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Publication date

**Document Version**Final published version

Published in

LDE Heritage Conference on Heritage and the Sustainable Development Goals

Citation (APA)

Pintossi, N., Ikiz Kaya, D., & Pereira Roders, A. (2021). Adaptive Reuse of Cultural Heritage in Amsterdam: Identifying Challenges and Solutions through the Historic Urban Landscape Approach. In U. Pottgiesser, S. Fatoric, C. Hein, E. de Maaker, & A. Pereira Roders (Eds.), *LDE Heritage Conference on Heritage and the Sustainable Development Goals: Proceedings* (pp. 304-314). TU Delft Open.

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## Adaptive Reuse of Cultural Heritage in Amsterdam: Identifying Challenges and Solutions through the Historic Urban Landscape Approach

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#### Abstract

The conservation of cultural heritage through its adaptive reuse contributes to the transition towards circular cities enhancing urban liveability and tackles challenges such as resource scarcity (UN SDG target 11.4) and waste prevention(UN SDG target 12.5). By regenerating heritage resources and maintaining their values over time, adaptive reuse comes out as a circular practice that can boost wellbeing and create new values, e.g. spill over effects. Currently, the knowledge on challenges affecting cultural heritage adaptive reuse is limited in scope, geographical area, and stakeholders' contribution. This study thus seeks to address such limitations by identifying what challenges cultural heritage adaptive reuse entails and how to overcome them. This identification uses the steps of the holistic and integrated approach set forward by the 2011 UNESCO Recommendation on the Historic Urban Landscape. This study is based on a case study analysis entailing a workshop in the City of Amsterdam. A wide range of [46] stakeholders from the public, private, and civic sectors participated. The qualitative dataset was analysed through content analysis revealing that the identified challenges mainly concern the domains of knowledge, interest, and civic engagement. In sum, this study provides insights in cultural heritage adaptive reuse practices by enabling a better understanding of their challenges from multi-stakeholders' perspectives. This research also raises awareness on challenges and sets out the basis for further developing solutions and tools to overcome them facilitating the transition from a reactive towards a proactive attitude in adaptive reuse practices.

#### Keywords

 $A daptive\ reuse, Amsterdam, Challenge\ and\ Solution\ Analysis,\ Cultural\ heritage, Historic\ Urban\ Landscape\ approach.$ 

## 1 INTRODUCTION

The conservation of cultural heritage contributes to urban liveability while tackling global challenges such as resource scarcity and waste prevention (United Nations General Assembly, 2015). The conservation and management of heritage resources is a challenging task, entailing a wide range of methods and approaches to support it (Pereira Roders, 2019), including adaptive reuse (Machado, 1976 and Jessen & Schneider, 2003 in Plevoets & Van Cleempoel, 2012).

Cultural heritage adaptive reuse is "a strategy that extends the building's physical and social functions by giving the building a new purpose while conserving its historic and cultural significance" (Conejos, Langston, Chan, & Chew, 2016, p. 508). This practice aligns with circular economy goals by managing, transforming, and reusing heritage resources and related values to generate well-being (Ellen MacArthur Foundation, 2016; Homrich, Galvão, Abadia, &

Carvalho, 2018; Kirchherr, Reike, & Hekkert, 2017). Thus, cultural heritage adaptive reuse can bring positive impacts to both heritage conservation and sustainable urban development while preventing waste production.

Despite these potential positive impacts, the current knowledge on challenges affecting cultural heritage adaptive reuse is limited in scope, geographical setting, and stakeholders' contributing to their identification (Conejos et al., 2016). Therefore, the present study seeks to provide a baseline identifying those challenges and solutions to address them considering the City of Amsterdam, The Netherlands, as a case study. The data collection was carried out during the Historic Urban Landscape (HUL) workshop devoted to this investigation within the CLIC project ("Circular models leveraging investments in Cultural Heritage Adaptive Reuse"). A broader base of stakeholders was involved in this HUL workshop acknowledging the demands for participatory approaches in heritage management as suggested in policy documents such as the Faro Convention and the 2011 UNESCO Recommendation on the Historic Urban Landscape (Council of Europe, 2005; UNESCO, 2011b). Furthermore, the adoption of the HUL approach (UNESCO, 2011b) as a framework for the identification of challenges and solutions meant a holistic and integrated assessment of cultural heritage adaptive reuse.

## 2 METHODOLOGY

The identification of those challenges and their possible solutions is drawn from content analysis. The qualitative dataset analysed was collected during the HUL workshop held in the City of Amsterdam in 2018.

Participants to the HUL workshop identified challenges and solutions using an investigation framework based on the six steps of the HUL approach (HUL steps; Table 1) (UNESCO, 2011a).

HUL STEP SHORT NAME	HUL STEP DESCRIPTION	HUL STEP CODE
Mapping	Mapping natural, cultural, and human resource	HUL1
Consensus	Reaching consensus on what values and related attributes to protect	HUL2
Vulnerability	Assessing the vulnerability of the identified values and related attributes to change and development	HUL3
Integrate	Integrating values, related attributes, and their vulnerability in urban development framework	HUL4
Prioritize or Prioritization	Prioritizing actions for conservation and development	HUL5
Partnership	Establishing local partnerships and management frameworks for each of the actions	HUL6

TABLE 1 HUL steps used by the participants as a framework to identify challenges in cultural heritage adaptive reuse and possible solutions to them. Source: HUL step description adapted from (Gravagnuolo & Girard, 2017; WHITRAP; City of Ballarat, 2016)

Besides, the identification was performed as a multi-scale investigation focusing on Pakhuis de Zwijger for the site scale; the City of Amsterdam for the urban scale; and "elsewhere" to let participants contribute specifying other scales or contexts. Particularly, Pakhuis de Zwijger, a former warehouse run by a foundation member of the CLIC project, was chosen because it exemplifies a cultural heritage adaptive reuse implementing sustainable strategies.

A variety of backgrounds in terms of professions, disciplines, and provenance were represented in the HUL workshop allowing for a cross-disciplinary identification of challenges and solutions. Particularly, this workshop involved 40 participants coming from the public, private, and civic sectors, and 6 facilitators. Most of these participants were representatives of the Municipality of Amsterdam, NGOs, developers active within the City of Amsterdam, and national and international researchers, whereas some of them were practitioners. Facilitators were academics moderating roundtable discussion.

To gain a broad overview of the challenges and solutions, the HUL workshop was structured adapting the World Café method, i.e. group dialogues answering questions by harvesting the collective knowledge (Brown, Isaacs, & The World Café Community, 2005). This workshop started with a session aiming at circulating knowledge among participants about the City of Amsterdam and Pakhuis de Zwijger. Afterwards, the participants worked in teams to identify challenges and solutions, by focusing on one HUL step in each of the six rounds of roundtable discussion. During this discussions, 353 participants' contributions-validated by consensus among participants- were noted down by the facilitators constituting the data (hereinafter, contributions) analysed in the present study.

Time of coding	Type of coding	Coded variable	Type of analysis
Workshop	Deductive (coded by participants)	<ul> <li>HUL step: mapping, consensus, vulnerability, integrate, prioritize, partnership</li> <li>Scale: Pakhuis de Zwijger, Amsterdam, Elsewhere</li> <li>Type of contribution: challenge, solution</li> </ul>	Frequency
Desk work	Deductive (coded by participants and author; peer reviewed by other authors)	<ul> <li>HUL steps: mapping, consensus, vulnerability, integrate, prioritize, partnership</li> <li>Scale: Pakhuis de Zwijger, Amsterdam, General, Not stated</li> <li>Type of contribution: challenge, solution, not stated</li> </ul>	Frequency
	Inductive (coded by author; peer reviewed by other authors)	• Factors	Frequency and thematic synthesis

FIG. 1 Content analysis (Krippendorff, 1980): coding process and analysis techniques.

This qualitative sample was cleaned and prepared for content analysis excluding the contributions that miss to explicitly referring to a challenge or a solution. For example, "the fabric of the old City of Amsterdam vulnerable, challenges are: overcrowding by tourism (...)" was retained, whereas "tourism" was excluded lacking a characterization as either a challenge or a solution. In the end, a reduced sample of 249 contributions (hereinafter, dataset) was analysed. This dataset constituted the corpus of a manifest analysis with inductive and deductive coding as well as a frequency and thematic synthesis (Fig. 1) (Bengtsson, 2016; Krippendorff, 1980; Thomas & Harden, 2008). Particularly, the coding used in the HUL workshop was adjusted to better fit the data content. For instance, "not stated" was added to code the scale-missing contributions (Fig. 1). Once coded the contributions and identified the themes, the challenges and solutions were analysed within each theme referring to the HUL steps to reveal patterns.

Throughout the remainder of this paper, challenges and solutions are collectively indicates as "factors". Specifically, direct quotes from contributions are indicated through their identification number, therefore "c.208-HUL1" indicates the "contribution 208" mentioned while discussing the "mapping" step.

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## 3 RESULTS

The analysed dataset includes at least the 56% of contributions per each HUL step, except for "integrate". For this step, only 3 out of 35 contributions satisfied the inclusion criterion (see Methodology and Fig. 1). The dataset (n=249) is described per HUL step, type of contribution, and scale in Fig. 2. For the "mapping" (HUL1) and "integrate" (HUL4), challenges are slightly more numerous than solutions. Solutions predominate for the "consensus" (HUL2) and "vulnerability" (HUL3), whereas the number of challenges and solutions is almost even for the "prioritization" (HUL5) and "partnership" (HUL6).

In terms of scale, most of the contributions do not refer to a specific scale or are general (n=242): only the 3% of contributions explicitly refer to the City of Amsterdam and there is no direct reference to Pakhuis de Zwijger. Hence, in reporting the results, the reference to the City of Amsterdam is made explicit, whereas no distinction is made between the general and the "not stated" scale.

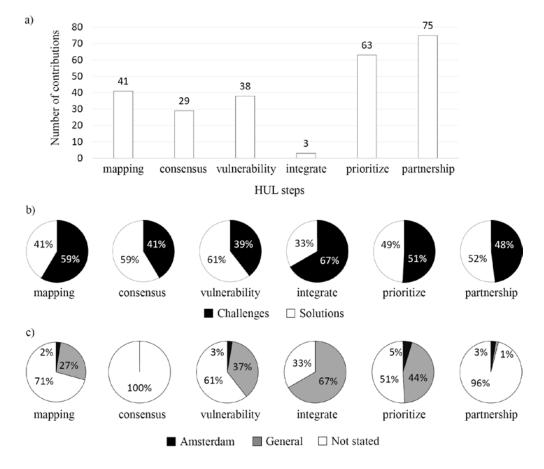


FIG. 2 Description of dataset analysed (n=249): distribution per a) HUL step; b) type of contribution per each HUL step; and c) scale per each HUL step.

To identify the factors, the dataset was inductively coded resulting in 61 themes (Fig. 3). The analysis revealed that the five most addressed themes refer to knowledge (n=28), civic engagement (n=24), interest (n=14), data (n=13), and approach (n=10). Factors related to civic engagement are associated

with the highest number of HUL steps, being identified in "mapping", "consensus", "vulnerability", "prioritize", and "partnership". Knowledge-related factors refer to "mapping", "consensus", "prioritization", and "partnership". Interest-related factors as well as approach-related ones affect "consensus", "prioritization", and "partnership". Data factors solely concerns "mapping". These five themes are described in more detail in the remainder of this section. However, relationship exist among these different themes independently from the type of contribution. For instance, the absence of interest is intertwined to challenges regarding civic engagement.

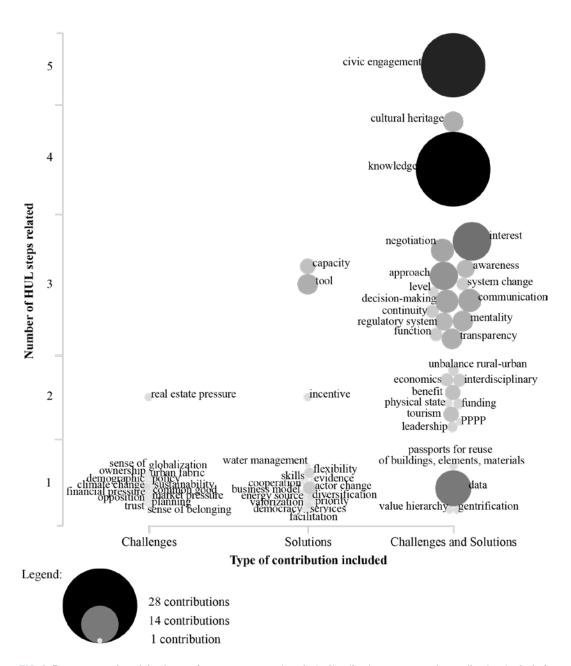


FIG. 3 Bee swarm plot of the factor themes representing their distribution per type of contribution included and per number of HUL steps in which they were revealed. The initial version of the chart was created using Rawgraphs.io

### 3.1 KNOWLEDGE

The knowledge theme refers to understanding of and information about cultural heritage, adaptive reuse, and their context. Overall, most of these contributions address "mapping" (n=19) independently from the type of contribution. Challenges mainly relate to lack of and access to knowledge, whereas solutions predominately refer to knowledge production and sharing. The lack of knowledge is reported for both tangible and intangible elements. At the tangible level, the absence of maps of vacant buildings is challenging both in general and within the City of Amsterdam (HUL1). At the intangible level, challenges are the lacking knowledge about values, perception, and needs of specific population groups, e.g. elderly and children (HUL1). Access to existing knowledge is challenging because of confidentiality issues (HUL1). Additional challenges are the time-consuming acquisition of information, and the knowledge gap between civic society and experts (HUL1). Over half of solutions concern knowledge production, acquisition, and dissemination also in terms of required tools to carry them out. For instance, to build a knowledge base, participants suggested "mapping the knowledge of society" (c.208-HUL1) and using roundtables, focus groups, perception data collections, and ICT tools. Knowledge is also lacking regarding opportunities and strategies for partnership creation. This challenge could be solved by producing and sharing knowledge on partnerships, for instance by "show[ing] good examples" (c.1238). Similarly, the knowledge-related solutions for prioritization refer to the dissemination of knowledge and best practices.

#### 3.2 CIVIC ENGAGEMENT

These contributions mostly mention the participation of a broad range of related stakeholders, as described in the 2011 UNESCO Recommendation on Historic Urban Landscape (UNESCO, 2011, article 24). Overall, civic engagement is slightly more associated with solutions. Both challenges and solutions mainly refer to adopting and implementing civic engagement processes within cultural heritage adaptive reuse. The civic engagement-related challenges are highly varied: they span from the lack of time and resources for participation (HUL6) to the idea that civic engagement is a hindrance in reaching consensus for development projects. It is also mentioned as a challenge that politicians do not necessarily recognize the value of participation(HUL2). An additional challenge is the process of identification and inclusion of all stakeholders (HUL5). Similarly, referring to the city of Amsterdam, participants pinpointed that citizens' willingness to take part in processes of cultural heritage adaptive reuse is limited to the "well-educated (...)" (c1172 - HUL6). This entail a problematic low representativeness of the civic society's diversity(HUL6). Another challenge is the lack of interaction between cultural heritage and "citizens" associated with their lack of involvement in mapping. To tackle this challenge, participants suggested involving citizens in mapping processes and implementing such a strategy by employing ICT platforms (HUL1). Analogously, digital platforms were identified as solution to "(...) facilitate cooperation and empower the civil society" (c.1189 - HUL6). Along with these digital tools, solutions also include the allocation of participatory budgets dedicated to heritage to create partnerships (HUL6) and "storytelling perceptive methods" (HUL 5). Also, participatory governance is suggested as civic engagement to reach consensus and to prioritize.

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#### 3.3 INTEREST

Interest is a twofold theme. Firstly, this theme addresses the concern resulting into willingness to participate in processes of cultural heritage adaptive reuse. Secondly, the theme addresses either benefits or advantages from adaptive reuse, both foreseen and derived. Interest-related factors are mainly challenges indicated as lacking,, conflicting, and prevailing interests of certain actors. Both these challenges are identified while discussing the processes of partnership creation (n=8) and building consensus (n=2). On the other hand, for "prioritization" (n=4),challenges solely relate to conflicting interests among actors and the dominance of some interests over others. For instance, the contraposition between the investors' interests and the ones put forward by communities and users (HUL5). Similarly, a divergence of interests was identified as a challenge for partnership as well as the "prevailing of external agendas" in attempting to reach consensus (c.392).

## 3.4 DATA

The data-related contributions completely focused on the mapping step, where two thirds of them mentioned challenges. These challenges predominantly relate to data management, mostly referring to already collected data. Data management presents issues at the level of interoperability and organization. For available data, challenges preventing their use are the lack of comparability among datasets, the lack of structure, and the fragmentation among different owners or people in charge. Furthermore, even once these fragmented data are collected, their merging is challenging due to its demand for "time and effort" (c.163). This fragmentation occurs at the local, national and European level. The only challenge identified for data collection is the adoption of an integrated approach while performing it. The suggested solutions mainly address the data management challenges by providing a framework for data acquisition and management; adopting a European standard to ensure data standardisation and interoperability; and using open data platforms that are interoperable and user-friendly.

## 3.5 APPROACH

Approach-related factors address the manners adopted in cultural heritage adaptive reuse. These factors, primarily solutions, are mainly identified discussing partnership (n=7). Such solutions advocate for a change in strategies and perspectives in favour of more collective and collaborative approaches. The only challenge concerns the competitive attitude within a sector hampering the creation of partnerships. Among solutions, participants pointed at favouring place making (HUL6) and sharing infrastructures, resources, and risk (HUL6). Particularly, sharing risks favours the creation of partnerships by decreasing the exposure of every single partner. Another solution mentions providing guidelines to change the decision-making approach to transformations brought by adaptive reuse (HUL6). Another suggestion has been the adoption of a business model perspective considering long-term investments and related returns of interests (HUL6). To build consensus, it is suggested a future-oriented approach and strategies based on "a common future instead of a common past" (c.380). In prioritization, solutions entail presenting "(...) heritage as an opportunity" (c. 996) and promoting self-management, -organization, and -government.

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#### 4 DISCUSSION

In literature, the existing knowledge on challenges encountered in cultural heritage adaptive reuse has either a highly specific or generic scope, (e.g. Conejos et al., 2016; Douglas, 2006). This knowledge is also often restrained to a specific geographical setting, (e.g. Bullen & Love, 2011; Conejos et al., 2016), such as Australia and Eastern Asia, or involves a limited variety of stakeholders in its production (Conejos et al., 2016). In this study, the methodology used to collect data addressed some of these limitations, and partially filled the gap on the European by context considering the City of Amsterdam as case study. This methodology incorporated the HUL approach, particularly the HUL steps, as a holistic and integrated framework to identify challenges and solutions. Furthermore, this identification was based on a participatory methodology, the HUL workshop, involving a broader and more varied spectrum of stakeholders. Hence, this study provides a baseline to inform actors, decision- and policy-makers about cultural heritage adaptive reuse challenges and solutions, mentioning 61 themes. Particularly, it was found that the most identified themes for both challenges and solutions relate to knowledge, civic engagement, interest, data, and approach.

This finding differs from previous studies that often revealed design and technical aspects as well as "compliance with codes and regulations" (Conejos et al., 2016, p. 515) as challenges in reuse (Bullen & Love, 2011; Conejos et al., 2016; Douglas, 2006). These challenges are still present in our analysis, but less frequently and in a more general formulation than the ones found in previous studies. These results are likely to be related to differences in stakeholders, methodology, and geographical setting. Specifically, the process-oriented, holistic, integrated character of HUL steps might have broadened the participants' focus partially shifting it from the design and technical aspects. In addition, this difference of thematic emphasis might also be explained by a growing interest in adaptive reuse potentially triggering the adoption of certain measures on design and technical challenges, thus they are less regarded as challenges as their solutions have been mainstreamed. At the same time, this difference might also reflect the evolution in the participants' understanding of cultural heritage. For example, the increased discussion of civic engagement-related factors could be explained by the rising interest towards participatory practices within the context of sustainable urban development and heritage management (Li, Krishnamurthy, Pereira Roders, & van Wesemael, 2020). Moreover, this difference could also echo current changes in urban and heritage management approaches. For instance, overtime, cultural heritage is being recognized as having a role in sustainable development and circular economy.

To encourage an integrated and holistic reflection in identifying challenges as well as solutions, the researchers gave a framework constituted by the HUL steps, which were singularly addressed in each table discussion. This seems having broadened up the participants' focus and drawn them to more process-oriented contributions, as discussed in the previous paragraph. However, the steps are sometimes intertwined and theme are cross-step, e.g. civic engagement. Hence, to stress the difference of thematic emphasis, the results were presented per theme and punctually related to the HUL steps. On one hand, this presentation reduces the impact of the fragmented use of the steps during the workshop. On the other hand, using the themes to report the results also allowed to cope with the bias derived from the inclusion of a minority of contributions about integrate in the analysed dataset. Furthermore, relations exist among challenges addressing different themes. The same interlinkage applies to solutions. Their fragmented reporting had been instrumental to their presentation. However, this interconnection advice for future approach of challenges as a united system and the same applies for solutions.

This study is a first step towards the creation of a baseline. The structure of the workshop allowed for a contextual validation of the results. However, since results depend on participants' reflections, it is advised to repeat the study. This repetition would allow to involve a higher number of stakeholders thus presenting results more generalizable for the City of Amsterdam. In addition, almost 75% of the contributions lack an explicit indication of a scale. This absence can be explained by the participants' implicit assumption of the scale since the data collection focused on the City of Amsterdam. However, while preforming the explicit content analysis, the lack of a scale was assimilated to a general statement. On this regard, future research could confirm on the applicability of these contributions to either the City of Amsterdam or Pakhuis de Zwijger or both. Despite facilitated discussions, a certain degree of bias might be present. On the one hand, participants and facilitators might have had their own interests, some anchoring themes might have been addressed at length, and more active participants might have steered the discussion. On the other hand, participants' multidisciplinary and variety of background enriched the identification while introducing uncertainty in the use of technical terms and lay language. However, providing a glossary was discarded to avoid involuntary constrains on the identification. To account for these terminology issue, participants' wording was used as much as possible in reporting the results, e.g. "citizens" and "civil society". Also, terms afferent to the same domain were clustered, e.g. "community engagement" and "civic engagement".

## 5 CONCLUSION

This study contributes to building a baseline about challenges encountered in cultural heritage adaptive reuse proposing solutions to address such challenges. The analysis for identifying these factors was based on data collected in a participatory, multidisciplinary, and multi-scale fashion adopting the HUL steps as an investigation framework. The prevailing themes of the identified challenges and solutions relate to knowledge, civic engagement, interest, data, and approach. These findings expand the list of challenges identified in previous studies. Furthermore, different challenges and solutions are interrelated therefore it seems advisable to approach them as a unified system. By providing knowledge on challenges and solutions to actors, particularly the expanded overview of challenges identified using the holistic and integrated framework offered by the HUL steps, we support the transition towards proactive practices. This baseline informs decision- and policy-makers on the current state of the art of challenges improving assessments and informing future decisions and policies related to cultural heritage adaptive reuse.

#### Acknowledgment

This work was performed within the framework of the European Union's Horizon 2020 research project called "CLIC - Circular models leveraging investments in cultural heritage adaptive reuse" which we thank. We gratefully acknowledge the help of Charlot Schans, Joey van Loo, and Carlijn Roovers of Pakhuis de Zwijger in organizing the workshop. We thank the participants of the workshop for contributing; Roelien van Steenbergen for assiting during the workshop; and dr. Gamze Dane, dr. Antonia Gravagnuolo, dr. Paloma Guzman Molina, and dr. Julia Rey-Pérez, for facilitating the round-table discussions together with APR and NP.

#### **Funding**

This research project was funded by the European Union's Horizon 2020 research and innovation programme [grant agreement number 776758].

#### References

- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. NursingPlus Open, 2, 8–14. https://doi.org/10.1016/J.NPLS.2016.01.001
- Brown, J., Isaacs, D., & The World Café Community. (2005). The World Café: Shaping our Future through Conversations that Matter. San Francisco, CA: Berrett-Koehler Publisher.
- Bullen, P., & Love, P. (2011). Factors influencing the adaptive re-use of buildings. *Journal of Engineering, Design and Technology*, 9(1), 32–46. https://doi.org/10.1108/17260531111121459
- Conejos, S., Langston, C., Chan, E. H. W. W., & Chew, M. Y. L. L. (2016). Governance of heritage buildings: Australian regulatory barriers to adaptive reuse. *Building Research and Information*, 44(5–6), 507–519. https://doi.org/10.1080/09613218.2016.1156
- Council of Europe. Council of Europe Framework Convention on the Value of Cultural Heritage for Society (2005). Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2014:477:FIN
- Douglas, J. (2006). Building Adaptation (Second). Butterworth-Heinemann.
- Ellen MacArthur Foundation. (2016). Intelligent Assets: Unlocking the Circular Economy Potential. Ellen MacArthur Foundation.

  Retrieved from http://www.ellenmacarthurfoundation.org/assets/downloads/publications/EllenMacArthurFoundation\_Intelligent\_Assets\_080216.pdf
- Gravagnuolo, A., & Girard, L. F. (2017). Multicriteria tools for the implementation of historic urban landscape. *Quality Innovation Prosperity*, 21(1), 186–201. https://doi.org/10.12776/QIP.V21I1.792
- Homrich, A. S., Galvão, G., Abadia, L. G., & Carvalho, M. M. (2018). The circular economy umbrella: Trends and gaps on integrating pathways. *Journal of Cleaner Production*, 175, 525–543. https://doi.org/10.1016/j.jclepro.2017.11.064
- Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. Resources, Conservation and Recycling, 127(September), 221–232. https://doi.org/10.1016/j.resconrec.2017.09.005
- Krippendorff, K. (1980). Content analysis: an introduction to its methodology. Sage commtext series. London: Sage.
- Li, J., Krishnamurthy, S., Pereira Roders, A., & van Wesemael, P. (2020). Community participation in cultural heritage management: A systematic literature review comparing Chinese and international practices. *Cities*, 96. https://doi.org/10.1016/j. cities.2019.102476
- Pereira Roders, A. (2019). The Historic Urban Landscape approach in action: Eight years later. In A. Pereira Roders & F. Bandarin (Eds.), Reshaping Urban Conservation. The Historic Urban Landscape Approach in Action (p. ND). Springer Singapore. https://doi.org/10.1007/978-981-10-8887-2
- Plevoets, B., & Van Cleempoel, K. (2012). Creating sustainable retail interiors through the reuse of historic buildings. *Interiors: Design, Architecture, Culture*, 3(3), 271–292. https://doi.org/10.2752/204191212X13470263747031
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. BMC Medical Research Methodology, 8(1), 45. https://doi.org/10.1186/1471-2288-8-45
- UNESCO. (2011a). Proposals concerning the desirability of a standard-setting instrument on historic urban landscapes. UNESCO.

  General Conference, 36th, 2011, 36 C/23 REV. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000211094
- UNESCO. Recommendation on the Historic Urban Landscape (2011). Retrieved from https://whc.unesco.org/en/hul/
- United Nations General Assembly. Transforming our world: The 2030 Agenda for sustainable development (2015). Retrieved from https://sustainabledevelopment.un.org/content/documents/21252030 Agenda for Sustainable Development web.pdf
- WHITRAP; City of Ballarat. (2016). T: Managing Heritage in Dynamic and Constantly changing Urban Environments: A Practical Guide to UNESCO's Recommendation on the Historic Urban Landscape.