

TRACING INDUSTRIAL HERITAGE: THE CASE OF BERLIN BICYCLE ROUTE¹

Evinc Dogan^{a,*}

^aDepartment of Tourism Guidance, Faculty of Tourism, Akdeniz University, Antalya, Turkey.

ARTICLE INFO	ABSTRACT
Keywords:	This paper aims to investigate how the industrial heritage is represented on a cultural bicycle trail and used
Berlin	as a tool for constructing tourist gaze. A qualitative case study methodology is used, where the analysis is two-fold. A phenomenological approach is adopted at the first step. The bicycle route is explored to
Industrial Heritage Routes	get first-hand experience and familiarize with the data in the physical urban context. The second step is
Tourist Gaze	document analysis. Texts are collected and analysed for interpreting the meaning by digging deeper into
City Image	socio-cultural context. The cycling route is a form of experience bridging the spatio-temporal gap between
Urban Experience	tangible heritage (monuments, landmarks) and intangible dimensions (symbols and meanings). The findings reveal shifts in meaning drawing on relations between the physical space and represented space. The cultural routes are of interest as applied tourism products. They provide opportunities for creating a strong destination image. This exploratory research is an initial examination of how cultural routes can shape tourism experience. It presents a framework to tackle with heritage and representation, while offering further avenues for investigating urban tourism where tourists can be co-creators for adding other layers of meaning. This helps increase awareness about urban heritage and offers an alternative tourist gaze and perception.

1. Introduction

Cultural experiences play a key role for creating meaning as a result of leisure activities (MacCannell, 1976; Rooijakkers, 1999; Rifkin, 2010 cited in Barrera-Fernandez et al., 2016). In the time of rapid urban change, heritage trails draw meaningful connections between past and present, "thereby grounding experience in a real, temporal continuity" (Hewison, 1987). In this framework, culture routes are the instruments for the construction of tourist gaze and spatial experience through moving between attractions as well as "organising and unifying the built and intangible heritage through place-narrative" (MacLeod, 2017, p. 424).

This paper aims to investigate how industrial heritage is represented on a cultural bicycle trail and used as a tool for constructing tourist gaze towards industrial sites in Berlin. The theoretical framework draws on the concepts of city image (Lynch, 1960) and tourist gaze (Larsen and Urry, 2011), suggesting a relational approach at the intersection of senses and visual encounters with places represented on the route. The methodological framework is based on the case study of the bicycle route for industrial heritage exploring how cultural routes shape sociospatial schemas of representation and meaning. The analysis is two-fold, where the first step is phenomenological delving into urban exploration and experience, while the second step is textual bringing a variety of sources of information tapped into an interpretive framework tackling placenarratives. Analysis and findings reveal divergence of meaning that occurs parallel to the urban and social transformation.

2. The Mental Image and The Industrial Heritage Routes

2.1. Gazing at the city

Borden et al. (2001, p. 14) define cities as complex systems of representations in which space and time are both imagined and experienced through signs. Our experiences and the way of interaction with the built environment is shaped not only by the selective representations, but also by the symbolic meanings and narratives. Urry (1990, p. 3) points out that "the gaze is constructed through signs, and tourism involves the collection of signs", which is performed by walking or moving along (Larsen, 2014).

The imageability is defined by identity, structure and meaning in the urban context (Lynch, 1960). Among the three components, identity and structure address the physical features (Damayanti and Kossak, 2016, p. 58) often recognized in the form of permanent tracks of the past, whereas meaning

¹ This article is the peer-reviewed and revised form of the study entitled 'Tracing Industrial Heritage: The Case of Berlin Bicycle Route' which is presented in the 20th National 4th International Tourism Congress, Eskişehir-Turkey (October 2019).

^{*}Corresponding Author.

e-mail address: evinc.dogan@gmail.com

Received 21.10.2019; Received in revised form 27.11.2019; Accepted 28.11.2019 e-ISSN: 2687 - 3737 / © 2019 Anadolu University. All rights reserved

is related to what we interpret from those physical structures, therefore fulfilling the form with content (Hall, 1997). A legible mental map of the urban environment provides a clear framework for organizing urban elements into a coherent pattern and enhancing level of interaction.

2.2. Navigating in the city

Mobilization plays a key role in the organization of heritage routes, whether it contains mobilization of individuals, organizations, institutions or other structures (CoE, 1998). Therefore, revolving around the concept of cultural heritage and cultural routes offer a new mode of cultural experiences as well as means of representation by granting "a value as a whole which is greater than the sum of its parts which gives the route its meaning" (ICOMOS, 2008).

Industrial sites have recently attracted "renewed attention both as tourist destinations and as repositories for collective local memories" (Jones et al., 2018, p. 306). Nevertheless, the profound cultural change brought by the industrialization makes it difficult to single out artefacts as Clark (2005, p. 99) gives the example of Ironbridge Gorge in the UK as a complex industrial site bearing "hundreds of buildings from cottages to villas, and from backyard brew-houses to major industrial complexes" where many elements are complementary and make less sense in isolation. In this assemblage, the "phantom networks" (Edensor, 2005, p. 63) of former production systems revived as "a way to mobilize the most heavy, sedentary objects conceivable and to grant them a second chance to represent interaction rather than inertia" (Bangstad, 2011, p. 292).

3. The Case of Berlin Bicycle Route: "Bright Lights and Cold Beer"

The analysis requires moving and experiencing the cultural route to be able to grasp knowledge and understand the context in terms of representations and meanings. The experience becomes more meaningful when we are familiar with the story and cultural codes, which can be developed by both firsthand experience in the physical urban context and secondary sources in the socio-cultural context.

The two levels of analysis at the phenomenological and textual level are synchronized, as movement requires a dynamic framework (See Fig. 1). The point of interest, or the landmarks, are photographed to document current status from the angle available on the route (without entering the sites this gives only a limited visual dimension of appearances from outside). After completing the tour, the sites (museums and sites accessible to public) are visited separately to increase the level of interaction, open room for further observation, investigate current use and collect documents for textual analysis. As the case study evidence may come from different sources including "documents, archival records, direct observation, participant-observation, and physical artefacts" (Yin, 2003, p. 98), data is collected through both fieldwork and documentation. All sources of data were reviewed and analysed together, so that the findings were based on the convergence of evidence from different sources.

3.1. Phenomenological level: Urban exploration

In this paper, urban exploration is employed to describe touristic engagement with the built environment (Crouch and Lübbren, 2003, p. 11).



Figure 1. Methodological framework



Figure 2. Flyer of Bicycle Route (Source: bzi, 2009)

in the form of moving (cycling), which produces a physical pathway while creating "cognitive connections" and "knowledge of place" (Turnbull, 2007, p. 142). The Bicycle route, designed by Berliner Zentrum Industriekultur (bzi), lists 15 industrial sites to be visited in the city centre (see Fig. 2). They were carefully selected among 40 possible sites based on the significance status and representativeness of diversity (A. Boshold, personal communication, August 7, 2019). Five of the sites (Deutsches Technikmuseum, Museum for Communication, AEG Tunnel, Kulturbrauerei, Fichtestr. Gasometer) overlap with the ones on the "Berlin Route of Industrial Heritage", and the rest are the sites of significance for industrial heritage, some of which are protected monuments and listed buildings. Brief information is available about each site as well as photographs for visual representation.

In this study, the mobile applications are utilized on the bicycle route for "way-finding" as well as "guiding the action" (Lynch, 1960, p. 4). The route is available on "Komoot" application for mobile devices, which was used for navigating on the route. The QR code to upload the app is available on the flyer. The app follows the correct route as shown on the flyer but uses a different numbering system. Moreover, the highlights (sites) added on the route by the users might be different than the actual route shown on the flyer. Although there are 15 sites highlighted on the Komoot, only four sites match with the flyer – Humboldt Substation, AEG Appliance Factory, Anhalter Bahnhof Portico, Deutsches Technikmuseum, which were added by the Berliner Zentrum Industriekultur (bzi) and the other sites were marked by other users, such as the most iconic landmarks like Reichstag or canals and squares worth seeing on the route. Yet, this should be further tested by considering the account and privacy settings as the personal user menu could be different. The publicly shared data (highlights, comments, photographs) contribute to the level of knowledge and the engagement of the users through the others' gaze.

According to Lynch (1960), such devices for navigation are meant to complement mental image by enriching experience of the landscape and make wayfinding hassle free but relying on them could make the user dependent on navigating rather than experiencing. Although the route was carefully designed for bicycle and aimed at keeping the track on bicycle lanes as much as possible; diversions from the route happened at certain places even with the help of navigation app. This was mainly due to unfamiliarity with the city and flow of traffic, as well as having less experience with cycling in the city. When certain level of familiarity developed and some experience is gained, it became easier and less time-consuming through the ability of recognizing patterns in the surroundings.

Since each experience is personal, the gaze can be distracted through other sites encountered on the route. Therefore, the actual route may differ from the designed one. The performed route is recorded on Komoot and then overlaid on the planned one to see diversions. Then, the two layers are saved in gpx format and added to the Google Maps. The 15 sites are manually marked on the Google Maps and another route is generated automatically. In this manner, three layers are formed with the same data but leading to different results (see Fig. 3). The blue colour shows the route virtually designed by Google Maps connecting the points of interest. The green route is the planned route on Komoot, and red route is the performed one by the researcher. On 23 July 2019, the route is tested as a whole in order to calculate the duration (the given time on the flyer is 2.5 hours). Despite the diversions and difficulty in navigating, it was completed in the right time. A break is given only once due to the need to charge the battery of phone for half an hour, so actual completion time is recorded as 3 hours (start: 11 am at Gleisdreieck U-bahn station, break for half an hour at 13pm near Bethaniendamm and finish: 14pm at Deutsche Technikmuseum). In the following days, the route is explored in parts by visiting the sites listed on the route and collecting data as well as exploring the sites from inside (if accessible such as museums).

Observations in an urban setting "add new dimensions for understanding either the context or the phenomenon being studied", which may also include taking photographs at the sites to convey characteristics of the objects (Dabbs, 1982 cited in Yin, 2003, p. 110). Each site is photographed to create field notes (photography literally translates as taking notes/writing with light), and documenting the current status of the artefacts and their surroundings. Photographs keep record of details that we can look and see again and again, refresh memories and provide evidence to compare then and

now. Therefore, the visual texts such as photographs provide data to be analysed on the textual level.

3.2. Textual level – document analysis

The built environment can be read as a narrative written by experiences, events and transformations. While urban exploration provides data through observation and hands-on experience, documents "contain data that no longer can be observed" (Bowen, 2009, p. 31). On the textual level, narrative is recognized in the form of representation of spatial, social, and cultural contexts (Clandinin and Rosiek, 2006), which join the web of urban imaginary. The aim of the document analysis is "to discover the narrative of spaces and memories layered over time" (Marchigiani and Mattogno, 2018, p. 790). Therefore, document analysis is used as "a systematic procedure for reviewing or evaluating documents" (Bowen, 2009, p. 27), with the aim of gaining an understanding of "social facts" and "interpreting the meaning produced, shared, and used in socially organised ways" (Atkinson and Coffey, 1997, p. 47).

The data can be provided through a wide range of sources – "printed literature, way-marking features provided en route, websites and increasingly, by mobile applications and audio devices" (MacLeod, 2017, p. 423). The sources of texts used for this paper can be categorized in three groups - (1) physical objects found within the study setting (often called artefacts), (2) the official records as secondary data sources, and (3) First-person accounts of an individual's actions, experiences, and beliefs (O'Leary, 2014) (See Table 1).



Figure 3. Layers on Google Maps

Physical evidence -What is the promise?	Physical objects found within the study setting (often called artefacts).	Flyers, exhibition materials, posters, gui- des, maps, brochures and catalogues.
Public records -What is the historical background?	The official records as secon- dary data sources.	Archival records, books, scientific articles, websites
Personal documents -What is the experience?	First-person accounts of an in- dividual's actions, experiences, and beliefs.	Mobile applications (Komoot, Google maps, DTM audioguide, Bunker Berlin app.), e-mails, blogs, commentaries, pho- tographs

Table 1. Categories of textual data (Source: Adapted from O'Leary, 2014)

4. Findings and Discussion

Tourist gaze is physically, culturally and symbolically constructed by the collection of signs through visual marks and traces in the urban landscapes, story structures (text) and experiences on the cultural route. The representation and meaning, as the focus of analysis, are culturally bounded in which the experiences at the phenomenological level provide meaningful connections between the expression and the content (Culler, 1975). The network of representations, which is drawn by the bicycle route for industrial heritage, serves as the mode of interpretation of a wide range of themes and stories that are spatio-temporally created and maintained. The findings are presented according to the structure of nodes, which are treated as the thematic concentrations - intersecting and drawing patterns between similar type of landmarks and industrial development in c areas.

4.1. Electricity and creative city – "Electropolis meets Technopolis" (E-Activity, 2010).

The "bright lights" in the theme of the route stand for electric power and industry which gives reference to "Electropolis Berlin". Steiner (2013, p. 231) traces back the urban development of Berlin parallel to the industrialization and the "Electric Revolution" in 1880s. AEG and Siemens are the protagonists of the electrified city. Their former factory complexes and representative offices are marked on the route. Apparently, the large part of the artefacts on the route belong to this category represented through power plants and substations. The former substations, heat and power plants reviving through electronic music and techno in the present time. After the fall of the wall, Buchhändlerhof Substation has become an event venue known as E-werk - "the place" for techno culture. Similarly, Berlin Power Plant, a later example of industrial site built when the wall was erected as the central power plant for East Berlin, operated until late 1990s and after it became abandoned famous techno club Tresor moved in. Since 2010 the turbine hall is vibrating with art and culture events by Kraftwerk Berlin. The modern Mitte Combined Heat and Power (CHP) Plant is still producing electricity and district heating operating under Vattenfall company. In addition to re-use of the old Berlin power plant, Vattenfall established its administrative and customer service centre in the

BEWAG's former Scharnhorst Substation (Vattenfall AB & Centre for Business History, 2019). The brick gothic style was mastered by Hans Heinrich Müller, house architect for BEWAG, which made these sites imagined as "cathedrals of electricity" inspired by the medieval castle/cathedral complex in the Prussian city of Marienburg (Borden, 2017). One of the eminent examples of this style is the Humboldt Substation which is converted to office building for the tourism company "Get Your Guide".

4.2. Breweries and culture – "Here was once brewed beer - today culture" (Berlin Tourism & Congress GmbH).

The second part of the route's official theme highlights beer. There are three breweries Groterjan Brewery, Pfefferberg Brewery and Kulturbrauerei - concentrated on the north-east section of the route (Schönhauser Allee), marking the district with the origins of historical brewing tradition. If the electricity and transport systems were the "nerves of the city" (Killen, 2006), Schönhauser Allee and Prenzlauer Berg would be the "belly of Berlin" (TIC, n.d.). Today, entertainment and consumption dominate the use and facilities as they become mix-use spaces with cultural spaces. cinemas, theatres, restaurants, clubs, administration offices, or accommodation facilities. Kulturbrauerei gives direct reference to cultural revitalization of the area bringing culture and brewery together under its name, which characterizes the economic focus on consumption, cultural production and entertainment (Mieg and Oevermann, 2014).

4.3. Railways and Transportation – "Metropolis on the Move" (Jeschke, 1999).

Another highly frequent emergent pattern connected to main theme on different levels is the railways and transportation - the by-product of industrialization as well as the requisite of industrial network and mobility. Anhalter Bahnhof was "the heart" of the city, "both the point of departure and the destination of the blood as it flows through the body's veins and arteries" (Roth, 2003, p. 105). Presner (2007, p. 3) associates railways with mobility, speed and exchange mapping the cultural geographies. As cities became connected to the growing rail network, the pace of mobility was increased which reflected on social and economic changes. The railway stations as the big hubs shaped the growth of the city - "the road leading toward the station usually developed into an important commercial street, attracting industry, and working-class quarters were built to surround the factories" (Matzerath, 1985, p. 156). As the developing industries moved to new location on the north of the city such as Moabit and Wedding, the need for ring line emerged the Berliner Ringbahn was built. Stadtbahh (S-bahn) was the "breakthrough for an efficient railway system" in Berlin (Fabian, 2000, p. 19).

4.4. Museums and monuments – "Places of public memory" (Dickinson et al., 2010).

Museums, as the old places of industry of vesterday, act as sites of memory today by telling and interactively visualizing the story. Deutsches Technikmuseum with the most comprehensive collection on the route is marked as the start and end point. It possesses original objects ranging from telegraphy and telephone to radio and television, which is a part of permanent exhibition "Elektropolis Berlin - a Telecommunications Story" (Deutches Technikmuseum, 2019) (See Fig. 4). Similarly, Museum for Communication used to be former Reichspostmuseum (Imperial Postal Museum) dating back to 19th century, as one of the first museums history and technology in the world. There is also a museum in the Kulturbrauerei, which holds a permanent exhibition about the everyday life in



Figure 4. Electropolis Exhibition - Deutsches Technikmuseum (Source: Photographs by the Author)

GDR mainly concentrating on the 1970s-80s. There are also events organized such as neighbourhood walks, public talks or book presentations to attract people.

4.5. Tunnels and bunkers – "The Berlin Underground: Cultivation and Preservation of Subculture" (Rooney, 2018).

There is a secret city beneath Berlin, an entangled web of bunkers, tunnels and abandoned subway stations, a gateway to everyday life in wartime Berlin. The first tunnel on the bicycle route dates back to earlier times, when AEG (n.d) built the first underground tunnel in Germany in the 1890s to connect Humboldthain Works and the appliance factory on the Ackerstrasse. The electric trains were used to transport materials and workers. The underground systems offered different uses during the war times. During the World War I (WWI) it was munitions production, while during the World War II (WWII) it became an air-raid shelter like many other bunkers underneath Berlin. A similar story can be found at Fichtestrasse Gasometer, born by the myth of "city lights" in 1880s. The original purpose was to store illuminating gas for streetlights but also became an air raid shelter during the WWII and served as a bunk and shelter for refugees and homeless due to its windowless thick brick walls. Unlike the invisible underground labyrinths, the massive structure could be easily observed from the street level, a distinguished iconic landmark in the neighbourhood which attracts immediate attention when passing by. When cycling in the city, the gaze is focused on the landscape and the landmarks however the way to the hidden corridors under the ground is guided by "Berliner Unterwelten" offering special tours on different spots with different stories. Today, underground culture of Berlin is represented by subcultures that emerged as a counterpoint to the mainstream. But perhaps it had become the mainstream fashion and image of Berlin for the youth. The techno scene and the night life made Berlin the epicentre of the underground culture. The abandoned industrial sites became the city's techno scene. Berlin's underground formed the basis of the cultural infrastructure and urban identity after the Wall came down. Places such as E-werk, Tresor and Kraftwerk Berlin are the burgeons of Berlin underground and techno subculture.

4.6. Tenements and dwellings – From Working Class to Creative Class

The pace of industrialization and growing number of sites of production, eventually led to population growth and introduced the need for dwellings built around the industrial areas. The settlements and social facilities for the working class gives important hints about the social facts. Villas of the entrepreneurs are also part of it, as the complexes of production, management and residence. Similar to French term "maison mixte" used for the heterogenous resident structure, "Kreuzberg Mischung" (Kreuzberg Mix) was the name for "distinctive blend of residential and commercial space" (bzi, 2019). The "Mietskaserne" (rental barracks) emerged as an urban block scheme in the wake of industrialization, creating a "city inside the city" (Kuck, 2010). The several buildings on a single plot separated by small courtyards accommodated workers and their families. Höfe am Südstern is today known for the Sputnik Kino (screening arthouse cinema) in the third courtyard and on the fifth floor offering a gaze to the city from its balcony. The new formation of incubators replacing the old tenements made the area charming and attractive. The blocks are occupied by creative businesses, co-working spaces and start-ups. Moreover, the pressure created by the growth of tourism industry is highly felt in the city centre. In the past rental barracks offered as a solution to the accommodation shortages for the factory workers, these tenements offer short-term rentals for tourists through Airbnb, setting the scene for new urban tourism today.

5. Conclusion

The Electric Revolution and Berlin's rise to European capital of the electrical industry are the underlying causes of the birth of Elektropolis from the historical perspective. However, Dame (2011) makes an extension to the myth originating from utopian narratives created in the 1920's and 1930's by adding the network of stakeholders referring to the aspect of social capital, which sets the ground for technological and social innovations. The progression in railway and engineering sectors, electronics, and the radio and telecommunications made "Elektropolis Berlin" a synonym for "modern, networked city" through the integration of public electric power and urban transport systems (Steiner, 2013: p. 231). Dame (2011) claims the number and diversity of buildings including factories, company representative offices, telephone exchanges, public transport stations for trams and subways, suburban railway stations, villas of industrialists, settlements and social facilities for employees, power stations as the witnesses of the multi-faceted history of Elektropolis. It is still possible to read the codes of Elektropolis written on the urban landscape and the industrial sites represented on the routes which shape the mental image.

Deindustrialization had deeply affected major industrial cities and their image represented as abandoned factory facilities as their basic feature. Huyssen (2003, p. 192) claims that the image is the major concern for "rebuilding key sites in the heart of Berlin" to increase attractiveness for tourists. Urban tourism is perceived as a viable solution to revitalize the city by transforming heritage assets into attractions (Barrera-Fernandez et al., 2016). The industrial sites are not mere expressions of collective identities and memory, but also places of experiences on the individual level which makes them sites for close interaction with heritage. In this framework, the cultural heritage routes serve as modes of both representation and practice, where the remnants of the past in the urban landscape and their former meanings affect our mode of encounters and turn them into vivid mental images.

MacLeod (2017) asserts that "a trail is only a suggested route" where visitors are encouraged "to select elements of a story and compare historical themes with contemporary street culture". Similarly, this paper follows a comparison between the past meanings and present forms of experience presented by the patterns emerging from the data as follows -"from electric industry to electronic music industry and creative city", "from bunkers to underground culture industries", "from beer production to cultural consumption", "from co-living to co-working spaces". Since massive structures of old industrial sites occupy large space in central locations, they are attractive locations by means of urban rent. In a World City like Berlin, there may still be abandoned sites, however it will not take so long for them to be the subject of adaptive re-use or demolishment to create space for a lucrative construction site according to the emerging market demands in the urban economy. Cultural industries are seen as an engine that generates effective solutions, especially in terms of creative economy. Heritage tourism joins directly into this picture by mobilizing people, enriching experience and/or making it worth gazing at the old industrial sites, while creating awareness and strengthening the local identity.

Acknowledgements

This research is undertaken as a part of twomonths visiting fellowship period (July-August 2019) at Humboldt University Berlin - Georg Simmel Center for Metropolitan Studies (GSZ). The fellowship program is funded by the German Academic Exchange Service (DAAD). The author would like to thank Dr. Heike Oevermann for her supervision and Antje Boshold for providing information on the Bicycle Route "BRIGHT LIGHTS AND COLD BEER" developed by Berliner Zentrum Industriekultur (bzi).

References

- AEG (n.d.). *Little Chronology*. Available at: http://www.aegie.com/download/web_aeg_history_e.pdf (accessed 23 August 2019).
- Atkinson, P. A. and Coffey, A. (1997). Analysing documentary realities. In *Qualitative research: Theory, method and practice* (Ed. Silverman, D.), pp. 45–62. London: Sage.
- Bangstad, T. R. (2011). Routes of Industrial Heritage: On the Animation of Sedentary Objects. *Culture Unbound*, 3, pp. 279–294.
- Barrera-Fernández, D., Hernández-Escampa, M. and Balbuena, A. (2016). Tourism Management in the Historic City: The Impact of Urban Planning Policies. International Journal of Scientific Management and Tourism, 2 (4), pp. 349-367.

- Berlin Tourismus and Kongress GmbH (n.d.) Museum für Kommunikation Berlin (Museum for Communication), VisitBerlin. Available at: https://www.visitberlin.de/ en/museum-fur-kommunikation-berlin-museumcommunication (accessed 23 August 2019).
- Borden, D. (2017). Save Berlin: God's power stations, Exberliner. February 16, Available at: https://www. exberliner.com/features/zeitgeist/gods-powerstations/ (accessed 23 August 2019).
- Borden, I., Kerr, J., Rendell, J. and Pivaro, A. (2001). *The Unknown City: Contesting Architecture and Social Space*. Cambridge, MA.: MIT Press.
- Bowen, G. A. (2009), Document analysis as a qualitative research method. *Qualitative Research Journal*, 9 (2), pp. 27-40.
- Bruner, E. M. (2005). *The Role of Narrative in Tourism*. Paper presented at Berkeley Conference, On Voyage: New Directions in Tourism Theory, 7-8 October, available at: http://www.nyu.edu/classes/bkg/tourist/narrative.doc (accessed 20 August 2019).

Bzi (2019). Bicycle Route "Bright Lights and Cold Beer". Flyer.

- Clandinin, D. J., and Rosiek, J. (2006). Mapping a landscape of narrative inquiry: Borderland spaces and tensions. In *Handbook of narrative inquiry: Mapping a methodology* (Ed. Clandinin, D. J.). pp. 35-80.. Thousand Oaks, CA: SAGE., pp. 35-80.
- Clark, K. (2005). From Valves to Values: Industrial Archaeology and Heritage Practice. in Eleanor Conlin Casella & James Symonds (Eds.), Industrial Archaelogy: Future Directions, Springer, New York, pp. 95-119.
- CoE (1998). On the Cultural Routes of the Council of Europe. CoE, Strasbourg.
- Crouch, D. and Lübbren, N. (2003). *Visual Culture and Tourism*. Oxford: Berg.
- Culler, J. (1975). *Structuralist Poetics: Structuralism, Linguistics and the Study of Literature*. Ithaco: Cornell UP.
- Damayanti, R. and Kossak, F. (2016). Extending Kevin Lynch's concept of imageability in third space reading; case study of Kampungs, Surabaya–Indonesia. *ITU A/Z*, 13 (1), pp. 57-67.
- Dame, T. (2011). *Elektropolis Berlin. Die Energie der Großstadt*. Berlin: Gebr. Mann Verlag.
- Deutches Technikmuseum. (2019). Elektropolis Berlin a Telecommunications Story. Available at: https:// sdtb.de/museum-of-technology/exhibitions/1162/ (accessed 23 August, 2019).
- Dickinson, G., Blair, C. and Ott, B. L. (2010). *Places of Public Memory: The Rhetoric of Museums and Memorials*. Tuscaloosa: The University of Alabama Press.
- E-Activity (2010). *Electropolis meets Technopolis*. E-Activity Records 002: Syn-Po-Tek, Netherlands.
- Edensor, T. (2005). Industrial Ruins: Spaces, Aesthetics and Materiality. Oxford: Berg.
- Fabian, T. (2000). The Evolution of The Berlin Urban Railway Network. *Japan Railway and Transport Review*, 25, pp. 18-24.
- Hall, S. (1997). *Representation: cultural representations and signifying practices*. London: Sage.
- Hewison, R. (1987). *The Heritage Industry*. London: Routledge.
- Huyssen, A. (2003). Present Pasts: Urban Palimpsests and the

Politics of Memory. Stanford: Stanford University Press. ICOMOS. (2008). The ICOMOS Charter on Cultural Routes. Québec: ICOMOS.

- Jeschke, C. (1999). Metropolis on the Move Public Transport in Berlin. Japan Railway and Transport Review, 20, pp. 37-43.
- Jones, C. E. K., Severo, M. and Guido, D. (2018). Socio spatial visualisations of cultural routes: Exploring collective memory on Instagram. *Netcom*, 32 (3/4), pp. 305-330.
- Killen, A. (2006). Berlin Electropolis: Shock, Nerves, and German Modernity. University of California Press. Available at: http://www.jstor.org/stable/10.1525/j. ctt1pp8gg (accessed 23 August 2019).
- Kuck, R. (2010). Mietskaserne. Explore Lab 8 Research Paper, 4, available at: http://preservedstories.com/ wp-content/uploads/2013/01/Mietskaserne-1.pdf (accessed 23 August 2019).
- Larsen, J. (2014). *The Tourist Gaze 1.0, 2.0 and 3.0.* In *The Wiley Blackwell Companion to Tourism* (Eds. Lew, A., Hall, M. and Williams, A.), pp. 304-313. Chichester: John Wiley & Sons.
- Larsen, J. and Urry, J. (2011). Gazing and Performing. Environment and Planning D: Society and Space, 29 (6), pp. 1110–1125.
- Lynch, K. (1960). *The Image of the City*. Cambridge, London: MIT Press.
- MacLeod, N. (2017). The role of trails in the creation of tourist space. *Journal of Heritage Tourism*, 12 (5), pp. 423-430.
- Marchigiani, E. and Mattogno, C. (2018). Reflecting on the Legacy of Kevin Lynch's Cognitive Approach to City Design through Italian Didactic Experiences. *Journal of Civil Engineering and Architecture*, 12 (11), pp. 778-797.
- Matzerath, H. (1985), *Urbanisierung in Preußen 1815-1914*. Stuttgart: Kohlhammer/ Deutscher Gemeindeverlag.
- Mieg, H. and Oevermann, H. (Eds.). (2014). Industrial Heritage Sites in Transformation. New York: Routledge.
- O'Leary, Z. (2014). *The essential guide to doing your research Project*. Thousand Oaks, CA: Sage.
- Presner, T. (2007). *Mobile Modernity: Germans, Jews, Trains*. New York: Columbia University Press.
- Rooney, C. (2018). The Berlin Underground: Cultivation and Preservation of Subculture. *Glossi Mag*, February 15. Available at: https://glossimag.com/berlinunderground-cultivation-preservation-subculture/ (accessed 23 August 2019).
- Roth, J. (2003). *What I Saw: Reports from Berlin 1920-1933*. London: W.W. Norton & Company.
- Steiner, M. (2013), Tracing the Invisible- Electropolis Berlin. TICCIH Congress 2012, The International Conservation for the, Industrial Heritage Series 2, Chung Yuan Christian University.
- TIC (n.d.). The beer from here-brewery history. Tourist Information Centre: Kultur- & Tourismusmarketing Berlin-Pankow, Bezirksamt Pankow, available at: https:// www.pankow-weissensee-prenzlauerberg.berlin/en/ beer-here-brewery-history (accessed 23 August 2019).
- Turnbull, D. (2007). Maps Narratives and Trails: Performativity, Hodology and Distributed Knowledges in Complex Adaptive Systems – an Approach to Emergent Mapping. *Geographical Research*, 45, pp. 140-149.
- Urry, J. (1990). *The Tourist Gaze: leisure and travel in contemporary societies*. London: Sage.

Vattenfall AB & Centre for Business History. (2019). Berlin electrified (Bewag). In *The history and heritage of Vattenfall*. Available at: https://history.vattenfall.com/ a-pan-european-company/berlin-electrified-bewag (accessed 23 August, 2019).

Yin, R. K. (2003). Case Study Research. London: Sage.



Evinc Dogan is a PhD in Management and Development of Cultural Heritage obtained from IMT School for Advanced Studies Lucca (Italy). She has been a visiting research fellow at Georg Simmel Center for Metropolitan Studies (GSZ) and Humboldt University Berlin, supported by DAAD research grant. Her research interests include heritage tourism, industrial

heritage, culture-led urban transformation, place marketing and city branding.

ORCID ID : 0000-0003-4874-7341