ABSTRACT

The railway system, considered an industrial heritage today, emerged in England as a means of transportation and spread rapidly worldwide in the second quarter of the nineteenth century. As in other industrial building types, the advancement of technology and the emergence of new systems for railway structures have been a threat; since the twentieth century’s latter half, many railways in the industrial and mining areas have been closed, and the disused buildings have faced the risk of rapid extinction. The deliberate destruction of railway structures in the 1960s, symbolized by the demolition of the Euston Arch in England, started the debate on railway heritage, first in England and then in the world. This study focuses on Swindon Railway Town, a highly significant industrial settlement of its era in England, as an exemplar of railway heritage conservation due to preservation efforts since the 1980s, including various restoration and reused railway buildings. It is an early and important example of both railway construction and conservation practice. This article aims to investigate Swindon as a potential conservation model for the Alsancak Railway Campus, considering their shared similarities in era, scale, and style, through a comparative study focusing on cultural significance and conservation status. These two railway areas were selected as case studies because they showcase the architectural diversity of railway buildings, sharing similar architectural features. Both railway campuses were built by the British as the first and early examples of railways in their countries. They were encountering similar problems such as becoming dysfunctional due to developments and changes in railway technology. The research methodology employed in this study comprises archival research and on-site visits to the railway town of Swindon and the Alsancak Railway Campus. Beginning with the history and significance of Swindon railway town, the study systematically examines the buildings that formed a planned railway town. Secondly, an overview of the railway heritage conservation process in Swindon is provided by highlighting the conservation area status, its management plan, and systematically analyzing the conservation status and transformation process of the historical railway structures. It is followed by a comparative analysis between Swindon Railway Town and Alsancak Railway Campus. Overall, this study presents an evaluation and potential for the conservation of railway heritage areas through a comparative analysis.
INTRODUCTION

In the early 19th century, Richard Trevithick’s pioneering demonstration of the steam locomotive unknowingly laid the foundation for the railway network linking cities. Originating from mining roads, the railway was developed for freight transportation as an alternative to existing canals and roads to meet the increasing demands of England’s heavy industry (Coulls, 1999; Jones, 2011). There is consensus that the prototype of the “modern railway” emerged with the opening of the Liverpool & Manchester Railway (L&MR) in northwest England in 1830, and the opening of this line is considered to be the beginning of the railway age. Essentially designed as a rival to the transport of goods via canal, this line met a demand for passenger transport that was unforeseen at the time it was built (Coulls, 1999). The Rainhill Trials of 1829, during which the managers of the L&MR invited locomotive inventors to exhibit their works, represent another turning point in railway history (Simpson & Scott, 1979). The locomotive known as “Rocket,” which was designed by George Stephenson and later earned him the title of the “father of the railway,” played a vital role in the inauguration of the L&MR. This event demonstrated that steam locomotives could efficiently transport both freight and passengers across substantial distances within a relatively short period, leaving a significant impact on the nation (Jones, 2011). The rapid success of the LMR railway sparked a railway mania in England, inspiring investors and entrepreneurs to explore these opportunities and ultimately leading to the development of railways across the nation (Buchanan, 2006).

Following the emergence of the railway, the Great Western Railway was started as one of the major railway projects under construction in the mid-1830s. The city of Swindon is one of the most significant industrial settlements and pioneering railway cities of its era, known for its repair and manufacture of locomotives, wagons, and carriages, tailored to the needs of the GWR, as well as worker houses and social facilities (Cattell & Falconer, 1995). It connected London to Bristol under the direction of Isambard Kingdom Brunel, one of the most significant names of the railway era in England. Contrary to many other railways constructed during the same period at the beginning of the railway era, it was designed as a whole and an ideal railway project with certain design principles (Buchanan, 2006). Similar to the rest of the country, Swindon began to experience a decline in the 1960s due to advancements in technology and transportation regulations. The railway infrastructure became vacant after the works were shut down in the 1980s.

On the other hand, the Alsancak Railway Campus is the terminus of the Izmir & Aydan Railway, which was the first railway line of Turkey and one of the major railway projects of the Ottoman Empire period. It was constructed by a British company under concession. The railway was built between 1856 and 1866 with the primary goal of utilizing the natural resources of the fertile Aegean region and transporting goods and raw materials to England via Izmir port (Ekizoğlu, 2012). The campus consists of storage, service and maintenance workshops, administrative units, and housing along with railway stations. While Alsancak Railway Campus shares similarities with Swindon Railway Town in terms of the size of the railway settlement, being built by British companies, and being early initiatives of their respective countries, it also faced similar challenges due to technological developments and changing transportation policies. Against this background, this study aims to investigate Swindon Railway Town as an exemplary model for the preservation of railway heritage due to preservation efforts over the years since the 1980s, including various restorations, reused railway buildings, and railway museums. It is also an example of holistic conservation, with the area being declared a conservation area in 1975 and 1987. The study not only explores the cultural significance of Swindon Railway Town but also focuses on the preservation processes of railway structures following the closure of railway facilities and that of current conservation status. Following the case of Swindon, the comparison with Alsancak Railway Campus can lead to present an evaluation and diverse potential for the conservation of railway heritage areas.

CONSERVING RAILWAY HERITAGE IN THE UNITED KINGDOM

Biddle (2011a) defines railway structures as developments that matured in the 19th century as railway construction evolved, pioneering new techniques and responding to demands. The structures built on the early railways reflected a lack of foresight about the potential of railways, as railway companies assumed their primary emphasis would be on freight traffic and viewed passenger transportation as a secondary industry (Parissien, 2014). Over time, due to factors such as the increasing importance of passenger transportation and the necessity to separate freight traffic, railway architecture evolved, forming its archetype (Richards & MacKenzie, 1986). Additionally, the requirement for large spaces as waiting rooms for passengers and train depots during the 19th century pushed the limits of material usage and inspired engineers like Isambard Kingdom Brunel to break new ground in the design of railway constructions (Brindle, 2004).

Railway structures, like other types of industrial buildings, have been created for specific purposes, and as technology advances and traffic increases, they may become obsolete for their original purpose and face the risk of demolition (Minnis, 2014). In 1968, the transition from steam...
locomotives to electric or diesel locomotives in the United Kingdom resulted in the demolition of many functional units associated with steam traction (ibid, p. 38). Another contributing factor to this demolition was the intervention in the national railway network in the country, largely stemming from the impact of the 1963 Beeching Report⁴, which led to the closure of numerous railway lines (ibid, p. 40; Nevell, 2010). The deliberate demolition that followed the closure of these lines became an increasingly common practice from the 1960s onward, and many stations on the closed lines suffered (Minnis, 2014). The 1960s and 1961s campaign to save the Euston Arch at the London & Birmingham Railway terminal, although unsuccessful, was significant in raising awareness of the importance and vulnerabilities of industrial structures in public discourse. This led to the reuse and preservation of railway structures for tourism purposes and gave rise to a new sector where steam locomotives operated on closed lines (Nevell, 2010).

The preservation of railway heritage in the United Kingdom initially focused on locomotives; for instance, Rocket (Figure 1a) was first acquired by the London Science Museum in 1862, and unused railway vehicles began to be preserved and exhibited. The examination of surviving remnants of the railway network in the 19th century laid the foundations for the discipline of Industrial Archaeology, which emerged in the 1950s and 1960s (Falconer, 2007; Nevell, 2010). In 1977, the exhibition "Off The Rails: Saving Railway Heritage," held at the RIBA Heinz Gallery, brought experts together to emphasize the value of railway architecture as heritage, express concerns, and discuss new functions for disused railway structures (Pearce & Binney, 1977). As part of the celebrations for the 150th anniversary of the line opening of the L&MR, research into the "world’s oldest surviving passenger train station," the Grade I listed Liverpool Road Station in Manchester (Figure 1b), highlighted the importance of railways in Industrial Archaeology (Nevell, 2010).

On the other hand, until the 1980s, other functional structures of the railway system received little attention, with the focus primarily on railway history, locomotives, and partially on passenger waiting areas, which represented the public face of stations (Biddle, 2011b). Minnis (2014) argued that railway structures were studied more by railway enthusiasts than by architectural historians or industrial archaeologists, leading to a narrow focus on locomotives or a single railway company in railway studies. However, he also acknowledged the contributions of many amateurs, outside their expertise, to railway history (Minnis, 2014).

In 1984, the Railway Heritage Trust was established under British Railways, aimed at preserving, restoring, and maintaining the heritage of the railways for the public good. This centralized conservation efforts related to railway heritage (Soane, 1997). The Railway Act 1993 is important in that it includes the concept of 'Railway Heritage' in England for the first time and subsequently established the "Railway Heritage Committee," but the railway heritage is not defined in the law and does not contain a guide on conservation and restoration. It was issued to restructure the UK railway network (Threlfall, 1997). The Railway Heritage Act 1996 is the law that arose from this need and determines the railway structures that will still be protected today and the authorities for their management. The establishment of the Institute of Railway Studies at the University of York in 1995 further accelerated railway studies having an important task (Burman, 1997). To organize applications for the World Heritage List (WHL), ICOMOS established a guideline setting up the criteria for railway heritage applications for WHL in 1999 (Coulls, 1999). This guideline also included case studies from the UK, such as the Liverpool & Manchester Railway and the Great Western Railway, which is the railway of this study. As regards WHL, the Semmering Railway (Austria), the Himalayan Mountain Railway (India), Rhaetian Railway in the Albula/Bernina Landscapes (Italy, Switzerland), and Trans-Iranian Railway (Iran) have been included in the World Heritage List in 1998, 1999, 2008, and

Figure 1. (a) Rocket, National Railway Museum, York; (b) Liverpool Road Station, Manchester.
2021, respectively. The management plan of the Trans-Iranian Railway highlighted up-to-date trends in railway conservation as documenting, monitoring, and conserving the historic buildings and other elements that are no longer in use. It also underlined documentation of the engineering elements at the same level of detail as carried out for the inventorying of all tangible features (UNESCO, 2021).

**SWINDON AS A RAILWAY TOWN**

Railway towns evolved from 19th and 20th-century company towns, where communities of workers, employed by the same company or group, lived in houses owned by the company, and these towns were characterized by the company’s control over both economic and social aspects. Some railway companies established railway works in existing industrial cities, while others founded new settlements. Unlike these two, as seen from Swindon, small market towns became central hubs for railway lines (Andreea, 1985).

**History of Settlement and Development**

In the 1830s, Swindon was a small market town (Figure 2a), but with the establishment of railway repair and locomotive manufacturing works, and railway village and community buildings (Figure 2b) by GWR, it rapidly grew into a significant railway town by the end of the 19th century (Andreea, 1985).

Swindon’s railway town comprises two interconnected areas, separately for the railway works and the railway village, including a church, a green park, and community buildings for workers for education, leisure, and health services. Both areas were established due to the GWR company’s decision to provide housing for its workers and to establish the works.

In 1833, Isambard Kingdom Brunel (Figure 3a), a prominent engineer of his era in railway, was appointed as the chief engineer by GWR to determine the route for a new railway between London and Bristol. This opportunity allowed Brunel to articulate his vision for an ideal railway in detail, which deviated from the standard railway construction.

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**Figure 2.** (a) Swindon railway works and railway village in 1846, as depicted by Edward Snell, from left to right: railway works and railway village. (b) Railway buildings of Swindon (It was prepared by the author on the Swindon Railway Town map obtained from the Great Western Railway Museum, Swindon).

**Figure 3.** (a) I. K. Brunel (National Archives, n.d.); (b) Brunel type according to the platform-rail (Meeks, 1957).
practices of the time in two significant ways: first, he prioritized passenger movement in the design, and second, he aimed to achieve high-speed travel to reduce journey times (Buchanan, 2006). In contrast to the prevailing practice of choosing the most economical route, he pushed the boundaries of engineering to achieve the highest standards (ibid, p. 69). As the railway became operational in 1841, Brunel, particularly working on the architectural plans and details of the main stations, created the double-sided platform type that would later be known as the “Brunel type” in station architecture (Figure 3b). Additionally, he was responsible for providing the infrastructure for works that transformed Swindon into a railway town (Buchanan, 2006). The GWR made a strategic decision to establish repair and locomotive manufacturing facilities in Swindon shortly after the opening of the London & Bristol railway line. The choice of Swindon as the central location for GWR’s repair and locomotive manufacturing was not random but carefully considered. Swindon’s geographical position at the precise midpoint of the London & Bristol line and its access to two existing canals for transporting coal and coke were advantageous factors (Historic England, 2020a).

Construction of the repair works was completed and operational by 1843, just two years after the railway line’s opening. Initially intended for locomotive maintenance and repair, the area soon expanded to include locomotive production. A railway village, with rows of houses for the many engineers and workers brought in from outside the town, made it a unique industrial settlement of its time (Brownlee, 2010) and the GWR intervening in the lives of its workers through architecture (Lewis, 2021). Until 1920, Swindon employed more than 14,000 people (Jones, 2011). When British railways were nationalized in 1948, the GWR became one of the four major railways under British Rail. The nationalization led to the reorganization of the works in the 1960s, resulting in some structures becoming disused and eventually demolished. In 1960, the works, where the last steam locomotive (Evening Star) was produced, closed due to the cessation of steam locomotive production and a decrease in the workforce (Jones, 2011). In 1966, while the railway village was planned to be demolished after Swindon Borough Council purchased most of the railway village from British Rail, through a campaign started with volunteer effort, the cottages were saved, and in the 1970s, the cottages were listed and in 1975 designated as a conservation area. In 1986, the works closed entirely, marking another effort by volunteers to preserve Swindon’s identity as a railway town (Jones, 2011). For instance, a charitable trust to keep railway engineering alive in part of the works, repairing and restoring old engines for use on preserved and tourist lines throughout Britain (ibid, p.100). Due to many buildings and features having been demolished following the closure, the railway works area was designated as a conservation area in 1987, at which time the area was derelict.

### The Buildings that Compose a Planned Railway Town

The town of Swindon was established as the headquarters of the GWR, one of the world’s first and renowned railways of its time. The locomotive and wagon repair and manufacturing works (Table 1) established under the leadership of Brunel, pioneers in railway engineering and architecture, held an international position in the field of railway engineering and were among the largest of their kind in the world. The railway town was also known for its railway village worker housing (Table 2), and social facilities to meet the demands of the workforce, making it one of the significant industrial housing areas of its time.

<table>
<thead>
<tr>
<th>Location</th>
<th>Construction Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>North of the London &amp; Bristol railway line</td>
<td>1841-1846</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Architect/Engineer</th>
<th>Original Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.K. Brunel Daniel Gooch</td>
<td>Repair and manufacturing works of locomotives and carriage</td>
</tr>
</tbody>
</table>

### Statement of Significance

For a century and a half, the railway works served as the focal point of the community had a crucial part in the local economy. The GWR company is responsible for the transformation of the once-small hilltop town into the vibrant railway town. The railway works expanded to become the world’s one of the largest facility for repairing and manufacturing locomotives, carriages, and wagons gaining a worldwide reputation as pioneers in this field.
time. Furthermore, the GWR company established the country’s first lending library (Table 3), and developed a pioneering healthcare system (Table 4). While the works were expanded with carriage works (Table 5), the village endeavored to improve living conditions with facilities such as the Health Hydro (Table 6) building, which is still in use today. St Marks Church (Table 7) and The Park (Table 8) were other facilities that met the demands of workers. Swindon Station (Table 9) connected railway works and the village to the west and east. All of these are defining characteristics of Swindon, a railway town that developed with a sense of community spirit and collective effort. The railway works, though closed, nevertheless hold significance for people in the area, many of whom had family working here. The buildings that compose a planned railway town are analyzed with the category of basic information such as location, construction date, architect/engineer, and original function; architectural features, and statement of significance which reflect data mainly from listed building contents. It is important to note that while the details given in the listed information have increased over time, their significance has been classified as historical architecture or group value.
AN OVERVIEW OF THE RAILWAY HERITAGE CONSERVATION PROCESS IN SWINDON

Railway heritage plays a crucial role in shaping Swindon’s identity, and this heritage is a vital part of the Great Western Railway, which is among the most significant historical railway establishments still in existence worldwide (Cattell & Falconer, 1995). It stands as one of the best-preserved early railway settlements in the country. While many of the first railway accommodations in rival settlements like Wolverton, Derby, and Crewe were demolished, Swindon Railway Village, which faced a similar fate in the 1960s, managed to survive. From the 1970s onwards, Swindon Borough Council has been a model in preserving railway heritage through successful restoration and redevelopment projects (Cattell, 1997).

Table 2. Railway Village

<table>
<thead>
<tr>
<th>Location</th>
<th>Construction Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>South of the London &amp; Bristol railway line</td>
<td>1842-1847</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Architect/Engineer</th>
<th>Original Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. K. Brunel</td>
<td>Housing for the engineers and workers and social facilities</td>
</tr>
</tbody>
</table>

Architectural Feature

Railway village was built including cottage housing, recreational areas, shops, and pubs, within a relatively short time frame. Despite their simple designs, these worker houses were notably superior in terms of quality compared to other industrial housing at the time (Andreae, 1985). The worker houses, approximately 300 in total, designed two stories high and featured front and back gardens (Figure 6). They were constructed using Bath stone, which was extracted during the railway’s construction. The facades facing the railway line were embellished with decorative elements, while the other facades were more plain (Figure 7). In the central square, designed as the village’s focal point, three-story blocks on either side housed company officials, foremen, and shops.

Statement of Significance

The railway village represents an early and rare instance of a model community created by a railway for its employees and their families, showcasing unique Victorian architecture and planning. It provided significantly superior accommodation compared to housing for workers during that era (Jones, 2011). The architectural style of the buildings owe much to Brunel’s enduring interest in the area and the consistent use of Swindon and Bath stone. Preserved to this day, the village stands as a vital element of England’s railway heritage (Catell, 1997).

Figure 6. Plan of Swindon Railway Village designed by Brunel and constructed between 1842-1847 (STEAM, 2007).

Figure 7. The row houses of Swindon railway village, still in use today in their original function.
Table 3. Mechanics' Institute

<table>
<thead>
<tr>
<th>Location</th>
<th>Construction Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emlyn Square, the central of the railway village</td>
<td>1854-1855</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Architect/Engineer</th>
<th>Original Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edward Roberts</td>
<td>Workers' and their families' education to improve all employees' standard of living</td>
</tr>
</tbody>
</table>

**Architectural Feature**

The building is two stories tall and prominently features a raised central hall or theatre, showcasing a Gothic Revival architectural style and made of limestone rubble with ashlar quoins and dressings, the institute consisted of a library, reading rooms (Figure 8a), a large theater, a coffee lounge, and recreational spaces (Figure 8b). Over time, an octagonal indoor market was added to the southern end of the building (Historic England, 2017).

**Statement of Significance**

For nearly a century, it played a pivotal role in the social and cultural life of the railway village (Roden, 2010). It was a central gathering place for various community events related to GWR. It includes the country's first lending library. This institute seems to be a rare survivor associated with a railway company.

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Figure 8. (a) Mechanics' Institute reading room (Historic England, 2017); (b) Mechanics' Institute.

Table 4. Medical Fund Hospital

<table>
<thead>
<tr>
<th>Location</th>
<th>Construction Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>South of the London &amp; Bristol railway line</td>
<td>Built in 1862 as the GWR works converted to hospital for GWR workers in 1871</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Architect/Engineer</th>
<th>Original Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Hospital for the use of railway workers and their families</td>
</tr>
</tbody>
</table>

**Architectural Feature**

The building was initially designed to integrate with the neighboring railway village structures, with the central block intentionally distinguished, and despite subsequent modifications, its original architectural form remains recognizable (Historic England, 2020c).

**Statement of Significance**

This initiative is of national significance as it served as an inspiration to Nye Bevan, the founder of the National Health Service, when he visited Swindon in the 1940s, pioneering the establishment of medical centers. Established in 1847 by Daniel Gooch, the Medical Fund Society utilized a fund created by deducting portions from workers' wages to contribute to public health and efforts to improve living conditions (Figure 9a-9b). This fund played a significant role in addressing various epidemic diseases and accidents (Roden, 2010).
which had been excluded from the railway heritage until
their closure, began when demolition decisions were being
considered. To keep railway engineering alive in part of
the works, Bill Parker founded the GWR Heritage Trust as
a voluntary organization. In the subsequent years, efforts
by volunteers across the country led to the preservation of
historic railway lines for tourism purposes, with a focus
on maintaining old locomotives to be used on these lines

Figure 9. (a) GWR Hospital (STEAM, 2023); (b) Central Community Centre.

Table 5. Carriage Works

<table>
<thead>
<tr>
<th>Location</th>
<th>Construction Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>South of the railway works between the railway village and the rail line</td>
<td>1874</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Architect/Engineer</th>
<th>Original Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joseph Armstrong</td>
<td>GWR's wagon manufacturing</td>
</tr>
</tbody>
</table>

Architectural Feature

It stands parallel to main rail line consisting of adjoining buildings. The masonry facade, stretching almost 200 meters, was specifically
crafted to complement earlier GWR constructions. It consists of a railway entrance building with a pedestrian subway underneath the
railway (Historic England, 2020b).

Statement of Significance

At the time of their construction, these works were not only the largest wagon works (Figure 10a) in the country but also exemplified
innovative design for this type of railway buildings. In this initial construction phase, brick and iron framing were employed for the
interior structure, marking their first use in such a context (Figure 10b). At its busiest, more than 14,000 workers used the entry build-
ing and subway tube as the only means of transportation between the works and the railway village (Historic England, 2020b).

Figure 10. (a) Carriage Works (STEAM, n.d.-a); (b) Carriage Works.
Table 6. Health Hydro

<table>
<thead>
<tr>
<th>Location</th>
<th>Construction Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>South of the London &amp; Bristol railway line</td>
<td>1891-1912</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Architect/Engineer</th>
<th>Original Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>J.J. Smith</td>
<td>A wide range of medical and recreational facilities for workers, from swimming pools to Turkish baths and dental surgeries.</td>
</tr>
</tbody>
</table>

Architectural Feature

The building (Figure 11a) occupy a rectangular block functioning dispensary and swimming baths (Figure 11b). The entire structure is constructed using red brick and adheres to a simplified Queen Anne architectural style (Historic England, 2000).

Statement of Significance

Long before the government provided universal healthcare, the Great Western Railway established its own comprehensive healthcare system in Swindon, offering services well ahead of its time (Roden, 2010). The Health Hydro was one of these healthcare facilities made available to workers. As the community raised money to build, a characteristic that makes Swindon unique is its sense of collaboration and belonging (Historic England, 2000).

Table 7. St. Mark’s Church

<table>
<thead>
<tr>
<th>Location</th>
<th>Construction Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>South of the London &amp; Bristol railway line</td>
<td>1843-1845</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Architect/Engineer</th>
<th>Original Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sir George Gilbert Scott William Bonython Moffatt</td>
<td>The Anglican Church built for GWR</td>
</tr>
</tbody>
</table>

Architectural Feature

The church (Figure 12a-12b) designed by highly significant ecclesiastical architects of the period with the revival of Gothic style. The initial design featured a chancel, six-bay nave, north and south aisles, sacristy, and south porch. The large north tower, adjacent to the north aisle, was a later addition aimed at enhancing the building’s appearance from the railway. (Historic England, 2020d).

Statement of Significance

It was constructed, particularly for GWR, as a place of worship as part of a comprehensive effort to provide housing, health, and welfare amenities for the workers at the GWR Swindon Works by significant architects of the time (Historic England, 2020d).
While the oldest works were listed by English Heritage, the demolition was halted due to the efforts of retired railway workers and railway enthusiasts who refused to allow the town's railway identity and traditions to be lost in the rubble, considering the destruction a loss of engineering skills and traditions (Taksa, 2008). Another significant development was the majority of Railway Village properties being purchased by Swindon
Borough Council to save them from demolition. This decision, in contrast to the destruction seen in similar industrial settlements of the time, ensured the preservation of much of the character of the Brunel era in the Railway Village (Jones, 2011). In 1970, homes were listed as heritage, and campaigns against their demolition led to the declaration of the village as a conservation area in 1975. Between 1970 and 1980, a comprehensive renovation program for worker housing was implemented with limited changes (Jones, 2011). The actions taken included repairing roofs, cleaning stone facades, removing additions from backyard gardens, burying external wiring, putting long grass strips in place of individual gardens, and enhancing the surrounding public areas and landscaping. One of the houses in the Railway Village was purchased with public funds and restored as a museum to represent the Brunel era (Jones, 2011). The restoration efforts in the Railway Village were considered exemplary conservation practices, earning numerous awards (Cattell, 1997).

With the recognition of the importance of Swindon’s railway heritage, both the local community and experts began to express concerns about its tangible and intangible cultural heritage. In 1997, a reuse project was implemented, covering a significant part of the surviving works, and they were transformed into the modern shopping complex known as McArthur Glen Designer Outlet Village. The GWR Outlet Village, visited by 4.5 million people in its inaugural year of business, (Taksa, 2008) triggered financial support from other organizations, leading to the restoration of the oldest repair works listed as Grade II, which were transformed into the award-winning STEAM – Great Western Railway Museum (Figure 15). The museum interpreted the production processes that took place in the works, showcased the lives of railway workers through video interviews, and displayed the skills and methods of the workers (Taksa, 2008). Beyond the collection, with the approach of depicting a wide range of railway operations, including the experience of working in the carriage and locomotive works, it is notable in railway museology (ERIH, n.d.).

Table 9. Swindon Station

<table>
<thead>
<tr>
<th>Location</th>
<th>Construction Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle of the railway works and railway village</td>
<td>1842</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Architect/Engineer</th>
<th>Original Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. K. Brunel</td>
<td>Transportation from London to Bristol</td>
</tr>
</tbody>
</table>

Architectural Feature

Brunel designed the station (Figure 14a) featuring two island platforms, each equipped with a matching two-story structure and connected by an iron footbridge, complete with attached timber canopies. When the southern island platform was destroyed and the current station tower with an entrance building was built in its place, the layout was significantly changed (Historic England, 2012).

Statement of Significance

Despite quite considerable alterations, the surviving building remains (Figure 14b) an integral component of the GWR and holds significance as it connects nearby railway-related buildings to the west and east (Historic England, 2012).

Figure 14. (a) Swindon Station was designed with an unconventional layout type by Brunel, differing from his customary plans (STEAM, n.d.-b); (b) The part that has survived from Swindon Station to the present day (British Listed Buildings, n.d.).

Borough Council to save them from demolition. This decision, in contrast to the destruction seen in similar industrial settlements of the time, ensured the preservation of much of the character of the Brunel era in the Railway Village (Jones, 2011). In 1970, homes were listed as heritage, and campaigns against their demolition led to the declaration of the village as a conservation area in 1975. Between 1970 and 1980, a comprehensive renovation program for worker housing was implemented with limited changes (Jones, 2011). The actions taken included repairing roofs, cleaning stone facades, removing additions from backyard gardens, burying external wiring, putting long grass strips in place of individual gardens, and enhancing the surrounding public areas and landscaping. One of the houses in the Railway Village was purchased with public funds and restored as a museum to represent the Brunel era (Jones, 2011). The restoration efforts in the Railway Village were considered exemplary conservation practices, earning numerous awards (Cattell, 1997).

With the recognition of the importance of Swindon’s railway heritage, both the local community and experts began to express concerns about its tangible and intangible cultural heritage. In 1997, a reuse project was implemented, covering a significant part of the surviving works, and they were transformed into the modern shopping complex known as McArthur Glen Designer Outlet Village. The GWR Outlet Village, visited by 4.5 million people in its inaugural year of business, (Taksa, 2008) triggered financial support from other organizations, leading to the restoration of the oldest repair works listed as Grade II, which were transformed into the award-winning STEAM – Great Western Railway Museum (Figure 15). The museum interpreted the production processes that took place in the works, showcased the lives of railway workers through video interviews, and displayed the skills and methods of the workers (Taksa, 2008). Beyond the collection, with the approach of depicting a wide range of railway operations, including the experience of working in the carriage and locomotive works, it is notable in railway museology (ERIH, n.d.).
In the United Kingdom, the Planning (Listed Buildings and Conservation Areas) Act of 1990 provides the legal framework for the protection of listed buildings and conservation areas in England and Wales. Historic England is the government's statutory adviser responsible for the conservation and management of historic monuments and buildings, advising on the designation of listed buildings and conservation areas, guiding conservation practices, and undertaking research and advocacy to promote heritage preservation in England.

The Planning Act defines a conservation area as a place of “special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.” This includes all of the characteristics of the buildings and monuments, including the topography, the materials used, the streets, the street furniture, the open areas, and the landscaping. Each of these elements influences an area’s appearance and character, giving it a unique local identity and sense of place (Historic England, 2019b). In conservation areas, there are extra planning controls and considerations, and development within conservation areas is subject to stricter controls by local planning authorities. In the case of Swindon, it is important to highlight the area designated with railway identity, namely “the Swindon Railway Conservation Area”.

The Swindon Railway Conservation Area (Figure 16) encompasses the internationally significant GWR works, the railway village, and the Swindon railway station. Initially, two separate conservation areas were designated in 1975 and 1987. The first one is for the former railway works and the second one is for the railway village. Both areas are interconnected in terms of their origins, histories, and evolution as the village would not have existed without the works, and had the village not been constructed, the works would not have been sustainable. The railway line that separates the two main sections of the Conservation Area is also crucial in terms of the area’s character and its significance in why these areas were built within the town. The railway works are considered a significant historical monument from the early days of the British railway era, and they are recognized for their national and international importance. Swindon’s railway village stands out as one of the most notable industrial housing developments of its time and is distinguished as one of the best-preserved railway settlements in comparison to other surviving railway towns like Crewe, Wolverton, and Derby in England (Cattell & Falconer, 1995).

Swindon Heritage Action Zone

Swindon Heritage Action Zone (HAZ) is a five-year plan prepared in June 2019 to revitalize the conservation area. HAZ is designed to restore and reuse neglected public buildings that were originally constructed to accommodate thousands of workers in the GWR works, revitalize public areas, strengthen relationships between the village and the city center, and highlight the region’s distinctive features. HAZ encompasses sixteen distinct projects, ranging from restoration initiatives to branding.
Functional Analysis of Historic Railway Structures in Conservation Area

The industrial and administrative buildings that have survived to the present day showcase innovative construction techniques that met the needs of their time. While exemplifying the style of typical industrial buildings of the era (approximately 1840–1920), the usage of Swindon stone gives them a distinctively local appearance. Projects that have adapted and reused these historic structures have received numerous awards since their implementation, making them potential models for the preservation of railway heritage (Pursell, 2021). In this section, as can be seen from Table 10, the current state of preservation of closed railway structures, after 150 years of use, is examined in three categories based on their functions: those still in their original function, those converted into museums, and those adaptively reused with different functions unrelated to railway museums.

COMPARATIVE ANALYSIS BETWEEN SWINDON RAILWAY TOWN AND ALSANÇAK RAILWAY CAMPUS

Alsancak Railway Campus

In the mid-19th century, the İzmir & Aydın (Smyrna-Aydın) Railway, the first railway in Anatolia, was granted to a British-led company, including notable figures like Sir Joseph Paxton and Sir Macdonald Stephenson (Atilla, 2014). It took eight years, starting in 1858, to complete, reaching Aydın in 1866 with the aim of modernizing Ottoman transportation. The British company was chosen for railway construction and management in Ottoman lands due to trust in its railway expertise (Cobb, 2023). It was a notable achievement, connecting once-isolated Anatolian towns to global markets and each other, enabling swift and cost-effective transportation from the inland areas to the port city of İzmir (Inal, 2021).

Alsancak, previously known as Punta, was situated in a rural setting, quite distant from the city center of İzmir, before its selection as the initial point for the İzmir & Aydın Railway (Cobb, 2023). After long discussions, the location of the Alsancak Railway Campus was determined for reasons such as the port planned to be built in Punta, ease of loading and unloading, and the supply of coal required for the railway by sea (Bilsel, 2000). After the station was built, Alsancak, which was originally a suburb of İzmir, transformed into the city center (Demirci & Coşar, 2021).

Alsancak Railway Campus (Figure 18) was built between 1858 and 1861 without a specific plan outline, as seen in early railway examples. The linear layout of Alsancak Railway Station was aligned parallel to the railway tracks and platforms. The railway complex extends to the south and east, including storage facilities, service and maintenance areas, as well as administrative units. Some of the railway buildings, including residential units situated to the northwest of the station building, are presently detached from the campus.

Statement of Significance and Preservation Status of Alsancak Railway Campus

Alsancak Station, one of the most important industrial heritages of İzmir, was the starting point of the first railway line in Anatolia. Alsancak, the initial point of the line, stands out as the largest settlement and also has the most remarkable structures built by the company responsible for the railway’s construction (Ekizoglu, 2012). The railway campus includes different functional group structures not found in other railway areas such as two different passenger stations, wagon repair shops, carpentry shops, warehouses of different sizes, and housing for different groups.

While the railway became a socio-economic milestone for Western Anatolia, Alsancak had a significant impact on both the economy and city planning of that period, as it was the first of its kind and was connected to the İzmir Port. The railway significantly boosted the foreign population in İzmir, with wealthy Levantine families settling in areas close to their countries’ living standards. While migrations, population growth, and changing conditions had an impact on daily life, they also brought with them many innovations in agriculture, trade, and communication (Atilla, 2014). The İzmir-Aydın railway construction likely had the most significant impact on Turkey’s archaeology, as it led to the discovery of the Temple of Artemis in Ephesus (Köşgeroğlu, 2005). Today, the Alsancak Railway Campus is still active and functions as a central point for İZBAN, a commuter...
### Table 10. Functional Analysis of Historic Railway Structures in Swindon Railway Town

<table>
<thead>
<tr>
<th>Category</th>
<th>Building(s)</th>
<th>Listed Status</th>
<th>Original Function</th>
<th>Current Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Use with Their Original Function</td>
<td>Railway Village</td>
<td>II</td>
<td>It was designed by Brunel and built between 1842-1847 to house the workers in the locomotive and wagon repair and production works.</td>
<td>In 1966, Swindon Borough Council purchased the railway village from British Rail, and the Grade II-listed houses of the railway village are still within the conservation area boundaries today, continuing their original use.</td>
</tr>
<tr>
<td></td>
<td>Health Hydro</td>
<td>II*</td>
<td>In order to protect the health of the workers in the railway works, a fund established by Gooch was used to build facilities such as a swimming pool and a Turkish bath in 1891.</td>
<td>The Grade II* listed building, located within the conservation area boundaries, continues to be used for its original function by the local community, with improvements initiated in 2021.</td>
</tr>
<tr>
<td>Reused as Railway Museums</td>
<td>STEAM Works</td>
<td>II</td>
<td>This is one of the oldest locomotive repair works. It was established in the 1840s to maintain and repair locomotives used on the London-Bristol line.</td>
<td>Works of 19 and 20 were converted into the STEAM museum, which was established by the Swindon Borough Council in 2000. The museum focuses on the history of GWR and the railway in the town, showcasing the working principles of the works and the skills of the workers (Hoadley, 2001).</td>
</tr>
<tr>
<td></td>
<td>Railway Museum</td>
<td>II</td>
<td>This is one of the houses in the railway village built in Swindon for railway workers to live in. It accommodated railway workers from 1846 until the late 1970s.</td>
<td>This house was transformed into a “Living Museum”, and it was first opened to visitors in 1980. The museum closed in 2000 but was renovated and reopened in 2017 under the management of the Mechanics’ Institution Trust.</td>
</tr>
<tr>
<td>Adaptive reused with different functions apart from the railway museum</td>
<td>The Engine House</td>
<td>II</td>
<td>It serves as the administrative center of the GWR Works. The drawing office where the first locomotive superintendent Gooch designed some of the steam locomotives.</td>
<td>Since 1992, the building has served as one of the main offices of Historic England (formerly known as English Heritage). Additionally, it houses the archives of the Historic England institution.</td>
</tr>
<tr>
<td></td>
<td>Railway Works</td>
<td>II*</td>
<td>These are works numbered 9, 13, and 15, constructed in 1872 to manufacture locomotives and represent factory buildings of era.</td>
<td>Works numbered 9, 13, and 15, which were originally used for locomotive production, have been reused as the Great Western Designer Outlet Village by McArthurGlen Group since 1997. These works have been partly transformed into working spaces for digital start-up businesses such as “Workshed” and the Royal Agricultural University Cultural Heritage Institute for postgraduate courses (Figure 17).</td>
</tr>
<tr>
<td></td>
<td>Carriage Works</td>
<td>II</td>
<td>These works, established in 1874 for the purpose of manufacturing wagons for the GWR company, were constructed as the largest in the country at the time.</td>
<td>In collaboration with Swindon Borough Council, Mechanics’ Institution Trust, the Theatres Trust, and Historic England, comprehensive research and surveys have been conducted to determine the new function of the building as multifunctional use, including cultural activities (Theatre Trust, n.d.). The hospital remained in service until 1960, then the building was transformed into a community center as still used as the Central Community Center.</td>
</tr>
<tr>
<td></td>
<td>Mechanics’ Institution</td>
<td>II*</td>
<td>It was established in 1854 at the heart of the railway village to provide education and socialization for workers and their families including a library, reading rooms, a large theater, a coffee lounge, game rooms, and an indoor market.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Central Community Center</td>
<td>II</td>
<td>This is the hospital building that was opened in 1871 by the GWR Medical Fund Society, with a mandatory subscription from worker’s salary due to the dangers of railway labor.</td>
<td></td>
</tr>
</tbody>
</table>
rail system connecting Izmir and its metropolitan area. The railway site holds a central position and possesses significant potential to meet the social and cultural requirements of urban life (Karabağ & Taddonio, 2019).

The declaration of Alsancak as a "historical urban site" in 2017 is significant in terms of the conservation process of the region. The biggest challenge related to the comprehensive preservation of Alsancak, with its historical documents and its role as a space of urban memory, witnessing the development process of Izmir as a port city and the architectural heritage of different periods, is the determination of the conservation area’s boundaries (Çırak et al., 2021). Despite the presence of listed structures such as Alsancak Railway Station and railway site, near other boundaries, these areas have not been comprehensively evaluated and have not been included in the historical urban site. The determination of the conservation area boundaries for the Alsancak area requires a more extended and comprehensive discussion.

Çırak et al. (2021) suggest that the preservation of Alsancak’s historical characteristics should be encouraged through the application of interdisciplinary dialogue-based participatory models within the framework of integrated conservation and planning approaches.

Regarding the functional analysis of the campus, as can be seen from Table 11, some of the railway buildings are still in use with their original function while most of them are adaptively reused.

Comparative Studies of Swindon Railway Town with Alsancak Railway Campus

In this section, Swindon Railway Town and Alsancak Railway Campus will be compared in terms of their similarities and differences in architectural features, conservation processes, and current uses. These two areas were selected based on their sharing similarities in architectural features and diversity; their significance as being early examples in their countries, as well as Swindon standing out as an early and effective effort in the preservation of railway heritage.

- Pioneering Examples of Railway Constructions: While GWR is one of the earliest attempts at intercity railways in the UK, the İzmir & Aydın Railway is the first example of railway stations in Anatolia. Thus, in both lines, buildings hold special importance from an architectural point of view as these buildings are among the earliest examples of new building types as railways. Additionally, both areas are important in terms of the use of new materials in architecture. In terms of architectural style, as Cobb (2023) highlighted, the façade architecture of Alsancak Station, which features a steeply pitched Gothic style, shows the influence of the revivalist tendencies that were present in England during the same period.

- Impact on Urbanization: In both cases, the rural areas before the railway turned into important settlements in their regions after the arrival of the railway. Both regions were chosen because they are convenient and important strategic points for the construction of the railway settlement. The gradual development of railway settlements in Swindon and Alsancak has made a substantial impact on both economic growth and social progress as well as urbanization. As the population increased and new neighborhoods were established with the railway, these railway areas became new attraction points in both cases.

- Planned Railway Campus with All its Elements: These industrial settlements, both Swindon and Alsancak, were meticulously planned to provide all required settlements for the workforce, from housing to healthcare and recreation. As Cattell & Falconer (1995) stated, Swindon is "an almost complete planned railway settlement of the 1840s and early 1850s, unrivaled in its state of preservation by Crewe, Wolverton, and Derby, England's other surviving railway company settlements". Similarly, as quoted by Kurmuş (2007) from the speech of British Consul General Redcliff, the İzmir-Aydın Railway is seen as "the great work and initiative of British genius and skill", while Alsancak looks like a railway village (IZKA, 2021) with its railway structures from housing to social buildings within the city on a very large area (Sönmezoğlu, 2016). While the town of Swindon stands out with its identity as a railway town, even though it...
Figure 18. Alsancak Railway Campus with railway buildings. (It was prepared by the author on the Alsancak site plan obtained from TCDD 3rd Region Archive.)
Table 11. Functional Analysis of Historic Railway Structures in Alsancak Railway Campus*

<table>
<thead>
<tr>
<th>Category</th>
<th>Building(s)</th>
<th>Listed Status</th>
<th>Original Function</th>
<th>Current Function</th>
<th>Photograph</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Use with Their Original Function</td>
<td>TCDD 3rd Regional Directorate (former railway termini)</td>
<td>Listed</td>
<td>It was the initial settlement as administrative buildings of major termini of the Izmir &amp; Aydin Railway.</td>
<td>It is home for (TCDD) 3rd Regional Directorate office.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technicians' shop</td>
<td>Listed</td>
<td>It was used as an erecting shop to ensure that locomotives were assembled, maintained, and repaired.</td>
<td>It is the technicians' shop used for maintaining rolling stock.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Housing</td>
<td>Listed</td>
<td>It was used as accommodation for railway employees.</td>
<td>It is used as accommodation for railway employees.</td>
<td></td>
</tr>
<tr>
<td>Reused as Railway Museums</td>
<td>TCDD Railway Museum (former Conservation Area)</td>
<td>Listed &amp; in</td>
<td>It served as a commercial warehouse for British merchants, later becoming the headquarters of British companies and, the residence of the Izmir &amp; Aydin Ottoman Railway Company’s manager.</td>
<td>It exhibits a collection Izmir related particularly &amp; Aydin Railway.</td>
<td></td>
</tr>
<tr>
<td>Adaptive reused with different functions apart from railway museum</td>
<td>Housing (former railway station)</td>
<td>Listed</td>
<td>It was the station built in the Alsancak railway settlement for use by Buca suburban line passengers.</td>
<td>It is used as accommodation for railway employees.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Printing House (former Vagoon Repair Work)</td>
<td>Listed</td>
<td>The building was used as a wagon maintenance workshop when it was built, It started to be used as a printing house in 1941 until 2000.</td>
<td>Under restoration for an adaptive reuse.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alsancak District Polyclinic (part of former railway termini)</td>
<td>Listed</td>
<td>It was the part of Alsancak Railway Termini.</td>
<td>It is used as a healthcare facility.</td>
<td></td>
</tr>
</tbody>
</table>
Table 11. Functional Analysis of Historic Railway Structures in Alsancak Railway Campus* (CONT.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Building(s)</th>
<th>Listed Status</th>
<th>Original Function</th>
<th>Current Function</th>
<th>Photograph</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Telegraph Building (part of former railway termini)</strong></td>
<td>Listed</td>
<td>It was the part of Alsancak Railway Termini.</td>
<td>It is home for (TCDD) 3rd Regional Directorate office.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>The Steam Depot Archive (former foundry)</strong></td>
<td>Listed</td>
<td>It was used to cast and mold metal components used in railway equipment.</td>
<td>It is used for storage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TCDD Materials Management (former oil storage)</strong></td>
<td>Listed</td>
<td>Its initial function was oil storage.</td>
<td>It is used as TCDD Materials Management.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Alsancak Art Workshop (former carpenter shop)</strong></td>
<td>Listed</td>
<td>It housed an iron workshop and a wood workshop that repaired road sleepers.</td>
<td>It is used as workshop area.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Regional Conservation Councils of Izmir (former depot)</strong></td>
<td>Listed</td>
<td>It was used to store and maintain railway campus.</td>
<td>It is used as the head of Office of the Directorate of Regional Conservation Councils of Izmir.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cafeteria</strong></td>
<td>Listed</td>
<td>-</td>
<td>It serves to offer meals and refreshments for railway workers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Out of use Steam Depot</strong></td>
<td>Listed</td>
<td>It sheltered location for the storage of steam locomotives when they are not in use.</td>
<td>It is out of use and neglected and part of building used as a storage.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Water tower</strong></td>
<td>Listed</td>
<td>It is functioned to supply steam locomotives with water for steam generation and maintenance.</td>
<td>It is out of use and neglected.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>The engine shed with a turntable</strong></td>
<td>Unknown</td>
<td>It was served for the maintenance of locomotives and rolling stock.</td>
<td>It was demolished and turned a car parking area of Alsancak railway campus, only turntable is survived.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
is not currently used for its railway function, Alsancak, although this function continues, is isolated from the city due to the heavy land traffic around it.

• **Preservation Processes, Listed and Conservation Area Status:** In both cases, railway settlements have been impacted by technological advancements, resulting in the adaptation of numerous structures for new purposes. While Swindon railway town has diversified its use to include cultural or artistic purposes, the Alsancak Railway Campus still has active railway-related functions. The Swindon Railway Works, village, and all railway-related buildings are encompassed within the Swindon Railway Conservation Area. As the railway played a crucial role in the industrialization and development of Swindon, the designated railway conservation area is crucial in terms of the area’s character and its significance. These areas include special regulations and incentives for the preservation of these structures such as controlling changes that could affect the character of the area even minor alterations may require planning permission. In Alsancak, despite its proximity to the boundaries, the historical urban site does not include the Alsancak Railway Campus, so as Çırák et al. (2021) stated, the conservation area boundaries for the Alsancak area require a more extended and comprehensive discussion. The vast majority of railway structures in both areas are listed. On the other hand, Swindon railway town has detailed conservation action plans such as HAZ, while the Alsancak Railway Campus, although survey plans are available for most of the buildings on the campus, needs detailed documentation and a management plan.

• **Museums, Restoration, and Reuse:** STEAM, an awarded railway museum, not only preserves and displays historical artifacts but also educates, engages with the community, promotes tourism, and commemorates the crucial role that Swindon played in the development of British railway history and makes it accessible to the public. The railway heritage in Swindon has been preserved through restoration and reuse projects. Many of the old railway structures have been given new functions, ensuring their continued use. This approach contributes to the physical preservation of these structures and the sustainability of conservation areas. As regards the Alsancak Railway Campus, there is a railway museum and art gallery which exhibit mostly movable heritage related to the Izmir-Aydın Railway. Also, one of the wagons of the "White Train" used by Mustafa Kemal Atatürk, the Founder of the Republic of Turkey, during his domestic trips, is exhibited at Alsancak Railway Campus. However, there is a need for a railway museum in which Alsancak should be exhibited with its railway identity and in all its aspects beyond only movable heritage.

• **Local Collaborations:** The Swindon Borough Council has played a pivotal role in supporting the preservation of railway heritage through local collaborations. These collaborations bring local authorities, community organizations, and other stakeholders together to develop preservation projects. In the case of Alsancak, Turkish Republic State Railways (TCDD) is the responsible organization for railways in Turkey, and Alsancak is one of its seven regional managements. However, there is a vital need for support from local collaborations.

**Interest, Awareness, and Education**

As seen from the preservation history of railway heritage in Swindon, it is primarily driven by a deep interest and awareness of the locals who are related to the works. Residents of the town are known for their commitment to preserving this heritage due to their strong historical connection. Schools and community groups in the town organize educational programs and awareness initiatives related to railway heritage. These efforts, including interpretation boards, guided tours, and other initiatives to preserve these sites, reinforce the town’s unique character. As regards Alsancak, there is a growing interest in the Alsancak Railway Campus, as can be seen from universities’ attempts at technical visits, and conferences at the railway campus area in recent years. But still, due to the isolated status of Alsancak from the city, there is a need for initiatives to help increase interest and awareness of railway heritage.

**CONCLUSION**

Railways, first in England and then in the rest of the world, have transformed economic and social life. They are seen as an unprecedented development in terms of their scale and impact on industrial societies. They have enabled travel over distances that just one generation ago seemed nearly impossible with relative comfort. Railway towns are central to the management systems of historical railway companies. These towns both create and exist because of the historical railways they are associated with, and the railway is an integral part of the identity of these towns.

Swindon continues to thrive within the identity of a railway town, uniting former workers and launching various campaigns for the future of the works and the character of the region, even though the railway works have been closed for approximately forty years. Despite some losses in the area, it remains one of the preserved railway complexes in England. The award-winning STEAM Museum serves as an exemplary model for preserving railway heritage in terms of both museology and adaptive reuse of industrial buildings. Currently, the Heritage Action Zone (HAZ) plan, developed in partnership with Historic England and Swindon Borough Council, is being put into practice to improve the protected areas of the railway works and village, as well as to reuse
vacant railway structures. Furthermore, restoration and reuse projects for listed buildings serve as a prime example of a sensitive and viable transformation of a historic railway area. When considering the importance of benefiting from international examples and their experiences in conservation efforts, Swindon exhibits qualities that could serve as an example for the Alsancak Railway Campus. These two railway areas are early and significant examples of railway architecture in their country, while Swindon demonstrates early efforts for similar preservation problems.

Alsancak Railway Campus, a groundbreaking and substantial investment that showcased the most advanced technology of its era, is a pivotal element for both the Izmir-Aydın Railway and the industrialization of Izmir. It should not be overlooked that the Alsancak Railway Campus includes a wide range of conservation concepts, from various building types and intangible heritage to technical equipment beyond the station. A detailed documentation of the campus; identifying and prioritizing the preservation of key historic railway buildings and exploring opportunities for adaptive reuse of vacant buildings are essential for the conservation of the campus. Additionally, considering this area as a whole and the decision of a “historical urban site” is vital for a holistic conservation approach. Involving relevant actors such as the central government, Turkish State Railways, local governments, non-governmental organizations, residents, and railway enthusiasts to collaborate in conservation efforts can also help ensure a holistic conservation approach. Organizing cultural and educational programs at the campus should also be taken into consideration to raise awareness about its historical and cultural significance.

NOTES

1In 1963, The Beeching Report, also known as The Reshaping of British Railways, was released by British Railways chairman Dr Richard Beeching, on the future of British Railways. In the UK at the time, British Rail, a division of the British Transport Commission, was in charge of the nationalised railway sector. Subsequently, Britain implemented several rail financing reductions, a move known as the “Beeching Axe”. There are several factors at play, including shifting market trends, botched reinvestment plans, and inadequate management. In conclusion, 42% of the line—approximately 13,000 km from 31,000 km—and roughly 60% of the stations—roughly 3700 out of 6400—were closed between 1950 and 1980 (Gibbons et al., 2018).

2Council housing in the UK refers to housing provided by local government authorities, known as councils, at subsidized or affordable rents to individuals and families who are unable to afford accommodation on the private market.

3Heritage Action Zones (HAZs), designated by Historic England, aim to identify and revitalize historically significant areas across the UK, fostering preservation and revitalization efforts.

4Alsancak was declared a “historical urban site” in 1976, following the first identification and registration studies carried out by the High Council for Historical Real Estate and Monuments. However, in 1984, the status of the region was abolished. 33 years later, it partially regained its protection status as an “Alsancak Historical Urban Site” by Number 1 - Izmir Regional Board for the Conservation of Cultural and Natural Assets, with the decision dated May 9, 2017, and numbered 5948. With the decision of the same board dated June 6, 2017, and numbered 6069, the transition period protection principles and conditions of use were determined, and the borders were corrected with the ildecision numbered 6917 dated December 20, 2017.

5For instance, carriage works in Swindon exemplified innovative design for this type of railway building with brick and iron framing (Historic England, 2020b). Similarly, new materials were employed to span large openings due to the need for these openings in the repair workshop on the Alsancak campus.

6Swindon was also a convenient choice due to its topography, where the terrain became more inclined. This necessitated the attachment of a more potent engine in Swindon to complete the journey to Bristol, so the decision was made to establish the Great Western Railway’s engine shed, repair, and manufacturing works in Swindon. As regards Alsancak, the port connection was an important factor in choosing this region for railway construction (Bilsel, 2000).

7In the case of Alsancak, Buca is a suburban area that was born and developed with the Izmir & Aydin Railway, and as Ekizoğlu (2012) stated, there was another station in the Alsancak Railway Campus for the use of the upper-class who lived in Buca.

8Conservation Areas are controlled by existing planning controls and with the application of an Article 4. For instance as the management plan of Swindon Railway Conservation Area stated “There is a current Article 4 Direction in place within Swindon’s Railway Conservation Area covering the residential streets in the railway village as well as Church Place. The Direction means that work such as painting the exterior of a building, any extension or alteration, erection of garden structures and the creation of vehicle cross-overs all require permission”.

9HAZ includes sixteen distinct projects, from repair plans to branding to public engagement. The main ones are; future planning of the conservation area, which includes the GWR; applications for unlisted buildings; a recovery plan to help local businesses stand out and thrive; Improvement of Health Hydro and its immediate surroundings; reuse of grade II registered Cricketers (local pub); the restoration of grade II listed carriage works and its reuse as a new business
Train Station with the participation of TCDD Izmir 3rd models prepared by the students were exhibited at Alsancak of the Alsancak Train Station building. The projects and awareness about the preservation of the cultural heritage bring a new urban and public space to the city, and to raise Alsancak Train Station with contemporary functions, to Environmental Design to revitalise the historical examples of railway heritage-related events.

Significant restoration projects are ongoing in both Swindon and Alsancak. The Grade II*-listed Mechanics Institute restoration project, a social building for workers with an important place in industrial heritage as one of the first of its kind in Swindon, continues. The wagon repair workshop in Alsancak, which was used as an Izmir printing house for a long time and had an important place in the city’s memory, is now under restoration. In both projects, it is planned to open the buildings for cultural purposes and public use.

These collaborations include; Mechanics Institution Trust, National Lottery Heritage Fund, Swindon & Wiltshire Local Enterprise Partnership, National Trust, Swindon Business Improvement District, Swindon Designer Outlet, English Heritage

Swindon Railway Festival, showcasing the UK’s model railway layouts; Swindon Heritage Open Days, to explore historic railway buildings; and We’ll Meet Again, a whole-day experience for children at the STEAM are featured examples of railway heritage-related events.

For example, reuse projects were designed by the students of Yaşar University, Department of Interior Architecture and Environmental Design to revitalise the historical Alsancak Train Station with contemporary functions, to bring a new urban and public space to the city, and to raise awareness about the preservation of the cultural heritage of the Alsancak Train Station building. The projects and models prepared by the students were exhibited at Alsancak Train Station with the participation of TCDD Izmir 3rd Regional Directorate personnel.

In October 2023, within the scope of the opening symposium of İzmir Institute of Technology Department of Architecture - Synergies of Place IZTECH Urban Design Studio Course, the concept of “Railways as Transformative Tourism Assets: Space Synergy of Place, Memories of Time” was discussed and held at the Alsancak Railway campus with the hosting and participation of TCDD.

REFERENCES


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