Abstract

In the UK, the regeneration of industrial sites has contributed to the preservation of the tangible industrial heritage, as many buildings have been saved from demolition through adaptive reuse. But there is an intangible side of the industrial heritage that hasn't been preserved - these sites were, in a very recent past, occupied mainly by the working class, who collected many memories throughout the years and to whom these sites bring a sense of place. These communities, however, are almost never involved in the regeneration projects and gentrification is the most common outcome of this process. This paper uses the Royal Arsenal district in Woolwich, London as case study to show the social impact that the regeneration caused and the gap it has created between the regenerated site and Woolwich town centre. The aim of this research is to point out how the existing public-private partnership as a method for regeneration has resulted in gentrification and discuss about the possibility of converting the industrial heritage into social housing in Brazil, since the practice of regeneration and reuse of industrial buildings is still not common in the country. Taking into consideration the big housing problem and the great number of vacant industrial buildings in central areas, especially in the city of São Paulo, this research will discuss the possibilities and the barriers to convert the industrial heritage into social housing, a proposal that could avoid gentrification – which would certainly happen if we followed the examples from other countries.

Introduction

In the United Kingdom, the reuse of industrial heritage is a well-established practice, in particular its adaptive reuse for housing purposes. However, while the practice of reuse for residential purposes has enabled the conservation and valorisation of this heritage, on the other hand urban regeneration projects have resulted in elitist spaces, which end up gentrifying areas previously predominantly occupied by the working class. With several urban regeneration projects taking place at the same time, as in Battersea and Elephant and Castle, for example, London is going through a widespread gentrification. According to the government's official list, there were 246,575 families on the housing waiting list in the City of London in 2020.

In addition to social problems, the heritage issue itself is also questioned. Industrial heritage is seen by many authors as a different kind of heritage, or at least with some characteristics that differentiate them from other heritage buildings. One of the reasons is the proximity that this heritage still has to the communities that created them. As deindustrialization is still a recent event, many worker’s families still live in the vicinity of the former industrial sites. The feeling of belonging of the community with these sites bring to the industrial heritage an intangible dimension that has been little explored and preserved in the urban regeneration projects of industrial sites. Cossons\(^1\) talks about these values attributed to industrial heritage, which go far beyond the historical and material value of the buildings themselves and argues that the preservation of this heritage from the arguments and values attributed to other heritage buildings

is often not well received by the community. According to the author, industrial heritage brings challenges that are not found in other sectors of heritage, such as the need to recover socially and economically these areas that are affected by unemployment and economic collapse.

**Royal Arsenal, Woolwich – between preservation and gentrification**

Apart from the very well-known cases as the London Docklands redevelopment that happened in the 80’s, there are several other more recent cases where gentrification was one of the outcomes of the regeneration. The Royal Arsenal, located to the east of the London Docklands, is a former military site in Woolwich, part of the Borough of Greenwich. Since 1565, the factory has produced ammunition, it’s heyday being during the first world war, when it was the largest source of British ammunition used in the conflict. During this period, Royal Arsenal employed 80,000 people, according to Masters².

The site began to decline in the 1950s, when ammunition production was transferred to private industries. The Royal Ordnance Factory was officially decommissioned in 1967, but some few buildings were still occupied by the Ministry of Defence (MoD) until 1994. According to Masters, with the announcement that MOD would leave the site, some residents came together and created the Royal Arsenal Museum Advisory Group (RAMAG), with the aim of creating a Heritage Centre with several museums in some of the most important buildings in the neighbourhoods, so that the history of the site would not be lost. The author also comments that the group had already presented the proposal to the Greenwich Council, which encouraged them by saying that "the proposal was very aligned with the municipality's strategy, which aims to raise public and private money to promote jobs, housing and leisure on the 7 miles of land along the river".

In 1992, Greenwich entered the competition to participate in the City Challenge, a government program that, unlike the urban regenerations of the 1980s, was led by the municipalities and allowed greater community participation and greater control under interventions by the private sector. In a video available online³, submitted to the government as part of the material needed to join the competition, it is clear the willingness of the community to integrate Royal Arsenal with the rest of Woolwich.

Unfortunately, Greenwich did not win the City Challenge and its urban regeneration began a few years later, in a partnership between the public and the private sector. The SHARP (Sustainable Historic Arsenal Regeneration Partnership) project, funded by the European Union and led by English Heritage, published an analysis of intervention projects in former military areas, with case studies from England, Malta, Spain and Estonia with the aim of devise sustainable urban regeneration strategies based on the appreciation of industrial heritage as included the Royal Arsenal regeneration as one of the successful UK projects. None of the publications mentions any kind of communication with the residents on the formulation of the master plan.

The regeneration plan for the Royal Arsenal (figures 1 and 2) redevelopment started in 1998 when the English Partnership, the urban regeneration agency of England, purchased the site. There were already 22 listed buildings at the time of purchase and the area had been designated as a Conservation Area since 1981. The master plan was approved by the Greenwich Council as an

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³ City Challenge: The Greenwich Waterfront (1992) [https://www.youtube.com/watch?v=EADVj0xTv-w](https://www.youtube.com/watch?v=EADVj0xTv-w), consulted July 25, 2021.
outline application, which meant that changes could be done along the regeneration process. In 2000, Berkeley Homes was chosen as the housing developer for the site and have been regenerating the site ever since.

According to Berkeley Homes, the regeneration programme received an initial £43m investment from the Ministry of Defence for the decontamination of the former industrial site. Berkeley Homes initially won the competition with a £150 million project for the adaptive reuse of four listed buildings and to turn them into 700 homes, 35% of them being affordable. In 2003, two years before the scheduled completion of the works, the company acquired some other buildings and obtained approval to turn them into additional 550 apartments and, just a year later, bought the rest of the EP site (western portion of the neighbourhood, which would initially be destined for an urban park) for the installation of bars and shops, in addition to 2500 more apartments and the creation of the new Cross Rail station.

In addition to the loss of area initially destined for leisure, another important change in the plan submitted later was related to the parcel destined to affordable housing. The first masterplan had promised that 35% of the total apartments would be destined to affordable housing divided into 3 modalities: social renting, shared ownership and key worker housing. In reviewing the plan, this percentage was reduced to 25%, with the justification that Berkeley Homes was investing in the construction of the Cross Rail station. The municipality accepted the justification, adding that the number of dwellings had increased in absolute values, despite the decrease in percentage.

With regard to cultural uses, which Roy Masters hoped would be included in the plan in 1995, in fact in 2001, in the first year of regeneration, the Firepower Museum was opened and operated in the neighbourhood until 2016, when it was closed with the promise of reopening it in Salisbury Plain, near Stonehenge, 150km from the Royal Arsenal district, where the sniper training used to take place. On the site of the museum and in 4 other listed buildings will be held the last stage of the regeneration project: the Woolwich Works, a cultural centre with space for exhibitions, shows and cultural activities in general, as well as cafés and bars.

In September 2014, Berlekey Homes interviewed 226 residents of the neighbourhood, which at that time corresponded to 11% of the inhabitants. Among these, 67% were residents in the private housing modality (private owners or tenants) and 32% in the affordable modality, with the intention of representing the real percentage of the different ways of living in the neighbourhood. The result of this survey indicates a community happy with their neighbourhood, where 93% of residents consider themselves happy with the place where they live and 75% think that the place where they live contribute so much to the sense of identity, the latter increasing...
considerably among the inhabitants of affordable units (90%). The research highlights that people in Royal Arsenal feel safe in the neighbourhood compared to the rest of Woolwich and that regeneration has changed the reputation of the neighbourhood.

The survey would have shown very different data if it had involved residents of the Woolwich neighbourhood, not just the residents of the regenerated part who are mostly people from other parts of London, attracted by the new developments and the good connection of the neighbourhood with the rest of London. Still, research with residents of Royal Arsenal raised the issue of visible separation between the two parties. In fact, what you see today are two distinct neighbourhoods. The wall and the highway are two physical barriers that symbolize a social separation between the new residents of the regenerated neighbourhood and the residents of Woolwich from the process of urban regeneration presented.

In March 2020, a group of students from University City London (UCL) conducted interviews with residents of the Royal Arsenal and with the rest of Woolwich. The results, not yet published, show the disconnect between the regenerated part and the rest of the neighbourhood. Royal Arsenal residents generally say they don't like the rest of the neighbourhood and avoid going there because they don't feel safe, while Woolwich Arsenal residents say they don't visit Royal Arsenal because they don't feel welcome, as it's a place for wealthier people.

Twenty years have passed since the start of the Royal Arsenal's urban regeneration process and now Woolwich residents fear that the neighbourhood's next stages of urban regeneration will cause even more gentrification as well as displacement, something that had not happened in the regeneration of the Royal Arsenal, as there were no residences within the industrial site. The Speak Out Woolwich group, made up of neighbourhood residents and shopkeepers, is a resistance group against the gentrification of Woolwich. The main demand of the group is for the fulfilment of the minimum of social housing and the maintenance of the identity of the neighbourhood, nowadays mainly formed by local shops (figure 3), which runs the risk of being gradually expelled to make way for the big brand stores, attending to a public of higher standard, as the one that currently lives in the Royal Arsenal.

FIGURE 3 – Woolwich, Powel Street

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Reuse of Industrial Heritage in Brazil for Social Housing

Unlike the UK, in Brazil there is (still) no interest from the real estate market in converting industrial buildings (or historic buildings in general) into housing. What exists is a great interest in the land that these buildings occupy, since they are in most cases in central areas, with complete infrastructure, close to public transport, and they usually occupy vast lands – with represent a very profitable redevelopment opportunity. There are two scenarios in Brazil regarding industrial heritage and housing: if the site has legal protection, such as listing, they remain unused with no kind of maintenance for years, becoming increasingly difficult to perform interventions in the future due to the great degree of fabric degradation. On the other hand, when the properties do not have legal protection, they are usually demolished to make way for residential towers, with no relation to the surroundings and without any concern for the local memory, that is destroyed along with the buildings.

Two other important facts to be highlighted are the absence of policies requiring compensation from the real estate sector, as is the case in the UK, through Section 106 that requires affordable housing, and the absence of other heritage protection policies that could prevent unlisted properties from being demolished without a more rigid analysis of what would be proposed for the site. Thus, there is an opportunity in Brazil for the industrial sites, which are not in the interest of the real estate market, to be converted into social housing.

Social housing policies in Brazil have two main characteristics: the focus on buying schemes instead of social rent and new constructions in peripheral areas, as opposed to regeneration and reuse of brownfield sites. It is necessary to think of new alternatives, such as social rent and the reuse of unused properties in urban centres, where there is the greatest demand for this type of housing. In some Brazilian capitals there have been some attempts to bring social housing to the centre, such as the Programa Novas Alternativas in Rio de Janeiro and the Morar no Centro, in São Paulo, which converted some buildings in height into social housing through the Minha Casa Minha Vida Entities program, now extinguished by the current government. The former Antarctica Beer factory (figure 4 and 5) in the district of Mooca, São Paulo, is an example of industrial heritage that would benefit from its reuse to social housing.

FIGURE 4 and 5 – Antártica Beer Factory, Mooca, São Paulo
The industrial site, unused since the beginning of the century, was listed in 2016 and there has been a few plans so far for its conversion, but none of them went ahead. One of the proposals included a residential tower that would be erected from the demolition of some of the warehouses. The proposal was rejected as its design completely ignored the special character of the site. Besides the architecture and preservation related problems that the new proposals present, there is also the gentrification issue. The Mooca district has been transforming for two decades now, ever since the new Municipal Plan started to allow for housing to be erected in the district, that had been of far allocated to industries only. With the change and with the lack of policies for the protection of the former industrial sites, many industrial buildings have been demolished and new gated developments, known in Brazil as club-condos (figure 6), with private leisure centres and buildings that does not relate to the industrial site and does not contribute to the affordable housing stock that is needed in the city centre of São Paulo.

FIGURE 6 – To the left, the Antarctica Factory and to the right the new developments

Final Considerations

Gentrification is a very common outcome of many regeneration schemes, that end up transforming the industrial sites into housing for the middle to upper class workers who does not relate to the previous character of the site. In the UK, the section 106 requirements for affordable housing does contribute to the problem but is still now enough to avoid gentrification. In Brazil, the lack of both heritage and housing policies will make it very difficult in the future to avoid gentrification once the real estate market develops interest in converting this site.

The partnership between the public and private sectors have made it economically viable to preserve the industrial buildings in the UK, but in Brazil there is still an opportunity for the industrial site to be integrated to the housing and planning policies, so that these buildings could be converted into social housing so that, together with other uses such as local shops and community services, it will be possible to create an environment that will not only preserve the tangible side of the industrial buildings but also take in consideration its intangible side.