

Maintaining the ambiance of regenerated post-military complexes – current and emerging possibilities

Marta Małgorzata Rudnicka-Bogusz^{1,*}

¹Department of History of Architecture, Arts and Technology, Faculty of Architecture, Wrocław University of Science and Technology, Wrocław, Poland

Abstract. Ambiance provides scholarly value to historic architectural precincts and complexes. Through it, the built environment – a corpus of buildings – becomes an environment with its own unique narrative. It grants us the possibility of interacting with the atmosphere of the place as it was in the epoch. However, due to the nature of modern development, living historic cities are changing dynamically. To stay in use, and thus continue their scholastic mission, historic urban areas need to be integrated into local development through either within-use adaptation or conversion to new functions. For historic barrack complexes, this usually means extensive redevelopment. The difficulty comes from accommodating quotidian use while maintaining its historiographic values, especially with historically sensitive sites. This means the designers should take the legibility of the original complex into consideration in their designs and provide suitable aids to visitors. As it turns out there is not a universal approach, instead different approaches allow preservation of various degrees of the original ambiance.

1 Introduction: the ambiance

The need for preservation of historic architecture and urban typologies is self-explanatory. Cultural landscape carries embedded notions of characteristic local tradition, gives proof to local history, grants indigenous community a sense of belonging and makes various landscapes worth visiting for their uniqueness and genius loci. Customarily, it was believed (Charter of Athens 1931, Venice Charter) that the value of historic architecture derived from authenticity of original tissue: materials combined with traditional techniques. This reflected main value heritage held to scholars as a document. Since the birth of mass cultural tourism, people's relationship with heritage started to change gradually[1]. The majority of visitors had no tools to investigate the intricacies; they relied on the general impression for intellectual and spiritual impact. The material heritage became a mere vessel for associated meanings[2]: the tradition, social significance and sense of place, along with various other unquantifiable values. Combined, they constitute the ambiance. It develops in the perception of historic architecture held by people, based on features specific to a given location that make a place unique. In the face of the fact that even immaterial heritage is considered

* Corresponding author: marta.rudnicka@pwr.edu.pl

endowed with documentary and historiographic value (Convention for the Safeguarding of the Intangible Cultural Heritage 2003), it is safe to say that the authenticity of the actual building tissue is secondary to the experience. Scholars used to think that what validated the material aspect of heritage to viewers was patina[3], evoking the feel of antiquity. Still, recent history of heritage regeneration proves that even reconstructed objects, therefore those containing minimal amounts of authentic tissue (e.g. Dresden's *Frauenkirche*) induce veneration and incite historic curiosity. The relationship between historic architecture and its ambiance goes beyond the preservation of original components. Losing the authenticity of components does not necessarily mean loss of the authenticity of the whole. Integrity of the narration presented by the material heritage is the key factor to ambiance. It may well be argued that this was the reason behind anastylosis of ancient temples in Agrigento or reconstruction of the Old Town in Warsaw.

The aim of preserving or enhancing the ambiance within regenerated historic environments comes from the way a modern society functions – based on experiencing, rather than theoretical learning. A more approachable heritage becomes an active factor in fostering a conscious and evolved civil society. Therefore, it is the ambiance that provides scholarly value to historic architectural precincts and complexes. Through it, the built environment – a corpus of buildings – becomes an environment alive with a story to tell. This way ambiance creates personal sentiment, encouraging better understanding and prolonging the impact of an experience: from place to the sense of place[4]. For only an experience, which has the audience fully emotionally invested, can affect it in any lasting way: promote, dissuade etc. Only an emotional response triggered by a site can anchor historical consciousness in a dynamic relationship: site→ experience→ appreciation→ nourishment of the site[5]. Collective memory is bound up with the public realm in the sense that accessibility facilitates recognition. To stay in use, and thus continue its scholastic mission, historic urban areas need to be integrated into local development processes and urban planning, such as contemporary architecture and infrastructure development. This integration can be carried out by either within-use adaptation or conversion to new functions. Therefore, the story that the ambiance of a place tells can be a story of the past or present. It can reflect the original *genius loci*. The architectural makeover can also generate a new ambiance, based on current spatial development. Still, while telling what IS now, the story will inadvertently relate to what WAS there, in consequence in passing relating the origins of the complex.

2 Ambiance in post-military barrack complexes – case studies

All of the above relates as well to the bulk of historic post-military barrack complexes. Initially positioned on the outskirts of municipalities at the exit routes, they were eventually swallowed by swelling cities. When restructuring and modernization of the army rendered them redundant, they were relinquished. Throughout Europe, decommissioned military installations were either razed or adapted, due to dynamic changes brought upon living historic cities by modern spatial development. They were turned into multiple contemporary functions: housing, educational facilities, offices, mix-use, etc. In some cases, their layout and outer appearances were maintained as a front for new use. In others, spatial courtyards and cavernous interiors intended for swift movements of large troop of soldiers encouraged new owners to build upon and partition. Most of the historic post military facilities have not been recognized as heritage or even as real estate asset yet. Nonetheless, they were important to the local communities living in their immediate proximity. Establishing a garrison in a city meant influx of funds, jobs at construction sites and services, development of roads and railroads and last but not least – prestige. Local identity was therefore shaped by the military and benefits that came from mutual relations. This local tradition was embedded in historic

military complexes. Loss of these objects would considerably distort local cultural landscape of garrison towns. Fortunately, post military barrack complexes can facilitate various functions. The difficulty comes from permitting quotidian use while sealing off the site against forgetting, especially with historically sensitive sites. As it turns out, there is not a universal methodology, instead different approaches allow preservation of various degrees of the original ambiance.

2.1 Traditional approach

The Collins Barracks in Dublin, Ireland (1704) have been preserved in their original layout and during adaptation for museum, hardly any outer appearance has been changed. Upon entering the complex, one instantaneously feels the mood of austere military life: granite-faced edifices encompass spacious empty muster yards. Both the original stylistics of the complex and its typology were preserved intact and can serve as scholastic asset. There are regular mock-up military parades and weapons reviews organized in the complex to uphold the military tradition. For those with enough imagination and information the ambiance of the place is close at hand.



Fig. 1. Minor infill in Collins Barracks does not thwart the original ambiance.

The Hyde Park Barracks in Sydney, Australia (1819) offer visitors a first-hand experience of barrack life. Originally, the complex was a penitentiary facility where convicts were rehabilitated under military supervision and subsequently a processing hub for female immigrants. Nowadays, it has been turned into a “living museum”[6]. Visitors are invited to don carefully replicated period attire and stroll amongst lime-washed bricks and floorboards, time worn roof timbers, doorways and observe layers of paint and plaster accumulated through the decades. Dormitories have been filled with replicas of period furnishings: hammocks, wash basins, a chiming clock. To immerse themselves in the experience, visitors are invited to use the props, for instance climb into the hammocks. The exhibition is completed by a searchable database of the names and identities of some of the barracks inmates. The experience is highly engaging and requires no prerequisite knowledge about the place. The complex is alive with performances that keep up the ambiance, giving out knowledge about the place as they unravel.

In Gdańsk, Poland, *Wrzeszcz* Garrison (1893) has been adapted to mix-use development, with schools, shops and office space now occupying what was once cavalry barracks, enriched with new-build housing district. Much of the original typological features were lost with the razing of stables and riding halls and the coming of the new-build that took up the space of *maneges* and drill grounds. However, preserved parts of the compound, even though adapted, still give a fairly accurate impression of how the property looked in the time of the military. The edifices were contemporarily adapted and expanded, yet with lavish materials

like historic brick and COR-TEN steel. Despite that, muster yards encompassed by these dormitories were left unbuilt and retain their grandiose gauge. A passer-by can still experience original spatial relations between buildings and open spaces. It is hard to discern the original military feel of the place from the hip-hub vibe it possesses nowadays, but a well-informed visitor with enough knowledge will still find it possible to discover traces of the original ambiance.

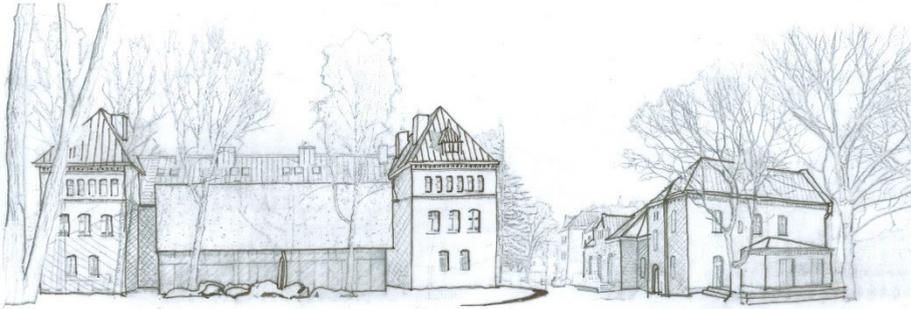


Fig. 2. Preserved parts of *Wrzeszcz* Garrison strive to maintain their *genius loci* despite expansions.

In the 1970s, the *Bådsmandsstræde* Barracks (1840) in Copenhagen, Denmark, have been spontaneously turned into The Free Town Christiania – a unique social phenomenon of a self-governing city district. Drifters and squatters who first appropriated the compound adapted post-military buildings in the way that most suited them. They also built new houses where they saw fit, without supervision. What resulted was a distortion of the typology and stylistics of a historic military complex. However, a new ambiance has arisen – the free-spiritedness of cooperation with a hint of defiance and anarchy as the “free town” opposes government’s efforts to subjugate it. It all happens in relation to the military origin of the complex, but it is only mentioned in passing, as something bygone, and there are hardly any spatial relations upheld to serve as proof of the original purpose of the compound. Therefore, the source ambiance is gone, replaced by a new one, which now becomes binding.

In all of the presented cases, there is information about the original use. However, in the first two spatial relations are visible to the naked eye, while in the latter – they are not. For the historic architecture to fulfil its purpose as the bearer of tradition and a part of cultural landscape its original spatial disposition etc. must remain visible or at least comprehensible with the right sort of narrative. In the first two cases, the ambiance was evoked with traditional means – patina, props, retaining a suggestive name, a non-invasive function allowing for retaining of original spatial relations. However, to allow for a more extensive change, facilitating a wider range of functions, the narrative has to be more explicit. In order to allow the eye of an unskilled tourist to appreciate the historic proof he or she is seeing, they must receive aid. Moreover, it would be dangerous to let any heritage become the sole vestige of memory, and consider it a self-sufficient repository of historical facts, able to trigger objective awareness of specific phenomena, especially the objects connected with the military power of the state, hence inevitably propagandistic. These objects are immersed in social context and thus require a commentary, an explanation, guiding the visitor through historic nuances, spelling out key points of the observed landscape.

2.2 Emerging technologies

Thus, while adapting historic architecture, aside from the physical space, the designers must take into consideration immaterial effects of their designs, such as the experience of the users, and account for them. It is even more challenging if the built environment is historic but serves contemporary use. The designers should program the ambiance to emanate the original *genius loci*, while at the same time leave enough space for the new ambiance – arising from the amalgam of the historic architecture and contemporary functions. The challenge comes from the ability of the designer to grasp the past sense of place and to display it effectively to the user. The solution to this problem might come with the emerging technologies e.g. the Augmented Reality – deeply immersive experience offered on site. However, the possibility of offering in-place simulation creates both new possibilities and new challenges for designers[7], such as petrification or stigmatization.

There already exist a few examples of AR and VR aids allowing for experiencing bygone architecture and urban environments. One of such experiences is an application granting the visitor the view of *Carnuntum*, the capital of the Roman province *Pannonia Superior* in modern-day Austria. The site of *Carnuntum* was never built upon, constituting today the largest preserved archaeological landscape in Central Europe. Using a combination of airborne scanners and ground penetrating radar archaeologists located the gladiator school, *castrum* (military camp) and barracks of the governor’s guards. The data was then transferred to architects and computer graphics who created a precise 3D model and simulation of the gladiator school. This 3D model is currently used at the Petronell Visitor Center, providing visitors with a virtual animation of the site, and is fully integrated into the true-to-scale model of *Carnuntum* cohesive with geographic latitude and longitude points. Consecutive objects on the site are successively reconstructed, becoming a more substantial proof of what it was like in its prime. Such Augmented Reality environments, incorporating both the material substance of a given cultural landscape and elements of Virtual Reality are a way to enhance experiencing historic heritage sites’ ambiance without limiting their potential for development.

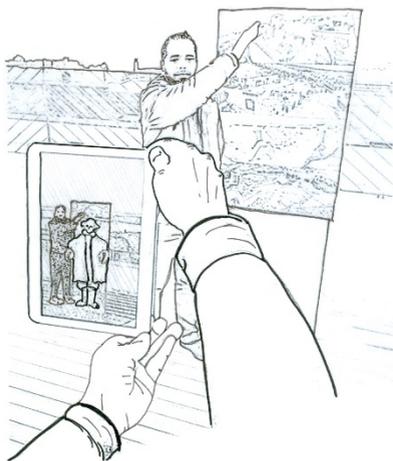


Fig. 3. Some chapters in Šibenik AR guide include interactive avatars guiding through the fort.

Creating Augmented Reality is more demanding than Virtual Reality. In AR, digital characters and objects are linked to real-life space and appear as part of the surrounding world via smart device. This technology was used in the 17th century Croatian *Barone* Fortress of Šibenik. The AR features of the tour are available through glasses that can be rented at the

entrance to the site as well as a personal smart devices via an application, allowing for selfies and snapshots e.g. with the avatars. The glasses have a built-in sightseeing tour scenario with five segments. Each of the parts lasts up to five minutes and gets activated approx. two meters from the point around which the chapter revolves. You can partake in a siege. Some chapters include interactive avatars, there is also a live-action movie imagining life in the streets of 17th century Šibenik. The fortress also houses various boutiques, shops and cafes. It facilitates space for cultural activity such as concerts and an open-air movie theatre. On the downside, the original layout of buildings inside the forte's walls is not mirrored by what was built there contemporarily, so the visitor has no way of recognizing the historic spatial relations between the elements of architecture. However, the new-build do not obscure the view inside nor the panoramas from the fortress and they allow for implementation of cultural program when the monument does not serve sightseeing. The modern functions and the monument-quality do not compete or impede each other as each of them happens in a separate slot of time. Contemporary additions were executed in an unobtrusive style that does not hinder the authenticity of the historic landscape. All in all, the ambiance was revived and the edifice was returned to active use within the society[8].

3 Ambiance in milieux de memoire – monumentalisation

An obvious problem with ambiance and urban recycling in barrack complexes begins when they had been used by a totalitarian regime. The ambiance there is one of gravitas and horror, nevertheless maintaining the original ambiance is essential to the scholarly value of the heritage. For only in a *milieu de memoire* can the ambiance of terror hold enough power to serve as a memento and preventive measure. However, it would seem, in cases involving sites of terror, the original ambiance inhibits any further investment other than a memorial and hinders any adaptation of the original tissue aiming to reintroduce active social use. On the other hand, if an adaptation were a priority, would it be even possible to downplay the ambiance to facilitate it. In addition, it does not seem ethical to put people in a position of day-to-day existence in an ambiance like that. At the same time, large homogenous historic complexes (such as post-military compounds) pose a challenge when it comes to integrated preservation efforts. Their sheer scale (tens of hectares of land) makes it virtually impossible to preserve them as monuments or turn into open-air museums. Due to the costs, such undertakings can only involve compounds that are exceptional within the genre. Moreover, preserving more of large-scale complexes as memorial sites might lead to petrification of historic towns.

3.1 Stigmatization

When a *milieu de memoire* is impossible to maintain in its entirety, a *lieu de memoire* may be created instead as a token. This was the case with the SS barracks in Oranienburg, built to accompany one of the first purposefully constructed death camps in Europe – *Sachsenhausen*. The compound consisted of a camp, barracks, single family housing district and various other facilities, laid out around exercise fields. While, after the war, the camp became a memorial, the barracks continued to be used during the GDR by the military. The single-family houses were turned over to private citizens. Some parts of the site were completely discarded, like muster yards that were overgrown with vegetation and a wooden mess-hall – dilapidated and rotten. The whole area was frozen in a state of transition, neither refurbished nor preserved, a constant reminder of the past. High status of the memorial site at the camp presented the local populace and politicians with contradictory incentives. On the one hand, there was the obligation to uphold the memory, on the other, the tourist potential of the site presented the local community with the opportunity to economically benefit and move on from the

stigma[9]. The competition that ensued aimed to turn the underused post-military area of land into a new residential district with low-rise houses, parks, schools and sports facilities[10]. The idea of refurbishing post-military property as mix-use development proved most culturally suitable and economically lucrative in many cases[11]. It seemed the easiest way to reconnect the socially excluded area into the surrounding urban fabric. Rather than merging the parts of the compound and working out a joined way of dealing with the problematic inheritance, the 1992 competition sanctioned the existing spatial dissolution. If it had been carried out as planned, it would have ascribed a completely new meaning to different parts of the compound. The state competition only applied to the dishevelled SS barracks and office buildings, which were to be razed. The *Sachsenhausen* memorial, the single-family homes, as well as industrial facilities associated with the camp were excluded. The municipality decided that the memorial site is sufficient to do justice to the history of the concentration camp and that the barracks did not carry the ambiance of the camp. Daniel Libeskind submitted a proposal that stood in a stark opposition to the terms of the competition. Libeskind stipulated, that the *lieu de memoire* was not enough, that it was not possible to mourn the victims without condemning the persecutors[9]. Instead dividing the site into camp memorial and the “mundane” barracks viable for adaptation, he perceived them as opposite poles of the same horrific killing installation and designed an epic monument cultivating the original ambiance throughout the whole complex. At the same time, he managed to incorporate in it enough services and utilities, so that the monument could economically sustain itself and at the same time become the focal point of the local community thus maintaining its social viability. Libeskind divided this site into two parts. The western part would be flooded and the ruins of barracks would be left to rot in the water – symbolizing moral decay of their former inhabitants participating in an atrocity. Visitors would stroll on platforms and piers observing the decay. The eastern part was to be reforested. Between the trees, he placed a collection of newly designed buildings forming a linear pattern, housing workshops, private and public institutions, and common buildings. The architect called these buildings the Hope Incision, and placed it diagonally across the plot, so that it pointed to the *Sachsenhausen* camp. Project MoUning managed to uphold the ambiance of the *Sachsenhausen* compound, while endowing it with new functions and altering its original appearance. Libeskind’s design proved that heritage is less about tangible artefacts or material tissue than about the meanings placed upon them and the representations which are created from them[3] – the ambiance. Nonetheless, even this design could not solve the problem of how to include the single-family homes without petrifying them. Eventually, after much deliberation, the Oranienburg municipality abandoned the plan to raze the barracks and decided to repurpose them as the campus of the Brandenburg Police Academy, which opened in 2006. The buildings were fitted with information plaques, but the property is closed off and only occasional visitors are permitted inside.

3.2 Assimilation

Similarly, the La Marmorata barracks in Via Asti (Turin, Italy) were a place of martyrdom of partisans during WWII. The complex was built in 1888, and in 1943 it was acquired by the fascist police and became a prison for political opponents. The walls of the complex still give proof to the executions that took place there. It is estimated that 400 people died on the premise in the moat adhering to barrack B, a fact remembered by a plaque placed there and sporadic commemorative events. However, only a portion of the historic complex (ground floors of barracks B and C) is set to become a museum honouring those grave events *per se*. The focus of the design is opening the previously inaccessible urban space and creating a green *piazza* 100x60 m, a meeting place for members of a civil society and so a monument for the freedoms the fallen dissidents had fought for as well. The historic buildings are going

to be preserved in their original outer appearance and there are going to be no infills that might distort spatial relations between barracks in the original array – thus maintaining educational value. The modularity of post military architecture was useful in re-designing the barracks into open-source solutions – co-living and co-working modules. Hence, with very little intervention the complex is going to be turned into a monument for freedom of civic expression with all its scholarly value preserved, albeit not petrified[12]. It is hard to assess before its completion, but from the look of the design, it seems that the original ambiance and the newly created ambiance have the chance to coexist. The museum will serve as the aide for the original ambiance (providing narrative and guidance), but not curb the sites potential for assimilation in the city scape.

Conclusion

Saying that heritage conservation is a sum of economic, cultural and social factors is stating the obvious. Today “heritage” is a very fluid concept rather than a body of historic objects with a single fixed connotation. Still, we continue to concentrate the best part of conservation efforts and discourse on matters concerning physical condition and countermeasures for deterioration. But heritage shapes society not by its physical presence, but with the set of ideas embedded in it. Therefore, heritage is a social construct: its value results from social processes specific to present moment in time and space. It is used as an instrument against social change or just the opposite – facilitating a change. However, at the same time heritage possesses universal scholastic and historiographic values stemming from the possibility of reliving the past, actively experiencing “what it was like” for one’s self. This possibility is granted by the place’s ambiance. Ambiance does not depend on the amount of the original tissue – there may be hardly any left and still with the right tools, the character and atmosphere can be evoked. It is a positive thing, as it allows for extensive adaptation of historic architecture without forsaking its scholastic values. The original setting – the historic architecture – triggers ambiance, but is not enough to be self-evident, self-explanatory. From plaques, props, staged parades to HMD, VR and AR designers have tried to revive the *genius loci* of post-military barrack complexes while adapting them to new functions, granting their designs various degrees of legibility of the original ambiance. There is not a universal approach. Instead, it is a compromise between various factors: economic, functional etc. It would be most desired if there was a unified policy of regeneration of post-military barrack complexes based on an international know-how, to assure that heritage or not, it will remain a valued part of local cultural landscape.

References

1. Harvey D.C., *Heritage Pasts and Heritage Presents: temporality, meaning and the scope of heritage studies*, International Journal of Heritage Studies, **7:4**, 319-338, (2001)
2. Czerner O., *Wartość autentyczmu w zabytkach*, Ochrona Zabytków, **27/3(106)**, 180-3, (1974)
3. Graham B., Ashworth G.J., Tunbridge J.E., *A Geography of Heritage: Power, Culture and Economy*, (2000)
4. Piga B., Morello E., *Environmental design studies on perception and simulation: an urban design approach*, Ambiances, **1/2015**
5. Nora P., *Realms of Memory: Rethinking the French Past*, **1:1**, (1996-98)
6. <http://sydneylivingmuseums.com.au/stories/mint-transformed>
7. Morello E., Piga B., *Experiential simulation in architecture and urban space*, Ambiances, **1/2015**

8. <http://www.barone.hr/stranice/augmented-reality/12/en.html>
9. Sandler D., *Counterpreservation: Architectural Decay in Berlin since 1989*; 141-2, (2016)
10. Libeskind D., *Radix-Matrix: Architecture and Writings*, 102, (1997)
11. Rudnicka-Bogusz M., *Mix-use adaptations in sustainable regeneration of barrack complexes*, VII Conference SOLINA Sustainable Development, E3S Web Conf., **49 (2018)**
12. <https://carloratti.com/project/caserma-lamarmora/>