Adaptation of industrial heritage to informal exhibition spaces
The case of Lx Factory

Abstract
Operating since 2008 as a creative cluster, Lx Factory has begun as a temporary project, occupying a former industrial complex in order to secure a return on their investment, while waiting for the approval of an effective urban plan. Nevertheless, the project revealed to be a great success in such a way that it became permanent. Following a recent trend that has been expanding in the last years at an international level, as well as offering low-cost spaces for the establishment of workshops and small companies, Lx Factory has been the stage for several exhibitions and cultural events, giving rise to experimentation and asserting itself as an alternative to the formal institutionalised spaces. Therefore, it has been providing an authentic launch pad for emerging artists, while it has benefited from the mediatic attention that has empowered its consolidation.

Introduction
This paper is a synthesis of the thesis that accompanies it, developed under the Architecture Integrated MSc programme at Instituto Superior Técnico of Universidade de Lisboa. The research focused on the issue of adaptation of industrial heritage to informal exhibition spaces and sought to understand the reasons that, in recent decades, have motivated the rehabilitation of industrial buildings disused from its original function, for arts and culture related programs; analyze the advantages, disadvantages, risks and benefits of that practice; assess the differences and similarities between different approaches to the same subject; understand how far the industrial heritage suits cultural and artistic programs, and study the effects of that association in their urban environment. Regarding the Lx Factory case study, this work proposes a reflection on the set of conditions that allowed its creation and about the uniqueness of the urban and creative dynamics that have taken place there, seeking, on the one hand, to appreciate its role on the development of informal exhibition projects and, on the other hand, to understand how these projects have contributed to its development and consolidation.
The adaptation of pre-existing buildings to cultural programs

The post-industrial society is associated with a profound acceleration of time-space compression in the cultural, social and economic fields, due to the development of mass telecommunication and transportation, and also by the growth of the cities. In the contemporary world, space and time ceased to be constraints in the organization of human activities (Giddens cit. in Anico, 2005), which was reflected in the decentralisation of the production centres, that now stand on locations with lower labour costs, while former industrialised cities in the occidental world began a process of deindustrialisation, culminating with the creation of enormous urban voids around their traditional centres (Grande, 2005). These industrial voids - brownfields - constitute a major challenge, both for their communities and stakeholders. Even though these are associated with a polluted environment, heterogeneous buildings and a community weakened by the loss, the release of large land portions within the consolidated city also provides an opportunity for development through the reuse of the soil and the built assets, allowing diversification compared to the initial use. (Queirós, 2004).

Until the mid-twentieth century, the industrial heritage was only considered pragmatically, depending on its material usefulness. Only after World War II, the material testimonies of our more recent history began to be valued. The trauma generated by the irretrievable loss of important buildings of the industrial era have raised the conviction about the ending of a cycle and warned for the need to preserve physical evidence of industrial society to the future generations. According to Françoise Choay, the consecration of the patrimonial practices and the expansion of their action field, whether from a chronological or typological point of view, happened simultaneously with the development of a leisure and cultural tourism society (Choay, 1992). The reuse as a safeguard measure, previously held by Alois Riegl and Gustavo Giovannoni, returned to the patrimonial agenda since the establishment of The Venice Charter, in 1964. In parallel, the ability of the historical monument to mobilize masses began to be exploited by its economic potential at the service of an expanding cultural industry.

Although the massified interest in these assets had functioned as an enhancer towards their safeguard, their identity and value were often perverted in favour of their economic profitability. The distortion experienced by many monuments in the name of “making use of them for some socially useful purpose” (The Venice Charter, 1964), even when the principles of this and other international charters and conventions were carefully respected (see Convention concerning the Protection of the World Cultural and Natural Heritage, 1972 and Nairobi Recommendation, 1976), quickly showed the their fallibility. For this reason, subsequent documents such as The Burra Charter (1976) and the Charter of Krakow (2000), have highlighted the importance of responsible reuse, compatible with the integrity of the architectural and historical object. With the recognition of the importance of safeguarding the industrial heritage, in the 1960s, the first steps towards the transition of its memory to future generations were finally taken. However, there was still a long path to be crossed, because the truth was that the industrial heritage remained shrouded in much controversy, and its defence faced, and still faces great challenges. In the early years of the twenty-first century Deolinda Folgado noted that safeguarding these purely functional structures continued to be
difficult to understand by the general population (Folgado, 2001).

The characteristics of these spaces make them especially able to be reused for the production and exhibition of contemporary art: they are usually flexible, wide and open spaces, with great heights and volumes, and largely equipped and infrastructured according to the industrial production and, therefore easily adaptable to the artistic production (Matos et al., 2002). For this reason, over the 1970 and 1980 decades, there were several examples of galleries and centers for contemporary art installed in former industrial buildings, by an artistic community that were looking for alternatives to the formal institutions and to the exhibition model consecrated by the Modernism – the white cube. Combining informality with a lower cost, these spaces provided a flexibility for the artists to work and display, that the conventional museum did not ensure (Ramos, 2011). Furthermore, the establishment of these alternative spaces within small urban communities, promoting its regeneration, stimulated a greater contact and involvement of the inhabitants with the artistic creation.

In the last decades of the twentieth century, the cities would find the solution to the morphological mischaracterization established by deindustrialization in the combination of tourism and culture (Grande, 2005). Successful case studies such as Guggenheim Bilbao (Frank Gehry, 1991-97) would thus rise to an authentic “gold rush”, with cities from around the world seeking to assert themselves within the global society through a monumental, iconic and mediatic architecture (Madureira, 2010). Although the Museum in the Basque city is a root construction, further solutions such as Tate Modern Gallery in London (Herzog & de Meuron, 1994-2000) have demonstrated the ability to achieve similar results while safeguarding the industrial legacy existent in those locations. The adaptability or compatibility between industrial and expositive uses, showcased in Tate’s gallery, becomes even more evident when recent interventions such as Matadero Madrid and the Le Centquatre in Paris are considered. These two cultural and creative clusters, which resulted from the conversion of large industrial complexes, unequivocally demonstrate the feasibility of the rehabilitation of industrial heritage for artistic and cultural programs, while the success of these experiences, guided by authenticity and a principle of minimum intervention, clearly reveals the potential inherent to this heritage for the democratization of culture.


Also in Portugal, the cases of occupation of vacant industrial buildings for cultural and creative clusters have been gaining expression in the recent years. In addition to the Lx Factory, there are other case studies that are worth highlighting, like Fábrica do Braço de Prata, in Lisbon, working since 2007 in a kind of “consent illegality”, being a democratic and open space where artists who, by choice or by force, have been left out of institutional recognition, find a place to express their art (Leiria et al, 2014); and Oliva Creative Factory in S. João da Madeira, created in 2013 by the initiative of the City Council, that certifies a change of view in the Portuguese society, which is increasingly recognizing a historical value and a regenerative potential to the industrial heritage.

**Case study: the Lx Factory, in Alcântara**

The origin of the industrial complex occupied by the Lx Factory dates back to 1846, when the main building was designed by the architect José Pires da Fonte for the Companhia de Fiação e Tecidos Lisbonense. The property was built according to the Manchester’s model and pioneered the use of non-combustible solutions in Lisbon. Opened in 1849, it stood on its four floors arranged perpendicularly to the river, in a position that favored natural lighting. This box volume, with 123 meters long and 20.6 meters wide, torn by a rhythmic fenestration, only differed from the Manchesterian model by making use of stone masonry as a building material instead of red brick. (Folgado, 2013). Between 1851 and 1855, five other warehouses were built near the main building, a set that would became known as Fábrica Pequena (Little Mill). In 1873, the company has raised a block of houses, in the street 1º de Maio, near the factory, that constituted Lisbon’s first Vila Operária (Labor Village) created by an industrial unit. By 1900 the factory was once again enlarged with the construction of the Oficina Nova (New Workshop) (Oliveira, 2007).

After the dissolution of the company, the complex was occupied by Companhia de Portugal e Colônias, in 1918, Tipografia Anuário Comercial de Portugal, in 1961, which added a fifth floor to the main building, and Gráfica Mirandela, in the eighties, before being acquired, in 2005, by Catumbel, a company from MainSide Investments SGPS Group, that found there a business opportunity in the area of urban renewal. The 23 thousand square meters occupied by this industrial complex were covered by the project Alcântara XXI (Frederico Valsassina and Aires Mateus, 2004-2005) which envisioned the preservation of at least three of

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![Fig. 3 Edifício da Companhia de Fiação e Tecidos Lisbonense. Fachada nascente. Fonte: Miguel Silva, 2010. Miguel Silva, Património industrial em Portugal: inclusão do passado em projectos contemporâneos, 2012, apêndice 1, p. 10.](image)
the existing buildings and the occupation of remaining empty spaces with new mixed use buildings, linked to a well-defined system of public spaces for circulation and permanence (Silva, 2012).

Given the repeated delays in approval of the plan, which was eventually abandoned in 2007, MainSide decided to proceed with a temporary project, occupying the former industrial complex in order to secure a return on their investment. The company therefore decided to subdivide the space and rent their parcels as generously dimensioned offices (Alfaia, 2009). Thus was born, in 2007, the Lx Factory. Cleaning operations began later that year and the first companies began arriving in 2008. The intervention carried out by the architects Ana Duarte Pinto and João Manuel Alves was marked by simplicity and description. The principle of minimum intervention, which characterized this project, was motivated, on the one hand, by a cost containment in terms of initial investment, given the alleged ephemerality of the project, and, on the other hand, by a desire to preserve the industrial space imagery. Volumes, fenestration and original materiality were kept; inside, the partitioning of the spaces was achieved using plasterboard walls that ensure the reversibility of intervention (Romano 2009).

The investment to adapt the building to new functions occurred in a phased manner and, as far as possible, the compartmentalisation has been made according to the needs of its occupants. Indoors, each company has total freedom to transform the space to its needs, with the only obligation of maintaining the old factory features. This adaptability, together with the uniqueness of the unfinished look and patina of the industrial environment are some of the biggest attractions of Lx Factory for creative companies, providing a discreet support for the expression of their identity (Carreira, 2008). In fact, the association of Lx Factory name to the cultural and creative industries was something that turned out to arise naturally, given the greater openness of these entities to this kind of solutions.

In 2009, the excellent location, the friendly prices, the wide spaces and the innovative concept were pointed out as the greatest strengths of this initiative (Bakali, 2009). Joana Henriques (2009) also highlighted the multidisciplinary and the proximity and complementariness of services. For the success of this project certainly contributed commitment to secure “anchor companies” like Livraria Ler Devagar, that give some prestige to the site and generate a great human flow (Carvalho, 2009). Moreover, like other creative and cultural cluster on the international and national scene, such as Matadero Madrid and Oliva Creative
Factory, the Lx Factory often hosts commercial, recreational and cultural activities that stimulate the traffic from the outside. Examples of this are the Sunday markets in the outside area - the Lx Market - and the Open Days, which take place periodically, twice a year, in May and November, during which all the old factory complex can be visited freely, while several initiatives are promoted by the resident companies.

Cultural and artistic initiatives were particularly significant at an early phase of the project and played a key role in its consolidation. In 2008, the area received two major events: the OFFF Festival and the exhibition Peter Zumthor: Buildings and Projects. OFFF Festival took place in two different areas: the outer space, where there several stalls selling food and various objects, and the interior space, which included rooms for presentations and conferences and exhibition halls. (Moreira, 2008). The Peter Zumthor’s exhibition, in turn, included a set of five introductory large-scale models, two video installations designed by Nicole Six and Paul Petritsch and a set of documentary drawings, sketches and models from the architect, exposed in a large open space, over three rows of tables (Schneider, 2009). Both events occupied part of the main building and the adjacent warehouse, which were almost empty at the time.

The role that these first two major events played on the projection of the name Lx Factory is undeniable, whether by the number of people to whom they made the space known, especially people connected to the areas of design and architecture, either by the fuss generated in the media. This was indeed the greatest return received by Lx Factory for freely handing over spaces that, otherwise, would probably remain vacant during that period. Additionally, Lx Factory benefited from significant improvements in those spaces, given the need to make them livable, charges that were mostly incurred by the entities that organized the events.

After a first year of activity strongly marked by two major events, cultural and artistic initiatives of such dimension were not again repeated beyond. The explanation for this fact may be related to Lx Factory’s own development: MainSide makes available for exhibitions and events the spaces that are vacant at the time, which means that the higher the number and size of the resident companies, the smaller the space available for such initiatives. So, if at an initial moment Lx Factory had sufficient free space to accommodate events with the size of OFFF festival or Peter Zumthor’s exhibition, it ceased to be true as the occupancy rate approached 100%. Nevertheless, even if on a smaller scale, Lx Factory continued to be the stage for several exhibitions and artistic expressions, like Red Bull House of Art, from 2010 to 2012, which held the

![Fig. 5 Wool on Tour 3, Lx Factory, 2013. Ojo, by João Samina.](http://www.woolfest.org/) [19 Feb. 2015].

![Fig. 6 Peter Zumthor’s Exhibition, Lx Factory, 2008. 3rd floor.](http://www.experimentadesign.pt/press/pt/) [17 Feb. 2015].
highest point of the entire complex - the old water tank – that, during that period, both worked as an artistic residence and an exhibition space for young emerging artists (Castanho, 2011).

Also in 2012 began the Wool on Tour project, an urban art festival that, since then, have been held regularly twice a year, on the occasion of the Open Days. Since its first edition, this event has been an experimental space and a launch pad for many artists who find there an extraordinary medium for the dissemination of its work. On the other hand, Lx Factory has benefited largely by the undeniable contribution that Wool has been giving to the cultural and creative hub image that this space still retains.

While the second edition of Wool on Tour was being held, the Lx Factory was once again the scene of a great cultural event: the Espaço Brasil (Brazilian Space) opened on November 16, 2012, housed in Fábrica L, a large warehouse that had wandered recently due to the definitive departure of Gráfica Mirandela. The space was handed over for free to be the cultural center of contemporary Brazil in Lisbon, during the celebrations of the Year of Brazil in Portugal. In return, Lx Factory benefited from a completely refurbished space. The intervention was made by the Brazilian set designer Aby Cohen that, in the 1200 square meters of the old warehouse, created a theater, an art gallery, a bar, an area for cuisine and a film club (Coutinho, 2012). The decoration of the space featured the trait of Derlon de Almeida, who filled the entire facade of the old warehouse with a giant mural inspired by the Portuguese cross of the ocean and by the diversity of the Brazilian culture (Rodrigues, 2013). For seven months, the schedule of Espaço Brasil integrated several concerts, exhibitions, lectures and workshops.

Built in a small garden, located in the extreme northwest of Lx Factory, the Kairos Pavilion was inaugurated at the same day as Espaço Brasil. The project started at the initiative of the architects João Pedro Quintela and Tim Simon, who wanted it to respond “(...) to an unsustainable and inhibiting socio-economic context, in order to stimulate, generate and present cultural works on which the Space emerges as the major and inevitable theme” (Quintela & Simon, 2012). Over the choice of Lx Factory as the place to house this small sculptural building heavily weighed the informality of the space which, unlike other more conventional cultural institutions, allowed the authors to not only have greater freedom of action, but also to have greater control over the project itself, particularly in what regards to the curatorship. In addition to pavilion itself,
the Kairos team was responsible for the arrangement of the entire garden, which previously stood vacant.

From April 2013 to July 2014, the Kairos pavilion received several interventions by artists from different disciplines. This was one of the initial purposes of the project, i.e., that it could generate a dialogue and debate of ideas on its inside. Moving away from institutionalized circuit of museums and galleries, Kairos intended to establish itself as a public space, free and opened to participation and proposals that would let for the meeting, interaction and share between different projects, ideas and generations. The initiative was part of two different programming cycles, the first with invited architects’ interventions and the second with proposals selected by open call, thus seeking to provide opportunities to a new generation of artists to intervene and show their work. As compensation for handing the space for free, Lx Factory benefited once again from a rehabilitated space, in this case an outdoor space, in addition to all the dynamism created at a time when a certain alienation from the cultural leaning that featured the project at an early time was starting to be felt.

Conclusions

Although part of the industrial complex of the former Companhia de Fiação e Tecidos Lisbonense were, from the outset, safeguarded, for being located within the protection zone of a classified building and later for its inclusion on the list of Bens Culturais e Históricos da Carta Municipal do Patrimônio de Lisboa, much of the complex was in serious danger of being demolished, while the safeguarded part would be delivered to the interests of a strongly private management, hardly compatible with the public right to make use of the architectural heritage. However, due to a situation of deep economic crisis in the country, and before continuing delays in the approval of an effective urban plan, a different solution has been tried, which, even implying a very low initial investment, turned out to be quite profitable, leading to the abandonment of the original intents, as for the old industrial building the conservation of almost its totality became expected.

As we have seen, the success of Lx Factory was mainly due to a strong commitment with cultural aspects in its early stages. It was through cultural and artistic initiatives, such as Peter Zumthor’s exhibition and the OFFF Festival that the Lx Factory managed to gain visibility and thus attracted not only residents, but also visitors, whether regulars or casuals. On the other hand, once integrated in the tourist itineraries, even with a notorious reduction of that cultural offer in recent years, Lx Factory has managed to maintain its attractiveness because of its uniqueness as an architectural element. Like other spaces with similar characteristics, Lx Factory has also constituted an alternative to conventional cultural institutions, leading to experimentation and dissemination of works and forms of expression that could hardly be incorporated in the institutionalized circuits. Initiatives such as Red Bull House of Art, Wool on Tour, Espaço Brasil and Kairos Pavilion not only have contributed actively to boost the space, but also for its rehabilitation.

The great structural capacity of the complex, a feature common to most industrial buildings, allowed it to dispense any major work of consolidation, which would significantly increase the overall cost of the intervention. Given the predictable ephemerality of the project (a situation that ended up not occurring),
the principles of minimal intervention and reversibility, highlighted by the Charter of Krakow, were widely respected, since the operations carried out in the building girded to a strict minimum, focusing especially on minor repairs and on the partitioning of the internal spaces with easily removable plasterboard walls, thus attesting the building’s compatibility with the new functions.

References


*International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter)* -


