in the Serra da Estrella and the safeguarding of its architectural and cultural heritage area...” [4] is considered significant. Nevertheless, the investigated sources do not address the subject of cityscape planning in the industrial areas. Appropriate enquiries are missing regarding the analysis and planning decisions made about the remote and adjacent views of the former factories considering the protection of the industrial structures.

The area is situated on the side of the mountain complex belonging to the Serra de Estrella. The mountainous shape of the district creates open space which

facilitates the perception of the remote view from south-eastern parts of the city (denoted on the map in Fig. 1). These conditions also allow for an adjacent view from western paths along the hillside and from eastern paths leading to the city centre.

In conclusion, urban connections and the geographic layout (i.e., the mountains) ensure the visibility of the industrial cityscape in the background, although views of the adjacent cityscape are partially limited by the hills.



Figure 15. The open space of a terrace created on the roof of the university library. This area gives the possibilities to enjoy the remote view of the Ribeira da Goldra River valley in Covilha. Photo: The author

4. CONCLUSIONS

The upgrading process in Covilha lasts since 1980s. This time has been used for improving the urban and architectural quality of the former industrial area Distrito Ribeira da Goldra.

Since 1990s the buildings of the UBI University have actively participated in revitalisation, of the district. They are being re-used for new science functions, since the original production of wool is no more profitable.

Today we can observe large interest of inhabitants, who try to take part in the urban process of deindustrialisation. They are the main actors in this case, and the revival of the post-industrial district is directed mostly to them.

The general assessment of so called "rehabilitation" (Portuguese: "rehabilitacao") is positive and presents new possibilities of using neglected areas.

It can be assumed that the introduction of new and contrasting functions in this part of the city attracts young people, who have the opportunity not only to

study at the university, but also to get to know the rich history of Covilha. In this Portuguese case the functional and spatial connection of old buildings with young people creates possibilities for a successful long-term upgrading process. The public open space plays thereby a key role as a connecting factor between built up sites and the users.

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