Cultural Routes/Serial Entities: a method for assessing and prioritizing the significance of components along Historic Railways

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Recent times have seen the concept of heritage expanding to include a range of buildings and objects, among them the relatively young and seemingly ordinary buildings relating to Railway heritage. This paper will present the case of the Israel Railways Corporation (ISR), which in recent years had repeatedly faced outbursts of public protest over demolitions of historic railway buildings, resulting in delays in the planning and execution of projects, as well as a compromised public image. In response, in 2012 the ISR initiated an inventory of the railway system, from the late 19th century Jaffa-Jerusalem Line to the shore line of the mid 1950’s, identifying, characterizing and prioritizing their historic stock, assessing the impact of future development, and developing a comprehensive heritage management plan. In the rapidly transforming environment of the 21st century, ever-increasing public demands to protect seemingly unremarkable built objects and landscapes whose values are not immediately evident cannot easily be justified. Moreover, due to the scale and distance between the various fragments, railway heritage is rarely treated as the linear and serial entity which it is, a misconception which leads to the formation of localized legislative protection focused on single sites or buildings. The broader social and cultural contexts are lost; giving rise to doubts about the significance of these fragments, the legitimacy of the costs invested in their maintenance, and the limitations their conservation imposes on development. The paper argues the case for a holistic values-led conservation policy which protects the attributes which best manifest the values of the historic railway, while allowing for the calculated removal of less valuable components.

Introduction

The conservation of historic railways is a new challenge to the field of Heritage Conservation around the world. Within the expanding debate concerning industrial heritage and cultural routes in recent years, historic railways have been attracting substantial attention expressed through a growing body of academic research, as well as in an increasing demand for local and international railway-focused heritage sites. At present this heritage is widely regarded as a complex socio-technical phenomenon, which fuses technical aspects inseparably with social ones (Coulls, 1999).

In Israel the remains of the historic railway systems are scattered throughout the country and reflect key eras in the region’s modern history, from the late 19th century Ottoman epoch, through the phase of the British Mandate and up to the relatively new Israeli period. In recent years, the Israel Railways Corporation Ltd (ISR), an independent, government-owned corporation and the sole company in charge of main-line railway transportation in the country, is advancing plans for expanding Israel’s railway transportation infrastructure. Thus, existing rail tracks are being doubled and old or abandoned tracks are being revived.

At the same time, awareness to architectural heritage in Israel has heightened. The fourth addition to Building Regulations, setting forth bylaws pertaining to architectural heritage came into effect in 1991, followed by the 5th addition in 2008. The efforts of the Society for Preservation of Israel Heritage Sites’ (established in 1984) to raise public awareness had begun to bear fruit, and groups of individuals...
interested in local heritage were now a growing phenomenon throughout the country. In addition, the state of Israel, having joined UNESCO's World Heritage Convention in 1999, had obtained World Heritage Site status for a number of sites in the country. The attention directed at these high profile nominations contributed to the rise in public interest, and helped establish the more formal commitment of the authorities towards heritage sites and their conservation.

In the rapidly transforming environment of the 21st century, ever-increasing public demands to protect seemingly unremarkable built objects whose values are not immediately evident cannot easily be justified and accepted by decision makers. Nevertheless, by the mid 2000’s the ISR had already encountered effective public protests against the demolition of historic railway stock. It had also already witnessed a competing authority (Trans-Israel Highways Management Corporation Ltd) garner public appreciation (as well as the support of planning authorities) for the self-imposed conservation of the early 20th century Te’enim River Bridge. By the late 2000’s all public authorities were required to comply with new impositions by Local and regional planning authorities, these including the production of historic property surveys, which have become standard pre-requisites for discussing large scale development plans.

Amongst the historic railway remains that the ISR was compelled to survey as part of its development plans, this paper will focus on two stations: Hadera-East and Zichron-Yaacov. Both stations were set up as part of the Haifa-Kantara historic railway, established between the years 1916-1918 as part of the British army effort against the Ottoman Empire during WW1. After the war was over, it became the main line of the British Palestine Railways (PR). The Haifa-Kantara line was used for passenger as well as freight transportation, for both military and civilian purposes (Cotterell, 1986). The British Mandate in Palestine was terminated on May, 1948, followed by the Israeli-Arab war, whose aftermath was the partition of the former Mandatory Palestine between the newborn Israel with Jewish majority, the West Bank annexed by the Jordanian Kingdom, and the Gaza Strip under military occupation of Egypt. After 1948, the fragmented Haifa-Kantara railway ceased to exist as a whole, and today only parts of it are still functioning through the ISR.
Although originally both stations were part of the same historic railway line, at present their circumstances are completely different. In today’s infrastructure they function within two separate lines—Hadera-East (HE) station is part of the defunct Haifa-Kantara Eastern line, while Zichron-Yaakov station (ZY) is a redundant station along the main artery of contemporary railway activity, the Haifa-Tel Aviv Shore Line. Nevertheless, both exemplify the most common circumstances which endanger railway heritage: in the course of being modernized for future use, the upgraded railroad infrastructure enters a competition with the historic buildings along its route. The survival of one becomes an obstacle to the other’s development. Both also exemplify the prevailing current practice of the ISR (and other large authorities), which deals with its heritage ad-hoc, on a case-specific basis, rather than as part of a comprehensive policy.
Methodology

Through the story of the ZY station and its counterpart, the Hadera East (HE) station, this paper will highlight the importance of approaching the conservation of Railway Heritage by addressing it as one linear and serial entity, and of seeing and analyzing all its fragments through the broad social and cultural contexts of the railway. The first part of this paper will describe the cases of the ZY and HE train stations, considering the motives for addressing their conservation within the circumstances of existing development plans. In its second part, the paper will propose a method for a whole-system analysis, through which local conservation policies and approaches can be defined and implemented. This method is currently employed by the authors and the ISR in the preparation of the Israel Railways Conservation Policy.

Data presentation

In 1997 the 16:54 Tel Aviv–Haifa train stopped for the last time at Zichron-Yaakov. Due to long term population shifts and changes in travel habits, passenger traffic to and from this small-town station had been declining for some years, eventually rendering it too expensive to maintain. The station building, erected in 1946, was now in a state of advanced dilapidation, yet still inhabited by the former Station Master's widow, a woman in her late 70's, who moved out in 2001 (Liberty-Shalev, 2011).

Ten years later, the Israel Railways Corporation (ISR) was in the midst of advanced planning for a general upgrade of the Tel Aviv–Haifa line. The scope of the plans included identifying locations for new station buildings as well as expanding the existing two-track rails to four. One of the locations identified for a new station was the Zichron-Yaakov (ZY) station compound, in the past part of the Haifa-Kantara Line, and today on the Haifa-Tel Aviv Shore Line. The station was now empty and forgotten at the far edge of the parking grounds of a newly erected suburban shopping center.

Although the existing 1946 building at ZY station was too small and otherwise incapable of satisfying the requirements of a new station, it was understood that simply suggesting to replace it with a new building would encounter resistance, and would therefore require justification and a clear statement of its (lack of) significance. In view of all this, in 2011 the ISR approached our firm with the request to document the station building.

The ZY station was the second 20th century station which our office had documented, the first having being the Hadera East (HE) station, some 20km further south on the Eastern line. While analyzing our research findings on HE, we discovered that the British Palestine Railways developed their train stations based on a standardized prototypical design, locally modified according to the specific requirements of each station (Liberty-Shalev, 2009). The stations at HE and at ZY were, respectively, a large and a small version of the same standard prototype, which was a well-designed but otherwise unimposing architectural object executed during the mid-1940's at six locations along the Haifa-Kantara Line.

Yet, despite the architectural similarity, the values attached to the two stations were vastly different: HE was an important agricultural distribution center, surrounded by citrus groves and local warehouses (Liberty-Shalev, 2009), while ZY was a small, underused and structurally problematic stop throughout its 75 years of operation (Liberty-Shalev, 2011). In both cases the ISR's plans aimed to replace the existing infrastructure of two tracks with a four-track system, which would occupy a significantly wider strip of land. Since railroad structures tend to be, for obvious reasons, located close to the tracks, the proposed expansion of the new tracks mandated the demolition of both station buildings, as well as a 1930's citrus shed in the HE compound. Hence, in both cases the significance of each historic building was carefully weighed against their unique values.

The HE station was deemed by the documentation report (Liberty-Shalev, 2009) as highly important and typical of the Palestine Railways era. This assessment was accepted by the ISR and the relevant planning authorities, and consequently implemented into National Ordinance Plan 22. Great effort went into changing the course of the proposed tracks in order to retain the station's historic core intact, while even greater efforts went into salvaging the citrus shed, which is now slated to undergo conservation treatment, then dismantled and re-erected at a new location within the historic compound.
In the case of ZY station, the course of events was different. Documentation of the site revealed that this station had never played a central role in the operation of the railroad or the life of the local community. The only justification towards slating it for conservation was it being ‘a typical example for the use of standardization in railway buildings’, but even as a variation on a standard prototype, it was one of the two smallest buildings of its series. Moreover, its foundations were not structurally sound, and when compared to the other surviving station buildings, was in the worst state of repair (Liberty-Shalev, 2011). On the grounds of this relative-value analysis, the documentation file’s conclusion (much to the ISR’s relief) was that the building need not be conserved. However, when presenting these articulated conclusions to the District Planning Authority, a legitimate question arose:
When using a locally-prompted comparative analysis to justify a demolition, can the ISR assure the safeguarding of the other, more significant site, to which the demolished site was compared? Are they able to display a general policy, which identifies and suggests measures for the conservation of some sites, when proposing to demolition others?

The discussions surrounding the ZY station revealed that the ISR had no larger ‘railway heritage policy’ in place to back their proposal for, and the demolition of the ZY station building was refused. This outcome was key to the ISR initiative in 2012 to undertake an inventory of the whole railway system, from the late 19th century Jaffa–Jerusalem and Hedjaz Lines to the shore line of the 1960’s, identifying, characterizing and prioritizing their historic stock, and assessing the impact of future development.

Analysis

The method for this project was developed first in the framework of an academic essay (Har-Noy, 2012) and then expanded as the ‘Israel Railways Conservation Policy’ project, which is currently underway. This paper will describe the method developed to identify and protect select attributes which best manifest the values of the historic railway in question, while allowing for the calculated removal of less valuable components.

Recent years have seen the concept of heritage expanding to include a range of hitherto ‘insignificant’ buildings and objects (Chaoy, 2001), among them the relatively ordinary, functional, and young buildings relating to industrial heritage, railways included. Each railway, however, is a large-scale spatial ensemble, which encompasses hundreds, sometimes thousand, of diverse objects, reflecting a range of topics and significances. It is a distinctive historical and geographical phenomenon that can be related to two existing arenas within contemporary heritage debate: conservation of Industrial Heritage, and Cultural Routes (Har-Noy, 2012). Industrial Heritage focuses on buildings, structures and tools constructed for industrial activities, bearing historical, technological, social, architectural or scientific cultural significance (TICCIH, 2003). Obviously, railways are an inseparable part of this heritage. However, railways are also linear spatial entities along which movement and interchange triggered the creation of a range of elements, very similar to Cultural Routes. Under this category, Railways can also be defined as ‘physically delimited routes of communication’ characterized by ‘interactive movements of people as well as multi-dimensional, continuous, and reciprocal exchanges of goods, ideas, knowledge and values between peoples, countries, regions or continents over significant periods of time’ (ICOMOS, 2005).

To aptly identify the wide cultural aspects of the railway, the two arenas have been fused into a comprehensive approach, which on the one hand, interprets the socio-economic, technological and environmental phenomena reflected and influenced by the railway as an industrial entity, and on the other hand allows for the exploration of the railroad’s interaction with its wider physical and cultural context, as would be reflected in the wider environment of a cultural route (Har-Noy, 2012).

The first phase of applying the railway analysis method entails identifying the railway’s main themes. These themes are topics reflecting the various values of the specific historic railway. Their identification is to be based on a thorough study of the historic railway in question, its history, features and components, while focusing on the railway’s influence on economic, social and technological development. Themes such as ‘The railroad as an agent for advancing the technologies of local industry and the building trade’ may be applied to many historic railways, while other themes, such as ‘The railroad as a catalyst for the citrus industry in Palestine’ have a more specific nature.

Then a list of tangible as well as intangible cultural and historical attributes reflecting each theme is assembled. These attributes serve as guidelines, and help focus our attention on the significant historic remains which might be found along the railway route. To complete this phase, a comprehensive survey should be conducted in order to detect the historic components of the railway route. These components are likely to span a diverse range of scales, from technical facilities and machinery, to buildings, whole compounds, and landscape settings, as well as memories and customs (TICCIH, 2003). Moreover, this method perceives the railway as an inseparable part of its environment, therefore identifying not only objects constructed directly for railway operations, but also nearby non-railway components which relate to the themes exemplified and highlighted by the railway, such as remains of a military camp indicating the presence of a route prior to the railroad.

The second phase of the method is establishing a clear link between the historic railway components in each site along the route and the themes they reflect, thus providing every site with a list of themes, and creating a uniform basis for comparison between the sites.

A layout map marking the themes represented in each site and using a different color or shape for each theme visualizes the data collected and provides the basis for an effective assessment of significance. It demonstrates the distribution of the themes along the railway, highlights sites with many varied themes as opposed to sites with one primary theme. The layout map also illuminates which themes are present in multiple sites along the railway versus themes with little remains left.
Last is the evaluation phase: A historic railway is usually comprised of hundreds or even thousands of remains. It is impossible to preserve them all. Thus, a process of sorting, rating and selection has to take place regarding the sites along the railway, using the theme layout map as the main tool. The map highlights sites with numerous themes. These sites, indicated by the map as rich heritage sites, should be highly rated for conservation. On the other hand, specialization of a site in one theme thus reflecting it in a unique way may be of equal importance. Sites representing the same theme as demonstrated by the layout map should be compared to each other, taking into consideration other variables such as the physical state of the site, its authenticity and integrity and the legal status of the site, thus selecting the most appropriate site or sites to preserve.

By using the themes layout map, which connects the themes with their geographical location, the eventual selection of the sites can consider a well-balanced distribution along the railway in order to preserve a sense of continuity. The themes map is the main evaluating tool, but should be accompanied with additional schemes, regarding other criteria for evaluating the sites, such as their role in the railway operation system and the diversity of the components comprising them. Sites bearing a vital role in the railway operation system, such as terminal or crossing stations, as well as sites that were active for long periods of time and particularly sites along operative railway should be prioritized.

The above outlined method will now be demonstrated on a particular historic railway, the Haifa Kantara line. Thorough research led to the formulation of eight themes related to different aspects along Haifa-Kantara historic line. For each theme a list of attributes was elaborated. For example, one clear characteristic of the line was its military function. It was established as a military railway and served as a crucial instrument for transporting soldiers and military equipment, and was perceived as a symbol of the British governing power (Cotterell, 1984). Despite its major role in aiding the social and economic development of both Jewish and Arab population in Palestine, since the late 1930’s it was the target of terrorist attacks against the unwelcomed colonial power, first by Arabs and by the 1940’s by Jews as well.

Attributes related to this theme, exhibiting and representing The railroad as an Instrument for Imperial Occupation and Military Control, could include evidence of defense systems protecting the line against politically-motivated attacks from within and without (guarding posts, watch towers, defense buildings such as pillboxes and blockhouses), as well as evidence of military infrastructure in the vicinity of railway intersections (camps, hospitals, communication networks, cemeteries etc.).

Figure 6. General map of Haifa-Kantara railway.
Another well-established theme along the Haifa-Kantara railway is the typical use of standardization in railway buildings and compounds. The standardization of railway buildings is a widespread and well-acknowledged phenomenon throughout the world (Burnmann, 1997). In Palestine it was initially introduced by the Ottomans in their train stations (Pic, 1979), but expanded during the era of British rule to include prototypes for different railway buildings, such as workers quarters, signal boxes, latrines etc. which were designed and built by the railway company (PR). Moreover, the station compound was also arranged using a replicated pattern. A close examination of the standard prototypes often sheds light on the parameters considered in their design: Climate and local materials adaptation, building costs, maintenance and durability and aesthetic considerations. All these relate to the wider cultural context within which the railroad developed, and which influenced and in turn was shaped by the railroad (Liberty-Shalev, 2009, Har-Noy, 2012).

Attributes related to this theme could include typical uniform structures along the railway, the typical station compound, plans and correspondence regarding it.

Based on the information accumulated in a comprehensive survey, each site along the railway is to be explored in the same manner by drawing the connection between the historic remains and the themes. For example, the sole remaining component at ZY station is a typical station building built in 1946, reflecting mainly the theme of 'Haifa Kantara Railway typical use of Standardization in Buildings and Compounds'. On the other hand, HE station still exhibits 10 built components other than the station building: the aforementioned citrus shed, five staff quarters buildings (specifically designated for the lineman, the platelayers, the ganger, and station master) a latrine, a water tower, a pillbox and a blockhouse. Within these components six different themes are reflected, one of them being the theme 'Haifa Kantara railway as a typical example for the use of standardization in buildings and compounds'. This theme is manifest in all components of the site, as of the buildings mentioned above are standard types in this station, even the latrine. Some of the components are connected with more than one theme. For example, the citrus shed, a historic steel shed, built in 1934-35 as a warehouse for packing and storing oranges collected from the surrounding orchards and sending them to markets in Palestine and abroad (Liberty-Shalev, 2009), is connected with three themes: 1. The role of the railway as a key element in the citrus industry. 2. The promotion of new technologies. 3. An example for the use of standardization along the railway.
Figure 8. The Haifa–Kantara Line Themes Layout Diagram.

- The railroad as an instrument for imperial occupation and military control
- The railroad as an agent for advancing the technological innovation of local industry and the building trade
- The railroad as a catalyst of the citrus industry’s development in Palestine
- The railroad as an outstanding example for the use of standardization in buildings and compounds
- The railroad as a welfare-oriented large-scale employer, involved in various aspects of its employees’ lives.
- The railroad as signifying the expanse of British military camps in Palestine, and their influence on later settlement.
- The railroad as a force in landscape transformation
- Vistas from the railroad to the remains of the ancient route of Via Maris
Based on such individual site research, the comprehensive layout map created for the Haifa-Kantara railway reveals new insights into the railway and its key-sites. Multi-Themed sites such as Haifa East, Hadera, Ras al-Ayn, Lydda and Deir el Seneid stations as well as Single-Themed sites such as Zichron, Petah-Tiqva and Rintaya stations are highlighted by the map. Themes that are well represented along the railway such as ‘Standardization of buildings’ and ‘The railway as a mean for occupation and military control’ stand out against themes less represented such as ‘Advancing new technologies’ and ‘Vistas towards the remains of the ancient Via Maris’.

Assessing the ZY station with respect to the Haifa-Kantara themes layout map leads to a clear conclusion: in comparison to other sites along the railway, it is less significant. With few themes relating to it, little diversity in existing heritage components and no important local narrative to link it to surrounding communities, it appears to be among the less valuable components of the track. Moreover, in close proximity along the northern part of the Haifa-Kantara railroad, the survey revealed four sites manifesting the same station building type: Atlit, Zichron-Yaakov, Binyamina and Hadera-East, together creating a unique geographic sequence. As part of its conclusions, the ‘Israel Railways Conservation Policy’ recommends the further documentation and conservation of Atlit and Binyamina stations, as these two, together with HE (which has already been slated for conservation), appear to be the more significant joints composing this chain.

Had this conclusion, in its wide context, been available when the ISR were trying to justify the replacement of the ZY historic station building with a new one, their request would have been more seriously considered, and perhaps ultimately granted.

Conclusions

Developing a conservation policy for a complex sequence of thematically related historic sites, spread over large distances along rail tracks and characterized by repetitiveness, is not a simple task. It requires a value-based approach, underlined by the realization that in order to function and thrive, transportation systems must be upgraded. Given that resources are always limited (especially those allocated for what is perceived as non-essential work), prioritization has to take place, and questions have to be asked: Are all of the historic components equally important? Are some sites and fragments more significant than others? How many items can we afford to lose and still maintain the integrity of the series as a sequence?

Firstly, assessing the values of sites which are linked by the railway has to take place in relation to one another. As this paper demonstrates, due to the scale and distance between the various fragments, the conservation of railway heritage is rarely perceived and treated as the linear and serial entity that it is. Individual railway components tend to be studied and documented on a singular basis, prompted by development plans which happen to affect the particular site in question, and which have little to do with its cultural context or historic value. The conservation approach which is developed on the basis of this fragmented research often results in the site’s contextual meaning being either underestimated or overlooked, eventually leading to the loss of the broader social and cultural contexts of the railway system, and giving rise to doubts about the significance of these fragments and the worthiness of the limitations their conservation imposes on development.

Development-minded bodies such as railway authorities tend to perceive the conservation of heritage as an expensive interruption which hinders and complicates their plans, and offers no measurable benefits. For such organizations, a comprehensive conservation policy such as the one presented in this paper can be a tool not only for conservation, but also for well justified removals. When presenting an all-encompassing policy for the railway system, they can single out significant sites and slot them for conservation, while identifying less important sites which can be altered or spared altogether. The thematic method can supply solid, fact-based arguments for these decisions, and by way of its systematic analysis has the power to negate sentimental or uninformed arguments. This is, of course, the opportunity and the threat of the analysis method proposed in this paper: on the one hand, it can push a powerful but otherwise reluctant organization to get in touch with its responsibility for the public historic assets under its jurisdiction; survey them and formulate a plan for their selective protection. But it can also become an effective instrument for the enhancement of certain ‘formal’ narratives over other, more local or subaltern ones. The use of this method, then, requires caution, a deliberate breadth of themes, and constant self-reflection.

Endnotes

1 For a concise bibliographical compilation on the subject see for example ICOMOS’s 2009 publication ‘Industrial and Technical Heritage- Bibliography’, at their online documentation centre: http://www.international.icomos.org/centre_documentation/bib/industrialheritage.pdf.

2 The Fourth Addition to the Planning and Building Regulations of 1965, approved in 1991, stipulates the local authority’s obligation to identify heritage properties under its jurisdiction and compile a list of those properties, which will serve as a municipal database. The new legislation also calls for establishing a conservation committee which will serve as the governing body responsible for approval and rejection of building permits to those properties. The 5th Addition, approved 2008, provides easements to safety regulations in historic sites.
3 The Eastern Line is the part of the Haifa-Kantara railway starting a few kilometers north of Hadera-east, and continuing southward up to Lod station, approximately 60km.

4 Other stations known today of the same prototype are Binyamina, Atlit, Rosh Ha'ayin and Ashkelon. It is possible that additional stations of this prototype existed but have not been documented or survived.

5 The existing train building was preceded by an earlier train station, constructed when the station was first established at this location between the years 1921-1925. For more detailed information, see Liberty-Shalev, 2009, Hadera-East Railway Station. Conservation documentation dossier, ISR.

6 Historic documentation (Liberty-Shalev, 2011) revealed that the station's location relatively far from the village of Zichron Yaacov, coupled with ongoing problematic transport connections, rendered the station underused throughout its years of operation.

7 During a planning consultation meeting on 23rd May 2012 at the Haifa District Planning Bureau concerning a proposed plan for a new station at the ZYe site.

8 There are two possible reasons for lack of representation of a theme: either the theme was originally represented in fewer sites, or over the years less of its attributes survived. It is important to assess which of the two scenarios applies in each case, as the conclusions and consequent course of action might be different.

References


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