

Public Participation as a Tool to reach a Consensus A Critical Reflection on the Historic Urban Landscape Approach

Foroughi, M.; Andrade, B.; Pereira Roders, A.

Publication date

Document Version Final published version

Published in

LDE Heritage Conference on Heritage and the Sustainable Development Goals

Citation (APA)

Foroughì, M., Andrade, B., & Pereira Roders, A. (2021). Public Participation as a Tool to reach a Consensus: A Critical Reflection on 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. 128-137). TU Delft OPEN Publishing.

Important note

To cite this publication, please use the final published version (if applicable). Please check the document version above.

Other than for strictly personal use, it is not permitted to download, forward or distribute the text or part of it, without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license such as Creative Commons.

Please contact us and provide details if you believe this document breaches copyrights. We will remove access to the work immediately and investigate your claim.

Public Participation as a Tool to reach a Consensus: A Critical Reflection on the Historic Urban Landscape Approach

Mahda Foroughi^{1*}, Bruno de Andrade², Ana Pereira Roders³

- * Corresponding author
- $1 \quad \text{TU Delft, The Netherlands, Julianalaan 134, 2628 BL, Delft, Netherland, m.foroughi@tudelft.nl} \\$
- 2 TU Delft, The Netherlands
- 3 TU Delft, The Netherlands

Abstract

World Heritage cities (WHC), meaning urban areas, often in part, inscribed at the UNESCO World Heritage list are valuable heritages to many local and global communities and, therefore, attract efforts to conserve them. Nonetheless, these cities are increasingly under pressure, by globalization, climate change, and tourism. An integral approach, interlinking urban development, and conservation, as proposed by the 2011 UNESCO Recommendation on the Historic Urban Landscape (HUL approach), foreseen to promote a more sustainable development. This means that public participation plays an essential role in consensus building among the varied stakeholders on related decision making processes, in particular on what is a heritage (attributes) in their city and why (values) to be conserved. The HUL approach underlines people's role by proposing public participation as a tool, recommending authorities to involve the community in their urban and heritage management processes. Being an international recommendation, the HUL approach does not specify a framework for public participation, nor reference the critical factors affecting the public participation processes, as these are expected to differ, depending on the context. It does reference the aim for consensus specificly to the cultural significance (attributes and values) of the city among all stakeholders. This paper aims to present the results of a part of a systematic literature review, revealing the knowledge and gaps in the state-of-the-art in studies that focus on public participation as a tool to reach consensus. The eligible studies were evaluated on four criteria: 1) context and field of the project, 2) public participation process, 3) consensus. Besides highlighting its conceptual complexities and contradictions, this paper also puts forward recommendations to guide future research. Results can be relevant for cities seeking public participation frameworks to implement the HUL approach.

Keywords

Public participation, consensus, World Heritage Cities, Historic Urban Landscape

1 INTRODUCTION

The 2011 UNESCO Recommendation on the Historic Urban Landscape (HUL approach) promotes a reform of heritage management. It proposes an integral approach, interlinking urban development and conservation. The HUL approach also promotes heritage as social capital (Bandarin and Van Oers, 2012; Sonkoly, G., 2017; Veldpaus and Roders, 2017) and proposes public participation as a tool, recommending the authorities to involve more and better the community.

Being an international recommendation, the HUL approach does not reference particular methods, actors, and the level of public participation. These are expected to vary according to the context, heritage, and community. Though it does recommend using public participation, in order to reach consensus among the stakeholders on what resources in their city ought to be conserved, named as attributes, and on why should these resources be conserved, named as values (Veldpaus and Roders,

2017). That is to say, while the attributes and values of the cities can differ from person to person, public participation is suggested as a tool to reach a consensus among the stakeholders on what and why resources should be listed as heritage. Determining the attributes and values contributes to setting limits of acceptable change, distinguishing areas in cities on their level of conservation, playing a significant role in the integration of urban development and conservation. As such, determining the attributes and values which are common by all stakeholders is essential.

Investigating consensus building in public participation processes is not only covered in heritage planning but also in other planning fields. This study focusses on researches examining the public participation process to reach consensus in urban planning, including heritage planning. Through a structured search of literature and further analysis, two questions and sub-questions are formulated, namely:

- What is the main focus of the literature on public participation and consensus building? What are their findings? What is the knowledge gap?
- What are the main factors of the public participation process affecting consensus building, and how are they developed?

In order to address these questions, eligible studies were evaluated on three criteria: 1) context and field of the project, 2) public participation process, 3) consensus.

2 METHODOLOGY

This paper is based on a systematic literature review (Boland & et al., 2017), comparing researches that focus on how to reach consensus on values and attributes in a public participation process. The main concepts are, respectively, consensus, values and attributes, and public participation.

2.1 SEARCH PROCESS

This research focused on the binary combination of consensus, values and attributes, and public participation. This paper specifically presents the results of selected publications combining the concepts of public participation and consensus, which covered around half of the total records gathered. These terms were complemented with other related concepts, such as community, public, citizen, local, actor, and stakeholder, in relation to the term public. The same was done for the concept participation, including related concepts as participation, engagement, and involvement. Conflict and consensus also were used to enrich the pool of papers focused on consensus.

The SCOPUS database was taken as the source, and the collection was limited to publications being classified as the fields: Social Sciences, Engineering, Environmental Science, and Arts and Humanities (total 405 records).

Records were excluded when they were not involving the public in the participation process (e.g., Caponio, 2018; Cho & Jung, 2018), nor when consensus building in public participation process would not be addressed (e.g., Blečić et al., 2007; Petrušonis, 2018). Moreover, full books have been excluded to keep the sample of publications comparable. Only accessible and English publications were chosen. Studies were assessed on the above inclusion and exclusion criteria by reading abstracts,

and if not clear from the abstract, the whole article was further reviewed. PRISMA was the mean to develop the systematic review and meta-analyses clearly and completely (Liberati et al., 2009). This study presents the search process in Fig. 1.

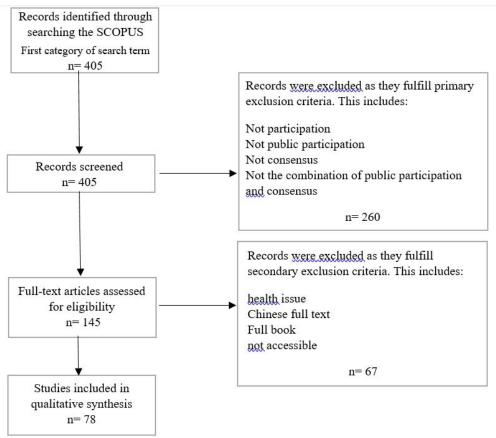


FIG. 1 PRISMA flow diagram; Overview of the number of eligible records in each step and exclusion criteria (consensus + public participation)

2.2 ASSESSMENT CRITERIA

After specifying the eligible studies (total 78 records), the literature was further reviewed on different subcategories within three domains: 1) Context and field of the project; 2) public participation process; 3) Consensus. First, the context and field of the project were sub-classified as (1) spatial planning, (2) infrastructure planning, and (3) political issues.

The geographical distribution of the projects was also specified. Second, public participation process was further detailed in relation to actors, methods, and levels of public participation. Each of these aspects has specific subcategories. The name and number of interest groups that participate in the project were specified. Methods are subcategorized to data collection and data analysis, distinguishing those which are Digital Technology (DT), Decision Making Support Model (DMSM), and Analog. The level of public participation (table 1) was classified according to the IAP2 (International Association for Public Participation) framework (IAP, 2007).

	Inform	Consult	Involve	Collaborate	Empower
Public participation goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision-making in the hands of the public.
Promise to the public	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.
Example techniques	Fact sheetsWeb sitesOpen houses	Public commentFocus groupsSurveysPublic meetings	WorkshopsDeliberative polling	 Citizen advisory committees Consensus- building Participatory decision- making 	Citizen juriesBallotsDelegated decision

TABLE 1 IAP2 public participation framework (2007)

The third criteria, consensus, was investigated concerning terminology and content. Accordingly, the word frequency and the terms used for the concept of consensus were identified and compared (see Table 2). Regarding the content, the records aim to reach a consensus or to guide to a consensus. The difference between these two approaches is further explored.

Context and field		public participation	consensus	
Africa/ Americ Europe/ Oceania	a/ Asia/	actor: selection criteria, interest groups	terminology: word frequency: agreement, compromise, convergence	
Spatial infrastructure political issues	planning/ planning/	tool: data collection, data analysis Level: based on IAP2 framework (1-5)	reach/guide to	

TABLE 2 Assessment domains and their subcategories

3 RESULTS

Most publications (92%) report on one or more case studies on public participation. Seven papers (8%) instead, report on theoretical aspects of public participation (e.g., Cecchini & Trunfio, 2007; Laurini, 1998).

3.1 CONTEXT AND FIELD OF THE PROJECT

The literature mostly does not provide enough information according to the context of the case studies and how it affects the process. Most research is conducted by the fields of spatial planning (67%), infrastructure planning (29%), and political management (4%). The case studies have different scales, ranging from neighborhood planning to urban development planning. These case studies are primarily located in Europe (39%), followed by America (32%) and Asia (20%), being Oceania (7%), and Africa (2%), the least researched continents.

3.2 PUBLIC PARTICIPATION PROCESS

Since the 1960s, public participation process has been the topic of a lot of studies and there were different approaches to it. In the following items, this paper discusses and compares the common issues in public participation processes in the literature.

3.2.1 Actors

The literature addresses four subjects according to the actor, including the number of the groups of actors participating in the project, public or private invitation, criteria of selection of the participants, and the role of different actors.

Most research details the groups of actors participating in their project (77%). Seldom is the research focused on only one group of actors (e.g., Balug & Vidart-Delgado, 2015). Most research includes two or more groups of actors. Beatley et al. (1994) involved the most actors, with nine interest groups. Sometimes, actors are limited to a specific social group, age, or gender (e.g., minority groups, young students, or women). Besides, in some case studies, each group of actors were involved in specific steps of the process and, as a result, had different levels of participation (Golobiĉ & Maruŝiĉ, 2007).

An open public invitation encouraging stakeholders to participate is the most common form of invitation (Manzi et al., 2018; Shen & Kawakami, 2007; Tudor et al., 2014). However, in a few cases, the potential participants are personally invited to take part in the process (e.g., Vlachokostas and et al., 2011; Shen & Kawakami, 2007).

Although the selection criteria of the participants are mentioned as a significant issue (Arciniegas & Janssen, 2012), there are just few research defining them (Finka et al., 2017; Gerasidi et al., 2009; Pérez-Soba et al., 2018; Starkl et al., 2013). For example, Gerasidi et al. (2009) defined three steps: (a) stakeholder mapping (identification of all potential stakeholders or stakeholder groups in the region, who affect or is affected by the project decisions); (b) assessment of stakeholder interests, positions and how these interests could be affected by project risk and viability; and (c) selection of different stakeholders to be involved in the study processes.

Public Participation as a Tool to reach a Consensus

The role of different actors, including planners and policymakers, and their influence in the success of the public participation process are only addressed by few scholars (e.g., Cheng, 2013; Purbani, 2017; Fahmi and et al., 2016; Maginn, 2007).

3.2.2 Level of public participation

Most of the literature (79%) provides information about the level of public participation though they do not directly mention that. Overall, nearly half of the case studies are in level three of the IAP2 (International Association for Public Participation) framework, involvement (48%), such as Van Empel(2008) and Gray et al. (2017). The rest are in level two, consultation (34%) (Tudor et al., 2014; Mohammadi, Norazizan and Nikkhah, 2018), and a few in level four, collaboration (18%) (Halla, 2005; Jaasma et al., 2017).

There were no researches reviewed on levels one and five. In other words, all the records go further than informing and at least consult with the stakeholders. But, they do not work on empowering participants, which means that they do not place the final decision at the hands of the public. Mostly (82%), the project manager keeps the power and makes the last decision, though considering the opinions of the participants. Only in a few records participants collaborate in decision making and consensus building.

3.2.3 Method

Most researchers either reference (21%) or investigate further (70%) the methods and tools of public participation. Concerning data collection, most of the projects used Analog methods alone (54%) or with combination to other methods (24%). DT methods are also used in the rest of the literature (22%). Semi-structured interviews and public hearing meetings (Yu et al., 2019), focus group meeting (e.g., Le Pira et al., 2017), public meeting (e.g., Engberg, 2018), role play, workshop (e.g., Thomas et al., 2018), public dinner, site visiting (e.g., Balug and Vidart-Delgado, 2015) are examples of Analog methods that have been used in the literature. These methods are also used in combination with other methods. Finka and his colleagues (Finka et al., 2017) present a five steps public participation procedure including a variety of methods and tools including focus groups, Public Participation Geoinformation Systems (DT), and voting or referenda (DMSM).

Among the researchers who detailed their data analysis methods, many used DMSM in their case studies, alone (26%) or with combination to other methods (48%), and few used only DT (14%) or Analog methods (12%). Delphi (Aigwi et al., 2019; Diaz et al., 2018; Jayasooriya et al., 2019) and AHP (Regan, Colyvan and Markovchick-Nicholls, 2006; Nordström et al., 2009; Diaz et al., 2018;) are the most common DMSM methods that have been used in the literature.

3.3 CONSENSUS

Consensus is a complex concept that can be seen from different points of view. In the following, the terminology and interpretation of the concept of consensus is explored.

3.3.1 Terminology

Public Participation as a Tool to reach a Consensus

The use of the term "consensus" ranged from once to 106 times. Other terms are also used for the concept of consensus, namely compromise, agree, agreement, and convergence. However, as they

were repeated in the records only a few times, the records can not be compared according to these terms. Hence, the goal was to investigate the relation between the frequency of consensus and the methods of public participation.

3.3.2 Reach/guide to a consensus

Consensus is often assumed as the goal of public participation processes (e.g., Bertolinelli et al., 2018; Engberg, 2018; Lebeau et al., 2018; Jayasooriya et al., 2019). While most of the records aim to reach a consensus, two scholars specify their aim as to guide to a consensus (Fahmi et al., 2016; Kato et al., 2008). In these cases, the decision was made before the public participation process, aiming to inform and persuade the stakeholders to agree with the decision. It is also worth noting that among the cases seeking a consensus, only a few (20%) asked participants to choose among a limited number of predefined options (e.g., Shen, Kawakami and Kishimoto, 2012; Thomas et al., 2018). Therefore, this also pre-sets the range of decisions.

4 DISCUSSION

In this part, we discuss potential relations between the different criteria mentioned in the results. Charts 1 and 2 demonstrate the average frequency of consensus in studies using different methods of DMSM, DT, and Analog in data collection and data analysis. These diagrams only include methods that have been used at least in five records. It can be seen from both charts that studies using DMSM, DT, and Analog respectively have more frequency of consensus. In other words, studies using DMSM methods focus on reaching consensus as a final goal by quantifying the participants' opinions. However, as the figures show, the level of public participation is relatively low when the records use only a DMSM method. This is because mostly, there is no or very limited interaction between different participants. Among data collection and data analysis methods, respectively, Analog and the combination of all the methods have the highest level of public participation. The higher level of participation not only means giving more power to participants but also means providing more interaction among them to reach a consensus.

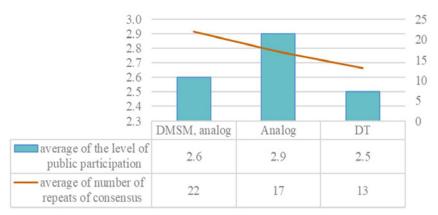


FIG. 2 The relation between data collection methods with the level of public participation, and frequency of consensus.

Public Participation as a Tool to reach a Consensus

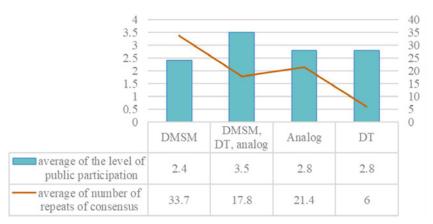


FIG. 3 The relation between data analysis methods, level of public participation, and frequency of consensus

5 CONCLUSION

The literature review presented revealed that research on consensus building in public participation processes is primarily focused on general planning, and seldom addressing heritage planning. None of them referenced to HUL approach. However, more than half of the scholars (57%) do reference values (e.g., Mouat et al., 2013; Aigwi et al., 2019), mostly seeking consensus on values.

This paper investigated the factors affecting consensus building in a public participation process. The first factor are the actors whom participate in the process, which is referenced by most of the literature. Although involving more interest groups makes reaching a maximum consensus more challenging, it leads to a more inclusive process.

The second factor is the level of participation, which is indirectly referenced in most of the records. The higher the level of public participation, more empowered the public is, more interaction they have and more inclusive the consensus is in the decision making process. In level one and two of the IAP2 framework (one-third of the records), the participants are only indirectly involved in the decision making process and consensus is reached without their presence. Nevertheless, respectively in levels three, four, and five, participants are more actively involved in the consensus building process.

Almost all of the literature references public participation methods, which is our third factor. Among different methods, DMSMs, using mathematical models and formulas, are more transparent and clear in reaching a point of consensus. However, there is no room for interaction in these methods and each participant is supposed to give his or her points of view individually. Analog and DT methods, in the other hand, are based on interaction contributing the actors to understand each other's points of view and reach a maximum consensus instead of an exact point of consensus. DT methods are the product of the recent decades which increase the efficiency of the Analog methods by fostering human interaction and visualizing actors' opinions. All the factors affect the degree of inclusive consensus and a maximum consensus. Then, each public participation project should find a balance between an inclusive consensus and a maximum consensus.

The last factor that influences all of the above factors is the context of the site. However, only a few information is provided regarding the context and how it affects other factors. The starting point

to improve a public participation framework for HUL are these factors and the acceptable range of them. None of the records provides an assessment of the project, and there is not yet a widely accepted framework for public participation assessment. Although, this paper cannot define the right limitation for each factor, it reveals the frequency of different options in each factor and potential relation between these options towards reaching a consensus.

The research gap was revealed related to the combination of site, method, level of participation, and diversity of actors for consensus building in planning processes. The open questions for the continuity of this research are: How can the consensus phase of the HUL approach be enriched by this paper's achievement on public participation methods? Which types of methods and tools could be combined? And how could they be used to satisfy consensus building requirements of heritage site particularities and citizen empowerment? This research will now investigate how digital technologies such as mining social media data could contribute to understand citizen's heritage values and attributes. This will be used to critically reflect on DT as a tool integrated to the HUL approach to achieve a greater conservation and sustainability in World Heritage Cities.

Endnotes

This study comes up with the categorization of methods. Two main categories are those using mathematic models or statistics and those using participants' interaction and discussion to reach a consensus. This paper called the first category DMSM including Delphi and AHP. The second category includes Analog and DT methods, contributing to common understanding to reach a maximum consensus. As it is clear from their name, DT methods use DT tools namely including online survey, visualisation tool, online participation platforms, and public participation Geographic Information System, social media analysis, and intelligent agent models. Analog methods use analog tools in their main process including paper survey, public meetings, paper maps, site visiting, and exhibition.

References

- Aigwi, I. E., Egbelakin, T., Ingham, J., Phipps, R., Rotimi, J., & Filippova, O. (2019). A performance-based framework to prioritise underutilised historical buildings for adaptive reuse interventions in New Zealand. Sustainable Cities and Society, 48(April), 101547. https://doi.org/10.1016/j.scs.2019.101547
- Angela Boland, M.Gemma Cherry, R. D. (2017). Boland et al_2017_Doing a Systematic Review_crop.
- Arciniegas, G., & Janssen, R. (2012). Spatial decision support for collaborative land use planning workshops. Landscape and Urban Planning, 107(3), 332–342. https://doi.org/10.1016/j.landurbplan.2012.06.004
- Balug, K., & Vidart-Delgado, M. (2015). Imagine! You Have Nothing to Lose: Collaboration and Play in Urban Development. Critical Sociology, 41(7–8), 1027–1044. https://doi.org/10.1177/0896920513519138
- Bertolinelli, M., Guzzoni, L., Masseroni, S., Pinti, L., & Utica, G. (2018). Innovative participatory evaluation processes: The case of the ministry of defense real-estate assets in Italy. In Green Energy and Technology (pp. 547–557). Springer Verlag. https://doi.org/10.1007/978-3-319-78271-3 43
- Blečić, I., Cecchini, A., & Pusceddu, C. (2007). Constructing strategies in strategic planning: A decision support evaluation model.

 Proceedings of 10th International Conference on Computers in Urban Planning and Urban Management, CUPUM 2007, 1–13. https://doi.org/10.1007/s12351-008-0014-6
- Caponio, T. (2018). Immigrant integration beyond national policies? Italian cities' participation in European city networks. Journal of Ethnic and Migration Studies, 44(12), 2053–2069. https://doi.org/10.1080/1369183X.2017.1341711
- Cho, K. W., & Jung, K. (2018). From collaborative to hegemonic water resource governance through dualism and Jeong: Lessons learned from the Daegu-Gumi water intake source conflict in Korea. Sustainability (Switzerland), 10(12). https://doi.org/10.3390/su10124405
- Diaz, J. M., Webb, S. T., Warner, L. A., & Monaghan, P. (2018). Barriers to community garden success: Demonstrating framework for expert consensus to inform policy and practice. Urban Forestry and Urban Greening, 31, 197–203. https://doi.org/10.1016/j. ufug.2018.02.014
- Engberg, L. A. (2018). Climate adaptation and citizens' participation in Denmark: Experiences from Copenhagen. In Urban Book Series (pp. 139–161). Springer. https://doi.org/10.1007/978-3-319-65003-6_8
- Fahmi, F. Z., Prawira, M. I., Hudalah, D., & Firman, T. (2016). Leadership and collaborative planning: The case of Surakarta, Indonesia. Planning Theory, 15(3), 294–315. https://doi.org/10.1177/1473095215584655
- Finka, M., Ondrejička, V., Jamečný, L., & Husár, M. (2017). Public Participation Procedure in Integrated Transport and Green Infrastructure Planning. IOP Conference Series: Materials Science and Engineering, 245(5). https://doi.org/10.1088/1757-899X/245/5/052054

- Gerasidi, A., Apostolaki, S., Manoli, E., Assimacopoulos, D., & Vlachos, E. (2009). Towards the formulation of a new strategy of water resource management for urban areas achieved through participatory processes. Urban Water Journal, 6(3), 209–219. https://doi.org/10.1080/15730620902781442
- Gray, S., Singer, A., Schmitt-Olabisi, L., Introne, J., & Henderson, J. (2017). Identifying the Causes, Consequences, and Solutions to the Flint Water Crisis Through Collaborative Modeling. Environmental Justice, 10(5), 154–161. https://doi.org/10.1089/env.2017.0016
- Halla, F. (2005). Critical elements in sustaining participatory planning: Bagamoyo strategic urban development planning framework in Tanzania. Habitat International, 29(1), 137–161. https://doi.org/10.1016/S0197-3975(03)00077-8
- Jaasma, P., Frens, J., Hummels, C., & Wolters, E. (2017). [X]Changing perspectives: Enriching multi-stakeholder deliberation with embodiment in participatory society. Proceedings of the 7th International Conference for E-Democracy and Open Government, CeDEM 2017, 147–156. https://doi.org/10.1109/CeDEM.2017.31
- Jayasooriya, V. M., Ng, A. W. M., Muthukumaran, S., & Perera, B. J. C. (2019). Multi Criteria Decision Making in Selecting Stormwater Management Green Infrastructure for Industrial Areas Part 1: Stakeholder Preference Elicitation. Water Resources Management, 33(2), 627–639. https://doi.org/10.1007/s11269-018-2123-1
- Kato, H., Shiroyama, H., & Fukayama, T. (2008). Process management in public transit planning: Case study of introduction project of light rail transit in Toyama, Japan. Transportation Research Record, 2042, 33–40. https://doi.org/10.3141/2042-04
- Le Pira, M., Marcucci, E., Gatta, V., Ignaccolo, M., Inturri, G., & Pluchino, A. (2017). Towards a decision-support procedure to foster stakeholder involvement and acceptability of urban freight transport policies. European Transport Research Review, 9(4). https://doi.org/10.1007/s12544-017-0268-2
- Lebeau, P., Macharis, C., Van Mierlo, J., & Janjevic, M. (2018). Improving policy support in city logistics: The contributions of a multi-actor multi-criteria analysis. Case Studies on Transport Policy, 6(4), 554–563. https://doi.org/10.1016/j.cstp.2018.07.003
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. Journal of Clinical Epidemiology, 62(10), e1–e34. https://doi.org/10.1016/j.iclinepi.2009.06.006
- Manzi, M., Figueiredo, G. C. dos S., Mourad, L. N., & Rebouças, T. de M. (2018). Neighbourhood planning and the right to the city: confronting neoliberal state urban practices in Salvador, Brazil. International Journal of Urban Sustainable Development, 10(1), 1–15. https://doi.org/10.1080/19463138.2018.1433677
- Mohammadi, S. H., Norazizan, S., & Nikkhah, H. A. (2018). Conflicting perceptions on participation between citizens and members of local government. Quality and Quantity, 52(4), 1761–1778. https://doi.org/10.1007/s11135-017-0565-9
- Nordström, E. M., Romero, C., Eriksson, L. O., & Öhman, K. (2009). Aggregation of preferences in participatory forest planning with multiple criteria: An application to the urban forest in Lycksele, Sweden. Canadian Journal of Forest Research, 39(10), 1979–1992. https://doi.org/10.1139/X09-107
- Pérez-Soba, M., Paterson, J., Metzger, M. J., Gramberger, M., Houtkamp, J., Jensen, A., Murray-Rust, D., & Verkerk, P. J. (2018). Sketching sustainable land use in Europe by 2040: a multi-stakeholder participatory approach to elicit cross-sectoral visions. Regional Environmental Change, 18(3), 775–787. https://doi.org/10.1007/s10113-018-1297-7
- Petrušonis, V. (2018). Symbolic potential of place and its modelling for management needs. Landscape Architecture and Art, 13, 39–48. https://doi.org/10.22616/J.LANDARCHART.2018.13.04
- Publications, S., & Kee, T. (2015). Vocational Training Council VTC Institutional Repository Cultivating a participatory design practice in architecture: a case study of Hong Kong Housing Authority. http://repository.vtc.edu.hk/thei-fac-de-sp
- Regan, H. M., Colyvan, M., & Markovchick-Nicholls, L. (2006). A formal model for consensus and negotiation in environmental management. Journal of Environmental Management, 80(2), 167–176. https://doi.org/10.1016/j.jenvman.2005.09.004
- Shen, Z., & Kawakami, M. (2007). Study on Visualization of Townscape Rules Using VRML for Public Involvement. Journal of Asian Architecture and Building Engineering, 6(1), 119–126. https://doi.org/10.3130/jaabe.6.119
- Shen, Z., Kawakami, M., & Kishimoto, K. (2012). Web-based multimedia and public participation for green corridor design of an urban ecological network. In Advances in Geographic Information Science (Issue 9783642135583, pp. 185–204). Springer Heidelberg. https://doi.org/10.1007/978-3-642-13559-0_9
- Starkl, M., Brunner, N., López, E., & Martínez-Ruiz, J. L. (2013). A planning-oriented sustainability assessment framework for peri-urban water management in developing countries. Water Research, 47(20), 7175–7183. https://doi.org/10.1016/j. watres.2013.10.037
- Thomas, M., Partridge, T., Pidgeon, N., Harthorn, B. H., Demski, C., & Hasell, A. (2018). Using role play to explore energy perceptions in the United States and United Kingdom. Energy Research and Social Science, 45, 363–373. https://doi.org/10.1016/j.
- Tudor, C. A., Ioj, I. C., P tru-Stupariu, I., Nit, M. R., & Hersperger, A. M. (2014). How successful is the resolution of land-use conflicts? A comparison of cases from Switzerland and Romania. Applied Geography, 47, 125–136. https://doi.org/10.1016/j.apgeog.2013.12.008
- Van Empel, C. (2008). The effectiveness of community participation in planning and urban development. WIT Transactions on Ecology and the Environment, 117, 549–556. https://doi.org/10.2495/SC080521
- Yu, T., Liang, X., Shen, G. Q., Shi, Q., & Wang, G. (2019). An optimization model for managing stakeholder conflicts in urban redevelopment projects in China. Journal of Cleaner Production, 212, 537–547. https://doi.org/10.1016/j.jclepro.2018.12.071