

The Urban Walking Tour as an Experience-based Methodology for Built Environment Education in Budapest

János Klaniczay^{1*}

¹ Department of Urban Planning and Design, Faculty of Architecture, Budapest University of Technology and Economics, Műegyetem rakpart 3. II/93., H-1111 Budapest, Hungary

* Corresponding author, e-mail: klaniczay.janos@urb.bme.hu

Received: 17 August 2023, Accepted: 25 March 2024, Published online: 17 April 2024

Abstract

Built Environment Education (BEE) plays an important role in urban sustainability as citizens who are more aware of the surrounding architectural heritage have better opportunities to develop a sense of place and place attachment. Themes and stories make the architectural fabric of a city more legible that is why urban walking tours are such a popular format for BEE initiatives. These experience-based educative events are originally constructed for visitors (mainly tourists) of a city to receive in-situ impressions of the built heritage during their visit. But in recent years, the new phenomenon of proximity tourism appeared, inviting locals to participate in walking tours to discover their own neighbourhood, rendering this tourist-focused activity into a BEE tool for adults. Urban walks have been used in architectural education at the university level for quite some time, and recently organisations focusing on BEE have adapted the format as well, which therefore can reach a wide range of audiences.

This research presents the quantitative and geo-referenced analysis of 449 photos taken during the walking tours by participants and a qualitative content analysis of the photos. The results of a questionnaire completed by 119 students upon the end of their walking tour are presented and analysed to determine the effectiveness of this BEE methodology. Results show that the experience-based format of urban walking tours in the context of BEE can contribute to the forming of sense of place for participants, and therefore should be considered as an educational tool.

Keywords

walking tours, built environment education, urban heritage, sense of place, Budapest

1 Introduction

Built Environment Education has been researched in the context of urban sustainability in the past decades (Hart and Nolan, 1999), and scholars tend to agree that experience-based learning methodologies are ideal to reach out to a wide range of audiences (Harris, 2004). By discovering the stories of the city, and especially our own neighbourhood the possibility to develop a sense of place grows extensively (Kudryavtsev et al., 2012a). Walkability is a topic discussed frequently among urban scholars (Sirjani and Szabó, 2021) and in recent years the phenomena of local urban walking tours have received more attention as well (Diaz-Soria, 2017), focusing on the educative aspect of the experience (Borucka, 2019; Zillinger and Nilsson, 2022).

When discussing the topic of urban walking tours in the context of BEE the local initiatives should be inspected, as they have the freedom to experiment

in search for better impact on citizens. Bottom-up projects by local NGOs and even university courses that integrate the local urban context into their curriculum can all be found in Budapest, Hungary, where urban walks organised primarily for locals have become very popular in recent years (Klaniczay, 2022b).

This study focuses on the methodology of urban walking tours in the context of learning about the architectural and urban heritage of cities, by inspecting the experience and development of a sense of place among tour participants (see Fig. 1). Its main goal is to distinguish which elements of the urban environment have effect on the spectator during a walking tour and to assess the possibilities of developing a sense of place during the experience. For the purposes of this study the urban walks organised by the Department of Urban Planning and Design in Budapest for first-year architecture students were monitored and results were evaluated.



Fig. 1 Photos of the walking tours taken by participating students
(Source: Klaniczay, J.)

In Section 2 the theoretical background of BEE will be presented with a special focus on urban walks (Section 2.1), the new phenomenon of proximity tourism (Section 2.2), and the recent advances in research of sense of place (Section 2.3). Section 3 discusses the local context of Budapest, introducing the academic research and teaching strategies of the Department of Urban Planning and Design (Section 3.1) and the methodologies of KÉK Urban Walks (Section 3.2). The research methodology of this paper will be presented in Section 4 with special emphasis on the impact of geo-referenced photography in urban research and the approach of environmental psychology in measuring sense of place. Results will be presented and discussed in detail in Sections 5 and 6, analysing hundreds of photos taken by walking tour participants and assessing the outcomes of the questionnaires completed at the end of the tour. Implications and future possibilities of the study will be discussed in Section 7 with concluding remarks.

2 Built environment education

As most of the world's population now lives in urban areas, the question of education about our built environment plays an essential part in forming our societies and cities. The UIA (Union Internationale des Architectes) Copenhagen Declaration of 2009 clearly states that the survivability and sustainability of urban environments depend on the consciousness of all users (Arin, 2014). Environmental education has been in the focus of academic research for decades (Hart and Nolan, 1999), with the built environment getting more attention mainly by professionals and practitioners of the field of architecture (Hughes, 2010).

The buildings that surround us provide the spatial context for our everyday lives. They play an important role in our quality of life and developing a sense of place that

attaches us to our neighbourhoods. The goal of BEE is to sensitize children and adults about their local urban heritage, often in experience-based forms (Arin, 2014) in order to become a conscious citizen in the future. Research shows that BEE can be a valuable tool for the future development of cities through their long-term effects (Uttke, 2012).

The importance of built cultural heritage in urban development has been emphasized by Tweed and Sutherland (2007), stating that the architectural environment has a measurable effect on our daily lives. Heritage development plans mostly focus on the preservation of buildings, but the streetscape is often overlooked, even though it plays a vital role in the image of the city. Through experiences more profound memories can be created about the built environment, a fact that has been realised by the tourism industry in the past decades (Willson and McIntosh, 2007), stressing the potentials in developing heritage buildings in relation to tourism. But as research shows the experiential values of the built heritage (visual appeal, personal reflections and engaging experiences) can be applied in local context within the local population during urban festivals (Kádár and Klaniczay, 2022).

2.1 Urban walks

In an article by Bairner (2011) the different motivations for walking the street are categorised, from the classic flâneur, religious reasons, political protests and as a way of understanding the built environment. In recent years this educational aspect of walking has been emphasized by urban researchers (Zillinger and Nilsson, 2022), presenting how during organised walking tours several learning opportunities are provided for participants. The urban walking methodologies are applicable in the educational context for elementary schools (Morris, 2006) and high-school students as well (Klaniczay, 2022a).

These urban walks build on the morphology of cities (Bertyák, 2021), the intertwined context of historical, cultural and architectural layers. There are of course several criteria for the built environment to create the ideal context for walking tours. The walkability of cities is a contemporary subject analysed by scholars in the context of urban sustainability (Sirjani and Szabó, 2021), pointing out how the physical context of cities contributes to the liveability of the urban environment. There are physiological benefits for the wellbeing of citizens who are able to walk in cities (Bornioli et al., 2018), be it for commute or leisure. Learning how to appreciate the buildings that surround

us (Ellard, 2023) can give yet another reason for taking a walk and exploring our neighbourhood. If we have a better understanding of the urban environment the already stimulating urban context can have a measurable effect on our sense of place during a walk (Hillnhütter, 2022), which can contribute to developing a sense of the city (Middleton, 2010).

Walking tours can facilitate the understanding of the built environment (Galí and Aulet, 2019) through telling stories (Yi'En, 2014) and by the co-producing opportunities arising during guided tours for participants to contribute to the making of the tour (Larsen and Widtfeldt Meged, 2013). Thematic tours can focus on valorising a certain exact layer of the city's cultural heritage (Mavini, 2020), making it an effective tool in education as well. The thematization of the urban heritage in cities through walking tours can be a transformative educational tool for tourists and locals as well (Ormond and Vietti, 2021), able to elevate niche layers of the city to the level of public discourse. In the context of architectural education walking tours have been used to present the in-situ examples of theoretical studies for students in their own cities (Borucka, 2019) but equally during study tours (Kwasek and Piwek, 2020).

2.2 Proximity tourism

Urban tourists explore the city they arrive in usually through walking, and often participate in guided tours. The market of thematic tours therefore developed originally for visitors, but in recent years locals more often started to express interest in participating in these forms of exploring the city (Diaz-Soria, 2017).

This phenomena of locals participating in experiences originally designed for tourists (Hoogendoorn and Hammett, 2020) is usually referred to as "proximity tourism" and has an ever growing number of academic articles that focus on researching its potential and effects on urban life (Salmela et al., 2021).

When aiming at developing our cities by educating citizens about their built environment the challenge of proximity arises (Jeuring and Haartsen, 2017), and the tools used in contemporary urban tourism (experiences, co-creation, narratives, authenticity, etc.) can be applied. Such methodologies of tourism seemed especially useful during the Covid-19 pandemic, when travel restrictions caused many to stay in their own city and wanted to explore it better (Romagosa, 2020).

2.3 Sense of place

The development of urban identity has been researched since decades by environmental psychologists (Lalli, 1988; Proshansky, 1978), pointing out the connections between the built environment and the personal emotional landscapes of citizens. Place identity as such has been conceptualized and studied by academics in recent decades exponentially (Peng et al., 2020), and as research shows a main cluster of topics is place meaning and cultural identity in relation to environmental studies. In the context of place identity research the conceptualization of "place" is necessary, and as Cresswell (2009) points out:

"The sense we get of a place is heavily dependent on practice and, particularly, the reiteration of practice on a regular basis. Space becomes a place when it is used and lived. Experience is at the heart of what place means." (Cresswell, 2009:p.170)

In the context of BEE and urban walking tours an important aspect to be considered is the development of a sense of place, in connection to tourism (Bernardo et al., 2017). In their article Bernardo et al. present how the perceived authenticity of a city's neighbourhood is interdependent on the relation of locals to their urban environment. Tourists prefer places that are already used and beloved by locals and is part of their identity. In return, the strong place attachment of residents can motivate the community to initiate the conservation of local cultural heritage, including architectural values and streetscapes (Yang et al., 2022). Furthermore, the development of stronger place attachment is directly in relation on how much local support tourism based developments (Stylidis, 2018).

For developing the sense of place of locals several methods have been applied during recent urban rehabilitation projects and heritage conservation programs. The characteristics of a neighbourhood have a great impact on the local community, and with the Historical Urban Landscape (HUL) approach and the tools of city-branding the identity of a city's quarter can be accentuated effectively (Alföldi et al., 2019). The mere act of walking through a neighbourhood can affect our emotional attachment to it. The "dérivé" recommendation of the Situationist movement in the late 1960s consisted of exploring the urban context with an open mind to the built environment, eventually resulting in the contextual research field of Psychogeography (Sidaway, 2022).

The elements of the streetscape play a major role in creating our attachment to a place (Ellard, 2015).

Research suggests that generally environmental education can influence the sense of place and place attachment of urban communities (Kudryavtsev et al., 2012b), but it may not always be as effective as one would hope (Kudryavtsev et al., 2012a), especially among younger generations. For university freshmen a campus tour can improve their sense of place through guided tours and self-guided walks with the help of brochures (Barlett, 2002). On a larger scale, cultural urban festivals can also be a tool to enhance (Kádár and Klaniczay, 2022) and to promote (Bitušiková, 2020) the sense of place to visitors and citizens alike.

Urban walks are constantly being developed internationally in relation to cultural heritage management projects and urban rehabilitation situations, focusing on the creation of a sense of place among locals through the techniques of placemaking. By creating a focus on local heritage values (historical and contemporary) and finding narratives to the urban context that can be interpreted by guides and locals the memory of the place can reveal itself (Markwell et al., 2004), contributing to a sense of place.

3 Initiatives in Budapest

In the past decade Budapest, the capital of Hungary has been the home for an exponentially growing number of local walking tour initiatives (Klaniczay, 2022b). The tourist-historic city in Central-Eastern Europe has been struggling to valorise its 20th century heritage after the change of regime in 1989 even though the potential to become a cultural capital is present (Smith and Puczkó, 2012). Budapest's diverse architectural heritage consists mainly of 19th century tenement houses (Benkő, 2011) that are concentrated in the touristic inner city (Kádár, 2014). The exploration of the city's past is popular among tourists and locals as well.

The phenomenon of thematic walking tours organised specifically for locals has been researched in various contexts lately. Academic papers, theses on master's and bachelor's levels and even doctoral dissertations explored the geographic nature of urban walks (Szemerey, 2012), the opportunities of business developments based on tourism and culture (Hill, 2012), and naturally the touristic aspects of this new alternative style of guided tours (Ehmann, 2018; Klaniczay, 2014; Rátz, 2017; Urbán, 2015). Yet there is a lack of research about the impact of organised city walking in the context of architectural education and environmental psychology, subjects along which urban exploration plays an important role in a methodological and empirical sense as well.

3.1 Urban walking tours of BME

The Department of Urban Planning and Design of the Faculty of Architecture at the Budapest University of Technology and Economics (BME) was established almost a century ago in 1929. The department has used walking tours as a means of environmental education for architecture students since the 1990s and produced guidebooks for urban trails showcasing the evolution of residential developments on an urban scale (Locsmándi and Szabó, 2007). Former head of department, prof. Tamás Meggyesi (Meggyesi, 2012) adapted in his research the ideas of strollology (or promenadology) (Burckhardt, 2015), laying the foundation for the study of interpretive walking in the Hungarian context (Meggyesi, 2013, 2016). The use of walking tours in an architectural research context is spearheaded at the department on a doctoral level (Klaniczay, 2021), conducting experiments and measuring experiences and identity changes during urban walks.

A new tradition was also started in 2011 by prof. Melinda Benkő, (Benkő, 2022) head of department at the time and in charge of the grand lecture-series given to first year students: Introduction to Architecture. In the framework of the course the circa 250 students had the possibility to participate in a guided architecture tour of Budapest and could choose from a wide range of themes provided by the colleagues of the department, who could interpret the architectural layers of the urban context as an expert guide. In the past 11 seasons a total of 88 tours were organised for first-year students, covering a massive area of downtown Budapest's architectural heritage (see Fig. 2).

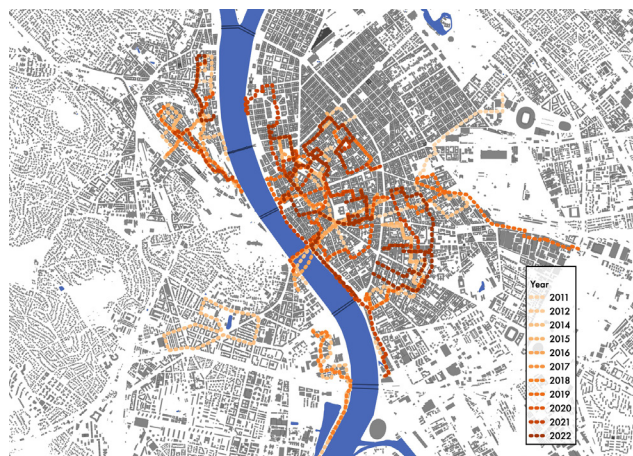


Fig. 2 Mapping of all architectural walking tours led by the Department of Urban Planning and Design during the Introduction to Architecture course, 2011–2022 (Source and graphics: Klaniczay, J.)

3.2 Urban walks of KÉK

Another important stakeholder of architectural walking tours is the Hungarian Contemporary Architecture Centre (KÉK, 2023), an independent professional NGO founded in 2006, who has organised hundreds of lectures, talks, exhibitions, festivals and other events in the past years (KÉK, 2023). Their programs include innovative projects of BEE for high school students through "walkshops", teaching participants how to create urban walks in the neighbourhood of their school (Klaniczay, 2022a). During the celebrated Budapest100 festival of open-houses thousands of visitors can also participate in volunteer led (Szöke, 2022) city walks and building visits, co-creating the urban brand of Budapest from a local perspective (Kádár and Klaniczay, 2022).

In a research project organised in collaboration with the Department of Urban Planning and Design in 2019 (Klaniczay, 2021), the post-war modernist heritage of Budapest was in the focus of the KÉK Urban Walks project, exploring the Socialist Realist Kerepesi Housing Estate (Jász, 2018) and the Havanna Housing Estate, a large prefab mass housing area (Benkő et al., 2021). The methodologies of comparing the architectural experience of walking tour participant in different urban contexts is useful for gaining knowledge about how laymen perceive the built environment, which can help in creating valorisation strategies for post war heritage that is in danger of being demolished (Hartmann, 2022).

4 Research methodology

The goal of the study is to inspect the built environment perception of architectural walking tour participants, analysing how the experience-based educational methodology can affect their sense of place. In order to be able to measure and analyse changes in the sense of place a mixed methodology of quantitative and qualitative approaches is used (Amaratunga et al., 2002).

During the 2022 Autumn Semester the first-year architecture students of the Introduction to Architecture course were asked to participate in the research during the traditional walking tour event on a voluntary basis. Eight tours were organised by the department during which a total of 208 students explored the city of Budapest.

The students were asked to take photos during the tour with their smartphones, preferably turning on the tracking function. Using tracking technologies in urban research is common practice, providing opportunities to study the spatial usage of cities for a select group of

the society (Bene, 2020), or even to analyse the emotional dimensions the built environment can have on visitors (Shoval et al., 2018). Geo-referenced photography makes tracking visitors possible on large scales (Kádár and Gede, 2013) while also allowing an insight into the contents and elements that visitors take photos of. Visitors take photos of what they find interesting to create memories, therefore by analysing the content of photos taken during the walking tours it becomes possible to explore the place perception of participants (Garrod, 2008). Students were given instruction prior to the tour to take photos of any interesting feature they find during the walking tour, but only as much as they prefer.

The study was complemented by an anonymous survey to be filled out right after the walking tour, accessible via reading a QR-code with a smartphone. The survey was designed to measure the changes in the sense of place (Shamai and Ilatov, 2005) of participants after the tour. The first block of questions focused on the walking tour and the authenticity of the guide, followed by questions about urban walking habits. The third question group collected information about the photo-taking habits of participants to validate the assumptions of the content-analysis. The most important part of the questionnaire inspected the experience of the walking tour, regarding how personal perception was influenced in the context of the built environment. A last question block was included to collect feedback on the efficacy and impact of built environment education with experience-based methodologies such as walking tours. In the end of the survey the personal data of participants was collected (gender, date and place of birth, location of current home).

Walk leaders were given instructions to remind students at the beginning of the tour to take photos, and to show the QR code at the end of the tour through which the questionnaire was accessible.

5 Results

Out of the 208 students who participated in the eight different walking tours 119 filled out the survey on time (late submissions were not accepted, as the research focuses on the immediate effects of the experience). The collection of photos taken during the walks was conducted separately. 36 students sent their photos, without making any prior selection, adding up to 449 photos. Unfortunately, not all participants could successfully turn on the tracking mode, so only 232 photos of 17 students included geo-data, but the rest of the photos were tagged manually during the content analysis.

As the students were distributed among the tours equally, and all tours had approximately the same number of stops during the same 1.5-hour period, the results can be used to make comparative analysis based on the number and content of the photos.

5.1 Tracking the visitor's gaze

The geo-tagged photos were imported to QGIS to map the POIs (Points of Interest) that students found interesting enough during the tours to take photos of (see Fig. 3). This is not only valuable feedback for the guides, but the map (see Fig. 3) also presents an opportunity to map

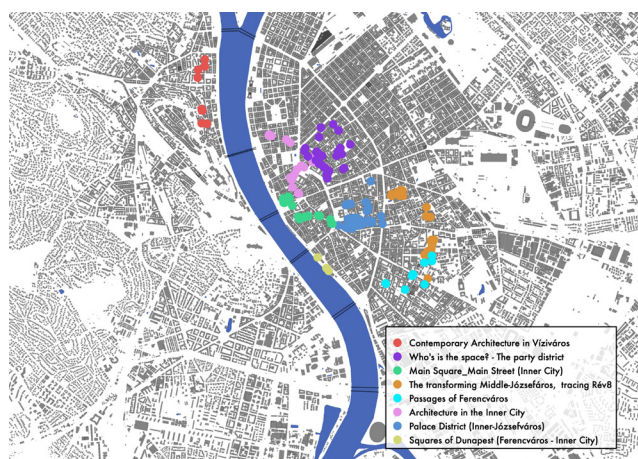


Fig. 3 Mapping of geo-tagged photos taken during the eight walking tours for the Introduction to Architecture course in 2022 (Source and graphics: Klaniczay, J.)

the concentration of the architectural experience of students. A much bigger concentration of photos (82% of all photos taken) can be observed in the central parts of the city, where historical architecture with more decorative elements can be found. Meanwhile the built environment during the contemporary architecture tour in Víziváros (red) or the urban rehabilitation tour in Józsefváros (orange) and Ferencváros (light blue) inspired less photos to be taken (18% of total).

The content analysis of the photos provided insight into how first-year architecture students at the very beginning of their career perceive the built environment and which urban contexts, architectural details, spatial situations inspire them. The content of the photos was analysed manually, dividing the 449 photos into 10 initial categories (see Fig. 4 for examples):

1. Detail (68 photos, 15% of total)
2. Painting (16 photos, 4% of total)
3. Tower (27 photos, 6% of total)
4. Group (19 photos, 4% of total)
5. Streetscape (70 photos, 16% of total)
6. Contrast (39 photos, 9% of total)
7. Indoor (51 photos, 11% of total)
8. Historical (90 photos, 20% of total)
9. Modern (33 photos, 7% of total)
10. Contemporary (36 photos, 8% of total).



Fig. 4 Examples of photos for each category created during the content analysis (Source: Klaniczay, J.)

5.2 Results of the questionnaire

The content of the survey showed valuable insight into how the relation to the built environment can be affected during architectural walking tours. The eight tours received 10–25 completed surveys, distributed equally. 27% of respondents were born in Budapest, the others in various Hungarian cities and settlements, but as students 75% currently live in Budapest.

To the questions concerning their prior familiarity with the neighbourhood of the tour only 27.5% responded that it was completely new to them, while 47.5% said they have visited the area before, and 25% said they frequently visit it. When asked about their architectural knowledge of the area, only 5.8% responded that they had a thorough previous knowledge, while 45.8% answered they have heard about it, but many new information was acquired during the tour. 48.3% answered that the architecture of the area was completely novel for them. Only a third of the respondents have participated in local thematic walking tours before, so the experience of discovering their own city this way was new for most of the group.

Certain questions were given on a 5-point Likert-scale, to evaluate the relevance and the effects of the walking tour experience among participants. 84% marked the maximum points if they found the tour guide authentic and 95% gave 5 or 4 points for the overall experience (65.8% and 29.2% respectively). The most diverse answer was given when asked about the tourist experience. Only 19.2% marked they felt completely like a tourist during the walking tour, and 8.3% said they are local, so no tourist experience was achieved. The most answers marked 3 (27.5%) or 4 (29.2%) on the 5-point scale. For the question group concerning the effects of the experience relevant feedback was gathered from participants. On the 1–5 Likert-scale 35.8% of respondents marked they like the neighbourhood "much better" (5) after the walking tour, and total of 90% marked "a little more" or better (3–5). Roughly 90% of students marked 3–5 for the question if they saw new building or discovered new details. Almost half of the respondents (48.3%) answered "completely true" (5) if they will revisit the neighbourhood, and in total 87.4% marked 3–5 on the 5-point scale. And more than half (51.7%) responded that they will pay more attention to the built environment when taking a walk. One of the key questions in the survey was if the respondent would like to discover his/her own neighbourhood with similar methods. 45% marked "true" (5), and in total the average answer was 4 on the scale. Additionally, 70% of students answered that they found the walking tour a very useful (5) addition to the curriculum.

6 Discussion

In this study the environmental experience of participants during walking tours was inspected by analysing the geo-data and content of 449 photos, plus by evaluating the results of a questionnaire completed by 119 students. The results show that the experience-based educational methodology is highly appreciated by students, who can learn about architecture in a contextual format. As most participants discovered new buildings during the tours, the educational aspect was clearly successful, but even more so, when we inspect all the photo evidence made by students. Creating photos during urban experiences solidifies the connection to the place and strengthens the memory. This correlates with the responses about the development of a sense of place, as most students answered they will revisit the neighbourhood of the walk. Therefore, it can be deduced that participating in these walks helped the students develop a stronger place attachment, and presumably the same effect could be noticed with other focus groups.

The responses on the tourist experience of students during the walking tour also requires some reflections. Walking tours are originally designed for tourists to explore the city, but as we described above they are becoming more popular among locals as well. The fact that only 19.2% of participants felt completely like a tourist in their own city shows that this experience is no longer associated completely with tourism. On the other hand it is interesting to see that more than 50% of responses marked 3 or 4 on the 5-point scale, showing how the discovery of a proximity destination can be regarded as a tourist experience. In the case of 1st-year architecture students at the beginning of their career this gives valuable insight to their perception of the city, that should be further inspected in another study.

The content analysis of the submitted photos provided insight into what captures the imagination of participants. It is interesting to notice that most photos were made of historical buildings (90), indoor locations (70) and architectural details (68). This correlates with the general popularity of historical architecture and courtyards and shows how a more decorative built environment can generate more impressions compared to a minimalist (sometimes dull) landscape. It is also important to add, that the building preferences of laymen and architects can differ greatly when comparing the historical or modern styles (Imamoglu, 2000), which is reflected in the results of this study as well. The "streetscape" was also a popular theme of photos with 70 instances, capturing the ambiance of the neighbourhood, showing how

the urban context plays an important role even during an architectural tour. A group of photos could be categorized as "painting", pictures showing tags, graffiti, wall paintings, and other urban colours, which contribute to a neighbourhood's identity, helping the development of a sense of place for visitors. Dozens of photos captured "contrast" in the urban context (see Fig. 5 for examples), which mainly included views of modernist and historic architecture next to one another. This urban contrast is very contextual, and important for students to realise, as in later years their focus will be solely on one building to design, or one architectural style to learn about.

The focus of the photos taken by first-year architecture students allows us to assume how laymen, who are already interested in architecture see the built environment during walking tours. This not only helps in the development of new tours but also give insight into which urban and architectural situations need to be highlighted in the context of BEE events. 20th century heritage and contemporary architecture could profit a lot from being valorised during BEE programs such as walking tours.

The study was supplemented by researching the decade long tradition of organising walking tours at the Department of Urban Planning and Design, mapping dozens of previous itineraries. The 88 different urban walks of 11 seasons were geographically mapped and a database containing information about the walk leader, the title of the tour and the main focus of the walk was created. By mapping the themes of all walks (see Fig. 6) the spatial distribution of the itineraries can be categorised. The Inner City of Pest is the most popular (red). The line of the Grand Boulevard of Pest is not crossed in the Erzsébetváros walks (purple), but it is regularly crossed in Józsefváros and Ferencváros walks (green and blue colours), since the latter two districts are home to the largest urban rehabilitation projects of the city.



Fig. 5 Examples of photos of "contrast" taken by participating students during the walking tours (Source: Klaniczay, J.)

On the Buda side tours focus on the contemporary architecture in the historical Castle District (yellow), or the new developments towards Lágymányos (brown). The uneven spatial distribution can be explained with the time limits of the course, setting the need to stay in close range of campus. The focus on Pest is due to the diverse and heterogeneous urban heritage, that is important to show to first-year students. Many tours for older students during their education take place further away in the city. The mapping of all tours is also good feedback for the department to develop their tours and find new itineraries if necessary (for example in Újbuda and Szentimreváros).

The influence of the guides in the creation of sense of place during architectural walking tours is also an important aspect to discuss. The walk leaders in this study were not professionally trained guides, but professional architects and university lecturers, deeply invested in education. Their approach to the built environment and architectural heritage is based on their profession, so the communication about the urban context was authentic in a professional sense. The guides were not necessarily personally connected to the neighbourhood where the walk took place, but had a profound knowledge of the districts history and heritage. The professional approach of the guides had a clear effect on the authenticity of the tours (considering the architectural focus), as it is also shown in the results of the questionnaire.

7 Conclusions

This research paper aimed to examine the potential of thematic architectural walking tours in the context of built environment education, by analysing the experience of tour participants. After examining hundreds of

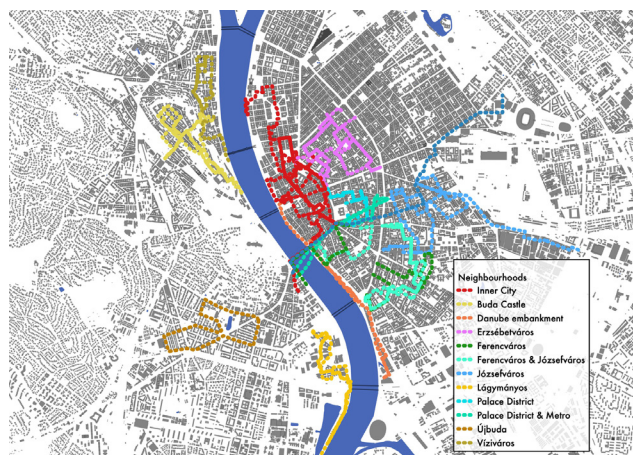


Fig. 6 Map of 88 walking tours organised by the Department between 2011–2022 categorised based on their theme and geographic focus (Source and graphics: Klaniczay, J.)

geo-tagged photos taken during walking tours certain elements of the physical context could be identified as a focus of interest, such as historical architecture, ornate details, towers, or urban paintings. The results of a questionnaire pointed out how thematic walking tours have the capability to influence the sense of place and place attachment of participants.

A limit of the study is the lack to consider the qualities of the guide, which play an important role in the experience as interpreters of the cultural and physical context, but as all guides were colleagues of the department a general level of confidence was given to the guides by the author. Another limit is the bias of participants, who are students of the department taking an obligatory course in their first-year. The study would benefit from a further control study organised 5–years later with the same students, which would show how architectural education changes the perception of the built environment. Equally, further focus groups should be examined to fully map the potentials of built environment education.

The outcome of the study is a valuable contribution to the research of urban tourism and built environment education as well. The approach of academics when researching walking tours is mostly from a

tourism context, even when inspecting the participation of locals, while this study shows a new perspective of built environment education to examine the phenomena. Furthermore, the development of sense of place and place attachment is an important element for urban sustainability. Reaching this goal with architectural valorisation has also the effect of maintaining our built heritage. The urban walk genre is not only about guiding tourists through the world of urban heritage but is also an experiential educational genre accessible to all age groups and an urban development tool with a scientific context, which plays an important role in the development of a sense of place among locals, thus promoting sustainable neighbourhoods and sustainable tourism.

Acknowledgement

Supported by the **ÚNKP-22-3-II-BME-262** New National Excellence Program of the Ministry for Culture and Innovation from the source of the National Research, Development and Innovation Fund.

The author would like to thank the walk leaders and tour participants, and especially prof. Melinda Benkő Benkő (2022) who contributed vastly to the realisation of this study.

References

- Alföldi, G., Benkő, M., Sonkoly, G. (2019) "Managing urban heterogeneity: a Budapest case study of historical urban landscape", In: Roders, A. P., Bandarin, F. (eds) *Reshaping Urban Conservation: The Historic Urban Landscape Approach in Action*, Springer, pp. 149–166. ISBN 978-981-10-8886-5
https://doi.org/10.1007/978-981-10-8887-2_8
- Amaratunga, D., Baldry, D., Sarshar, M., Newton, R. (2002) "Quantitative and qualitative research in the built environment: application of "mixed" research approach", *Work Study*, 51(1), pp. 17–31.
<https://doi.org/10.1108/00438020210415488>
- Arin, S. (2014) "Built environment education for children through architectural workshops", *Procedia – Social and Behavioral Sciences*, 143, pp. 35–39.
<https://doi.org/10.1016/j.sbspro.2014.07.353>
- Bairner, A. (2011) "Urban walking and the pedagogies of the street", *Sport, Education and Society*, 16(3), pp. 371–384.
<https://doi.org/10.1080/13573322.2011.565968>
- Barlett, P. F. (2002) "The Emory University campus walking tour: awakening a sense of place", *International Journal of Sustainability in Higher Education*, 3(2), pp. 105–112.
<https://doi.org/10.1108/14676370210422339>
- Bene, B. (2020) "Hajléktalan emberek térbeli mobilitása – térképalapú elemzés a Práter utcai nappali melegedőben felvett kérdőívek alapján", (*Spatial Mobility of Homeless People – Map analysis based on questionnaires from the Práter street's day center*), *Tér És Társadalom*, 34(3), pp. 193–223. (in Hungarian)
<https://doi.org/10.17649/TET.34.3.3256>
- Benkő, M. (2011) "Budapest urban blocks and their sustainability", *Architektúra and Urbanizmus*, 45(3–4), pp. 186–199. [online] Available at: https://www.researchgate.net/publication/293366684_Budapest_urban_blocks_and_their_sustainability [Accessed: 22 March 2024]
- Benkő, M. (2022) "Walking tours of the department of urban planning and design at BME", [interview] interviewed by Klaniczay, J., Department of Urban Planning and Design at Budapest University of Technology and Economics, [19 Sept 2022].
- Benkő, M., Antypenko, H., Losonczy, A. K. (2021) "Contemporary food markets within Budapest's large housing estates: factors influencing the design process", *Architecture Papers of the Faculty of Architecture and Design STU*, 26(1), pp. 10–19.
<https://doi.org/10.2478/alfa-2021-0003>
- Bernardo, F., Almeida, J., Martins, C. (2017) "Urban identity and tourism: different looks, one single place", *Proceedings of the Institution of Civil Engineers: Urban Design and Planning*, 170(5), pp. 205–216.
<https://doi.org/10.1680/jurdp.15.00036>
- Bertyák, Á. (2021) "Urban morphology: the classical and modern research methodologies", *Periodica Polytechnica Architecture*, 52(2), pp. 135–145.
<https://doi.org/10.3311/ppar.17988>
- Bitušíková, A. (2020) "Cultural heritage-based urban festival as a tool to promote local identity and city marketing: The case of the Radvaň fair in Banská Bystrica, Slovakia", *Narodna Umjetnost*, 57(2), pp. 131–146.
<https://doi.org/10.15176/vol57no207>

- Bornioli, A., Parkhurst, G., Morgan, P. L. (2018) "The psychological wellbeing benefits of place engagement during walking in urban environments: a qualitative photo-elicitation study", *Health and Place*, 53, pp. 228–236.
<https://doi.org/10.1016/j.healthplace.2018.08.018>
- Borucka, J. (2019) "City walk: a didactic innovative experiment in architectural education", *World Transactions on Engineering and Technology Education*, 17(2), pp. 158–163. [online] Available at: <https://mostwiedzy.pl/pl/publication/city-walk-a-didactic-innovative-experiment-in-architectural-education,152531-1> [Accessed: 22 March 2024]
- Burckhardt, L. (2015) "Why is landscape beautiful?" Birkhäuser. ISBN: 9783035604078
<https://doi.org/10.1515/9783035604139>
- Cresswell, T. (2009) "Place", In: Kitchin, R., Thrift, N., (eds.) *International Encyclopedia of Human Geography*, Elsevier, London, UK, pp. 169–177. [pdf] Available at: <https://booksite.elsevier.com/brochures/hugy/SampleContent/Place.pdf> [Accessed: 22 March 2024]
- Díaz-Soria, I. (2017) "Being a tourist as a chosen experience in a proximity destination", *Tourism Geographies*, 19(1), pp. 96–117.
<https://doi.org/10.1080/14616688.2016.1214976>
- Ehmann, G. (2018) "Tematikus budapesti séták a kulturális turizmusban, avagy 'turistaként' itthon", (Thematic Budapest Walks in Cultural Tourism, or "as a tourist" at home) Level (MSc) Budapest Corvinus Egyetem. (in Hungarian)
- Ellard, C. (2015) "Places of the heart: the psychogeography of everyday life", Bellevue literary press. ISBN 9781942658009
- Ellard, C. (2023) "How to appreciate buildings", Psyche.Co. [online] Available at: <https://psyche.co/guides/how-to-appreciate-buildings-by-tuning-into-them-more-deeply> [Accessed: 22 March 2024]
- Galí, N., Aulet, S. (2019) "Tourists' space–time behavior in heritage places: comparing guided and nonguided visitors", *International Journal of Tourism Research*, 21(3), pp. 388–399.
<https://doi.org/10.1002/jtr.2270>
- Garrod, B. (2008) "Exploring place perception a photo-based analysis", *Annals of Tourism Research*, 35(2), pp. 381–401.
<https://doi.org/10.1016/j.annals.2007.09.004>
- Harris, N. R. (2004) "Experiential learning in built environment education", *Cebe Transactions*, 1(1), pp. 3–7. [pdf] Available at: <https://orca.cardiff.ac.uk/id/eprint/32170> [Accessed: 22 March 2024]
- Hart, P., Nolan, K. (1999) "A critical analysis of research in environmental education", *Studies in Science Education*, 34(1), pp. 1–69.
<https://doi.org/10.1080/03057269908560148>
- Hartmann, G. (2022) "Rekonstrukció, újrafelhasználás és bontás" (Reconstruction, repurposing and deconstruction), *Építés – Építészettudomány*, 50(1–2), pp. 169–207. (in Hungarian)
<https://doi.org/10.1556/096.2021.00059>
- Hill, S. (2012) "Business at the intersection of tourism and culture: an ethnography of alternative tourism companies in Budapest, Hungary", Level (MA) Central European University. [pdf] Available at: http://www.etd.ceu.hu/2012/hill_susan.pdf [Accessed: 22 March 2024]
- Hillnhütter, H. (2022) "Stimulating urban walking environments – can we measure the effect?", *Environment and Planning B: Urban Analytics and City Science*, 49(1), pp. 275–289.
<https://doi.org/10.1177/23998083211002839>
- Hoogendoorn, G., Hammett, D. (2020) "Resident tourists and the local 'other'", *Tourism Geographies*, 23(5–6), pp. 1021–1039.
<https://doi.org/10.1080/14616688.2020.1713882>
- Hughes, W. (2010) "Built environment education, research and practice: integrating diverse interests to make an impact", In: *West Africa Built Environment Research (WABER) Conference*, Accra, Ghana, pp. 1–8. [online] Available at: <https://centaur.reading.ac.uk/18433/> [Accessed: 22 March 2024]
- Imamoglu, Ç. (2000) "Complexity, liking and familiarity: architecture and non-architecture Turkish students' assessments of traditional and modern house facades", *Journal of Environmental Psychology*, 20(1), pp. 5–16.
<https://doi.org/10.1006/jevp.1999.0155>
- Jász, B. (2018) "Hidden modernism: architecture theory of the socialist realist gap", *Periodica Polytechnica Architecture*, 49(1), pp. 92–97.
<https://doi.org/10.3311/ppar.12168>
- Jeuring, J. H. G., Haartsen, T. (2017) "The challenge of proximity: the (un)attractiveness of near-home tourism destinations", *Tourism Geographies*, 19(1), pp. 118–141.
<https://doi.org/10.1080/14616688.2016.1175024>
- Kádár, B. (2014) "Measuring tourist activities in cities using geotagged photography", *Tourism Geographies*, 16(1), pp. 88–104.
<https://doi.org/10.1080/14616688.2013.868029>
- Kádár, B., Gede, M. (2013) "Where do tourists go? Visualizing and analysing the spatial distribution of geotagged photography", *Cartographica*, 48(2), pp. 78–88.
<https://doi.org/10.3138/carto.48.2.1839>
- Kádár, B., Klaniczay, J. (2022) "Branding built heritage through cultural urban festivals: an instagram analysis related to sustainable co-creation, in Budapest", *Sustainability*, 14(9), 5020.
<https://doi.org/10.3390/su14095020>
- KÉK (2023) "KÉK – Hungarian contemporary architecture centre website", [online] Available at: <http://kek.org.hu/en/kekrol/#a-kek> [Accessed: 22 March 2024]
- Klaniczay, J. (2014) "Hello turiszt! gyalog in Budapest", (Hello Tourist, Budapest by Foot), *Budapesti Műszaki és Gazdaságtudományi Egyetem*. [online] Available at: <https://tdk.bme.hu/EPK/DownloadPaper/Hello-Turiszt> [Accessed: 22 March 2024] (in Hungarian)
- Klaniczay, J. (2021) "Measuring the architectural experience: comparing the '50s and the '70s using urban walking tours", In: Benkő, M. (ed.), *DOCONF2021 – Facing post-socialist urban heritage: Proceedings*, Budapest, Hungary, pp. 194–205. ISBN 978-963-421-864-7 [pdf] Available at: http://doconf.architect.bme.hu/post/doconf2021_11.pdf [Accessed: 22 March 2024]
- Klaniczay, J. (2022a) "14+ Budapest : városi séták gimnazistáknak 2022" (14+ Budapest: Walking Tours for High School Students), *Építészforum*. [online] Available at: <http://epiteszforum.hu/14-budapest-varosi-setak-gimnazistaknak-2022> [Accessed: 22 March 2024] (in Hungarian)
- Klaniczay, J. (2022b) "The resilience of proximity tourism during the pandemic : local walking tours of Budapest", *International Journal of Tour Guiding Research*, 3(1), Article 3.
<https://doi.org/10.21427/hj3y-9g86>

- Kudryavtsev, A., Krasny, M. E., Stedman, R. C. (2012a) "The impact of environmental education on sense of place among urban youth", *Ecosphere*, 3(4), pp. 1–15.
<https://doi.org/10.1890/es11-00318.1>
- Kudryavtsev, A., Stedman, R. C., Krasny, M. E. (2012b) "Sense of place in environmental education", *Environmental Education Research*, 18(2), pp. 229–250.
<https://doi.org/10.1080/13504622.2011.609615>
- Kwasek, M., Piwek, A. (2020) "Supporting study tours in the teaching of architectural heritage", *World Transactions on Engineering and Technology Education*, 18(4), pp. 479–484. [online] Available at: <https://mostwiedzy.pl/en/publication/supporting-study-tours-in-the-teaching-of-architectural-heritage,153760-1> [Accessed: 22 March 2024]
- Lalli, M. (1988) "Urban identity", In: Canter D., Jesuino, J. C., Soczka, L., Stephenson, G. M. (eds.) *Environmental Social Psychology*, Springer, pp. 303–311. ISBN 978-94-009-2802-2
https://doi.org/10.1007/978-94-009-2802-2_26
- Larsen, J., Widtfeldt Meged, J. (2013) "Tourists co-producing guided tours", *Scandinavian Journal of Hospitality and Tourism*, 13(2), pp. 88–102.
<https://doi.org/10.1080/15022250.2013.796227>
- Locsmándi, G., Szabó, Á. (2007) "Guidebook for an urban ecological tour on housing in the city of Budapest", Technical University of Budapest, Faculty of Architecture, Department of Urban Planning and Design, Budapest, Hungary, [pdf] Available at: https://urb.bme.hu/segedlet/angol/professional_tour_on%20housing_in_BP.pdf [Accessed: 22 March 2024]
- Markwell, K., Stevenson, D., Rowe, D. (2004) "Footsteps and memories: interpreting an australian urban landscape through thematic walking tours", *International Journal of Heritage Studies*, 10(5), pp. 457–473.
<https://doi.org/10.1080/1352725042000299063>
- Mavini, C. (2020) "Redefining city experiences and thematic city walks: the case of "Thessaloniki walking tours"", In: Kavoura, A., Theodoridis, P., Kefallonitis, E. (eds.), *Strategic Innovative Marketing and Tourism*, Springer, Cham, pp. 225–233. ISBN 978-3-030-36125-9
https://doi.org/10.1007/978-3-030-36126-6_25
- Meggyesi, T. (2012) "Promenadológia: fejezetek egy új tudományághoz", (Promenadology: Chapters for a new science), Utóirat: A Régi-Új Magyar Építőművészet, 12(68), pp. 8–21. (in Hungarian)
- Meggyesi, T. (2013) "Promenadológia: Fejezetek a séta és a lineáris látványelemzés elméletéhez", (Promenadology: chapters to the theory of linear sight analysis), Építés - Építészettudomány, 41(1–2), pp. 145–189. (in Hungarian)
<https://doi.org/10.1556/EpTud.41.2013.1-2.6>
- Meggyesi, T. (2016) "Promenadológia: a séta költészete az urbanisztikában" (Promenadology: The Poetry of Walking in Urbanistics), Utóirat: A Régi-Új Magyar Építőművészet, 16(87), pp. 57–62. (in Hungarian)
- Middleton, J. (2010) "Sense and the city: exploring the embodied geographies of urban walking", *Social and Cultural Geography*, 11(6), pp. 575–596.
<https://doi.org/10.1080/14649365.2010.497913>
- Morris, R. V. (2006) "The land of hope: third-grade students use a walking tour to explore their community", *The Social Studies*, 97(3), pp. 129–132.
<https://doi.org/10.3200/TSSS.97.3.129-132>
- Ormond, M., Vietti, F. (2021) "Beyond multicultural 'tolerance': guided tours and guidebooks as transformative tools for civic learning", *Journal of Sustainable Tourism*, 30(2–3), pp. 533–549.
<https://doi.org/10.1080/09669582.2021.1901908>
- Peng, J., Strijker, D., Wu, Q. (2020) "Place identity: how far have we come in exploring its meanings?", *Frontiers in Psychology*, Volume 11, Article 294.
<https://doi.org/10.3389/fpsyg.2020.00294>
- Proshansky, H. M. (1978) "The city and self-identity", *Environment and Behavior*, 10(2), pp. 147–169.
<https://doi.org/10.1177/0013916578102002>
- Rátz, T. (2017) "'Be global, go local'-innovation and creativity in the development of alternative guiding services in Budapest", *Journal of Tourism and Cultural Change*, 15(5), pp. 476–489.
<https://doi.org/10.1080/14766825.2016.1189558>
- Romagosa, F. (2020) "The COVID-19 crisis: opportunities for sustainable and proximity tourism", *Tourism Geographies*, 22(3), pp. 690–694.
<https://doi.org/10.1080/14616688.2020.1763447>
- Salmela, T., Nevala, H., Nousiainen, M., Rantala, O. (2021) "Proximity tourism: a thematic literature review", *Finnish Journal of Tourism Research*, 17(1), pp. 46–63.
<https://doi.org/10.33351/mt.107997>
- Shamai, S., Ilatov, Z. (2005) "Measuring sense of place: methodological aspects", *Tijdschrift Voor Economische En Sociale Geografie*, 96(5), pp. 467–476.
<https://doi.org/10.1111/j.1467-9663.2005.00479.x>
- Shoval, N., Schvimer, Y., Tamir, M. (2018) "Tracking technologies and urban analysis: adding the emotional dimension", *Cities*, 72(1240), pp. 34–42.
<https://doi.org/10.1016/j.cities.2017.08.005>
- Sidaway, J. D. (2022) "Psychogeography: walking through strategy, nature and narrative", *Progress in Human Geography*, 46(2), pp. 549–574.
<https://doi.org/10.1177/03091325211017212>
- Sirjani, A. H., Szabó, Á. (2021) "Perceiving liveability through the diverse aspects of walkability", *Periodica Polytechnica Architecture*, 52(1), pp. 46–53.
<https://doi.org/10.3311/ppar.16449>
- Smith, M., Puczkó, L. (2012) "Budapest: from socialist heritage to cultural capital?", *Current Issues in Tourism*, 15(1–2), pp. 107–119.
<https://doi.org/10.1080/13683500.2011.634898>
- Stylidis, D. (2018) "Place attachment, perception of place and residents' support for tourism development", *Tourism Planning and Development*, 15(2), pp. 188–210.
<https://doi.org/10.1080/21568316.2017.1318775>
- Szemerey, A. (2012) "Nagyvárosi séták", (Big City Walks), Level (MA), Eötvös Lóránd Tudományegyetem. [pdf] Available at: http://lazarus.elte.hu/hun/digkonyv/szakdolgo/szemerey_anna-2012.pdf [Accessed: 22 March 2024] (In Hungarian)

- Szőke, T. (2022) "Önkéntes koordináció és önkéntesség a Budapest100 programban", (Volunteer coordination and volunteering in the Budapest100 program), *Önkéntes Szemle*, (3), pp. 97–115. [online] Available at: <https://www.onkentesszemle.hu/szoke-onkentess-koordinacio-es-onkentesség-a-budapest100-programban/> [Accessed: 22 March 2024] (in Hungarian)
- Tweed, C., Sutherland, M. (2007) "Built cultural heritage and sustainable urban development", *Landscape and Urban Planning*, 83(1), pp. 62–69.
<https://doi.org/10.1016/j.landurbplan.2007.05.008>
- Urbán, C. (2015) "Alternatív városnézés Budapesten, mint új kihívás az idegenforgalmi szakma számára", (Alternative walking tours in budapest as a new challenge for the tourism industry), Level (BA), Budapest Gazdasági Főiskola, [pdf] Available at: http://dolgozattar.repozitorium.uni-bge.hu/4742/1/Urban_Cintia_W3GN3I_szakdolgozat.pdf [Accessed: 22 March 2024] (in Hungarian)
- Uttke, A. (2012) "Towards the future design and development of cities with built environment education: experiences of scale, methods, and outcomes", *Procedia – Social and Behavioral Sciences*, 45, pp. 3–13.
<https://doi.org/10.1016/j.sbspro.2012.06.537>
- Willson, G. B., McIntosh, A. J. (2007) "Heritage buildings and tourism: an experiential view", *Journal of Heritage Tourism*, 2(2), pp. 75–93.
<https://doi.org/10.2167/jht024.0>
- Yang, Y., Wang, S., Cai, Y., Zhou, X. (2022) "How and why does place identity affect residents' spontaneous culture conservation in ethnic tourism community? A value co-creation perspective", *Journal of Sustainable Tourism*, 30(6), pp. 1344–1363.
<https://doi.org/10.1080/09669582.2021.1945070>
- Yi'En, C. (2014) "Telling stories of the city: walking ethnography, affective materialities, and mobile encounters", *Space and Culture*, 17(3), pp. 211–223.
<https://doi.org/10.1177/1206331213499468>
- Zillinger, M., Nilsson, J.-H. (2022) "Learning on guided tours", In: Jernsand, E. M., Persson, M., Lundberg, E. (eds.), *Tourism, Knowledge and Learning*, Routledge, pp. 40–57. ISBN 9781003293316
<https://doi.org/10.4324/9781003293316-4>