Xiaozhen Li

INCORPORATING PLACE ATTACHMENT IN SPATIAL PLANNING: A LITERATURE REVIEW

Contents

Abstract

Place attachment, usually referring to the emotional relationships between people and places, has been studied intensely by environmental psychologists and humanistic geographers for decades. Its influence on landscape planning and development has recently gained increasing attention. Place attachment can be a double-edged sword. It can be an obstacle hindering new developments. It can also be a resource, promoting and informing spatial planning and transformation processes and further enabling a higher level of sustainability. Despite numerous empirical studies highlighting the relevance of place attachment to spatial planning, it remains unclear how research on place attachment can be effectively incorporated into planning practices. This paper aims to review literature that incorporates place attachment into spatial planning and transformation. Directions for future research and potential implications for sustainable spatial transformation practices will also be discussed.

Keywords

Einbeziehung der Ortsverbundenheit in die Raumplanung: Ein Literaturreview

Kurzfassung

Die Bindung an einen Ort, die sich in der Regel auf die emotionalen Beziehungen zwischen Menschen und Orten bezieht, wird von Umweltpsychologinnen und -psychologen sowie Humangeographinnen und -geographen seit Jahrzehnten intensiv unter-

sucht. Ihr Einfluss auf die Landschaftsplanung und -entwicklung hat in letzter Zeit zunehmend an Aufmerksamkeit gewonnen. Ortsverbundenheit kann ein zweischneidiges Schwert sein. Sie kann ein Hindernis darstellen, das neue Entwicklungen erschwert. Sie kann aber auch eine Ressource sein, die Raumplanung und Transformationsprozesse fördert und informiert, um ein höheres Maß an Nachhaltigkeit zu erreichen. Trotz zahlreicher empirischer Studien, welche die Relevanz der Ortsverbundenheit für die Raumplanung unterstreichen, bleibt unklar, wie die Forschung zu *place attachment* effektiv in die Planungspraxis integriert werden kann. Ziel dieses Beitrags ist es, einen Überblick über die Fachliteratur zu geben, welche die Ortsverbundenheit in die Raumplanung und Transformation einbezieht. Es werden zukünftige Forschungsrichtungen und mögliche Auswirkungen auf nachhaltige räumliche Transformationspraktiken diskutiert.

Schlüsselwörter
Ortsverbundenheit – Ortssinn – Landschaftsplanung – Landschaftswandel – kollaborative Planung – Placemaking

1   Introduction

Place attachment has been a topic of intensive study for several decades, and this heightened interest can be partly attributed to the challenges posed by globalization, increasing mobility, and worsening environmental problems, all of which threaten the bonds between people and their places (Gustafson 2001; Scannell/Gifford 2010; Arts et al. 2017). This has sparked a debate on the importance of places and people-place bonds, with some theorists suggesting that these bonds become less critical as personal experiences become increasingly disconnected from local places (Gustafson 2001). However, numerous empirical studies demonstrate that place remains a vital factor despite the trend of increasing globalization (Lewicka 2011). Furthermore, from the perspective of socio-ecological systems, the importance of place attachment for sustainability and resilience has also been acknowledged (Manzo/Perkins 2006; Brunckhorst 2010). The significance of place attachment for individuals and socio-ecological systems has highlighted the need to promote it in planning practices (Manzo/Perkins 2006). Despite numerous empirical studies highlighting the relevance of place attachment to spatial planning, the ways in which research on place attachment can be effectively incorporated into planning practices remain unclear. This literature review seeks to explore the approaches available for effectively incorporating place attachment into spatial planning, as well as to identify potential areas for future research.

1.1   The confusing terms: place attachment, sense of place, place meaning, and place identity

Humanistic geographers such as Tuan and Relph have emphasized the importance of perceptions and experiences in creating valuable places since the 1970s, leading to a foregrounding of place-related research across various disciplines (Cresswell 2004; Trentelman 2009). Approaches to place research have been enriched over time, with

Morgan (2010) recognizing three incompatible approaches and Williams/Miller (2021) detailing six more. Meanwhile, a large number of place-related concepts such as place attachment, sense of place, place identity, and place meaning have emerged, but their broad definitions can cause confusion (Hidalgo/Hernández 2001; Manzo 2003; Lewicka 2011).

The proliferation of place-related concepts has necessitated clarification of their relationships. Quantitative studies have commonly explored the hierarchical relationships among these concepts. Hernández/Hidalgo/Ruiz (2021: 96 et seq.) identified three types of relationships between place attachment and other place-related concepts: (1) treating place attachment as a one-dimensional concept alongside place identity and place dependence; (2) considering place attachment as a multidimensional and encompassing construct that covers other concepts; and (3) regarding place attachment as a subconcept of other constructs such as sense of place and place identification. While hierarchical approaches have been used to clarify relationships among these concepts, they may oversimplify the unique focus of each concept and their interrelationships (Drasdo 2018: 178). These concepts should be considered independent of each other but also related. Lewicka (2008: 212) also shared a similar view when comparing place attachment and place identity.

Multi-dimensional frameworks, such as Scannell and Gifford's (2010) model, are therefore needed to capture the complexity and interrelatedness of various place-related concepts. Scannell and Gifford's model organizes existing studies into three dimensions: place, people, and psychological processes, providing a comprehensive framework for understanding the relationships among place-related concepts. In this multi-dimensional framework, place attachment is regarded as the overarching concept and defined broadly as "a bond between an individual or group and a place that can vary in terms of spatial level, degree of specificity, and social or physical features of the place, and is manifested through affective, cognitive, and behavioral psychological processes" (Scannell/Gifford 2010: 5). The authors further note that not all dimensions need to be considered in each research project and encourage researchers to tailor their definitions to specific contexts with different emphases.

Sense of place is a concept originating from humanistic geography, which emphasizes the significance and uniqueness of places (Cresswell 2004). Since the 1970s, humanistic geographers have characterized it as a feeling of immersion and belonging to a place, emphasizing the subjective emotions and connections people have with places and arguing that places are fundamental to human existence (Cresswell 2004). Since the 1990s, Massey has introduced the idea that places are constructed by external objects and processes, and that sense of place, as a characteristic of a place, is it appears that a citation is missing here. To avoid the need for further modifications in the references section, the citation I would like to add here is (if it is possible): „constructed by linking that place to places beyond" (Massey 1997, cited in Cresswell 2004: 70). This conceptualization gives rise to the concept of a "progressive sense of place", underlining the characteristics of openness and change. Although the focus has shifted from subjective feelings to external relationships over time, the concept of sense of place continues to emphasize the distinctiveness of places. Currently, the

terms sense of place and place attachment are often used interchangeably as the overarching concepts for the emotional relationships between people and places (Trentelman 2009). However, Kyle et al. (2004) found that place attachment is more commonly used as the overarching concept when studying recreational contexts, where participants are mostly visitors, while sense of place is more likely to be used for local respondents in residential contexts. It can be inferred that sense of place refers more to rootedness, feelings of belonging and immersion in places, reflecting its deep roots in the humanistic approach. In contrast, place attachment relates more to relatively weak and superficial emotional connections, considering that people can attach to places without incorporating them as a part of their existence.

The cognitive aspect of place attachment is widely recognized, but there is a lack of clarity surrounding the term of place meanings. This term is often used without clearly indicating what it refers to, and it is sometimes confused with the cognitive aspect of place attachment, a conflation that has been criticized by Stedman (2002). Williams (2014) provides a framework for understanding multiple forms of place meanings, ranging from the surface to the deep, including inherent, instrumental, socio-cultural, and identity-expressive. However, Raymond/Kyttä/Stedman (2017) argue that this framework neglects the sensory dimension of place meanings. They propose that place should also be understood as a perception-action process that forms immediately perceived place meanings; this constitutes the third important branch of place enquiry, alongside place as a locus of attachment and place as a center of meaning.

Place identity is a multifaceted concept that encompasses both people's internalization of external places and the perceived uniqueness of places themselves (Peng/Strijker/Wu 2020). People's place identity is closely intertwined with place attachment and is based on subjective valuation and personal place meanings (Twigger-Ross/Uzzell 1996), while the place identity of places is more related to the perceived and constructed distinctiveness of places and may overlap with the concept of sense of place. It is important to note that place identity, whether referring to people or places, is not solely focused on subjective relationships but always involves how these relationships contribute to the valuation and characterization of individuals and groups as well as the places themselves.

Place-related concepts are distinguished by the fact that scholars often use place attachment and sense of place interchangeably, and place meanings may serve as their concrete manifestations. In contrast, place identity emphasizes the characteristics of people or places formed under the influence of people-place relationships. Thus, this paper focuses on place attachment, sense of place, and place meanings as key constructs, while excluding place identity.

1.2   Understanding spatial planning

Spatial planning is a complex term with various perspectives and interpretations (Healey 2004; Alexander 2016). Healey (2004: 46) notes that "spatial" refers to the location of objects and their relationships within a specific area, while "planning"

involves decision-making that shapes future socio-spatial relations. The Council of Europe Conference of Ministers Responsible for Spatial/Regional Planning (Council of Europe 1983) defines spatial planning as the geographical expression of economic, social, cultural, and ecological policies. This interdisciplinary approach aims for balanced regional development and the physical organization of space according to an overall strategy. Another definition characterizes spatial planning as the public sector's methods to influence the distribution of people, activities, infrastructures, recreation, and nature areas in various spaces (von Haaren/Galler 2016).

Despite the various conceptualizations, spatial planning ultimately aims to shape future socio-spatial relationships (Loupa Ramos et al. 2019) and optimize space and environmental conditions through decision-making (von Haaren et al. 2014: 161). In Europe, spatial planning serves as an overarching concept and is conducted by public authorities on behalf of a society or particular stakeholders. It aims to manage the spatial impacts of sectoral policies and establish objectives for controlling future activities through intervention in the physical environment, often via statutory spatial plans (von Haaren/Galler 2016).

Landscape planning and design are related to spatial planning, but it is important to distinguish them for methodological reasons. The European Landscape Convention (ELC) defines landscape broadly as a spatial entity with territorial properties, experienced sensually and meaningfully by humans, composed of various inter-acting elements that are hierarchically structured, with a spatial organization and management that is largely influenced by humans, and inherently dynamic (Antrop/van Eetvelde 2017: 57). Landscape planning involves proactive actions to enhance, restore, or create landscapes, as defined in the ELC. However, in Germany, landscape planning is mainly concerned with nature conservation and protection, with a narrow focus on natural and ecological concerns, and can be reactive in character (Gantioler 2018: 102). This understanding of landscape planning is generally applicable across Europe, with differences primarily concerning legal influence and the role of participation (von Haaren et al. 2014: 161).

Landscape design and landscape planning are distinct activities in landscape architecture, with landscape design focusing on visible changes and characterized by subjective and intuitive elements, while landscape planning has a more proactive and rigorous approach to enhancing, restoring, or creating landscapes (von Haaren et al. 2014: 160). The tasks, application contexts, and methodological approaches of landscape design and planning differ. Although landscape architecture is widely considered to be the overarching discipline encompassing both (von Haaren et al. 2014: 167; Thompson 2014), there remains no complete consensus on this matter. According to von Haaren et al. (2014: 161 et seq.), the term landscape architecture is sometimes used interchangeably with landscape design, but is explicitly differentiated from landscape planning. In this review, which focuses on integrating place attachment into planning processes, the term planning is more appropriate due to its rigorous and standardized characteristics.

According to the definitions, spatial planning and landscape planning are important constructs in this review. However, it should be noted that some studies may use the term landscape design to refer to the final outcome of landscape planning, especially in studies with a heavy US influence (von Haaren et al. 2014). Therefore, both landscape design, spatial design, and landscape architecture were included as search strings. The final selection of studies was based on their demonstration of rigorous and standardized characteristics rather than intuitive and creative ones. Additionally, some scholars may use a specific landscape or spatial type as a prefix to the term planning to emphasize planning within a particular spatial context, such as forest planning. The term planning is also included as a search string in this review to guarantee that related literature is included.

While there are different planning models available, they share common underlying principles of analyzing the current situation, identifying problems and objectives, and implementing selected proposals. The landscape planning process model proposed by von Haaren/Lovett/Albert (2019: 27 et seq.) consists of five steps: scoping, assessment, developing responses, implementation, and monitoring. The authors also underline that all stages should be accompanied by public participation. In the scoping stage, officials, stakeholders, and planners collaborate to identify pressing issues, future development goals, potential contributions of landscape planning, and higher policy-level drivers. The assessment stage involves evaluating the current state and future prospects of the landscape, biodiversity, and ecosystem services. Response measures are then proposed to decision-makers and the public, prioritizing which pressures to reduce, which sites to maintain or protect, and which impacted areas to rehabilitate. Implementation of the selected plan can be triggered by a political decision made by the regional or municipal council. Information resulting from implemented plans is used to inform future choices and reduce uncertainty over time. Monitoring is a key tool to assess the effectiveness of decisions made. Different planning stages may occur concurrently, although with various focuses, and may not follow sequential order (Gantioler 2018).

2   Methods

The literature search was conducted on 14 January 2023 using Scopus and Web of Science databases, with the search strings outlined in Figure 1. The selected time range was from 1 January 2000 to 31 December 2022, as research on place attachment has experienced rapid growth since 2000 (Lewicka 2011). This review includes only English language publications, and due to time constraints, only journal articles, conference articles, and book chapters were selected for inclusion.

A four-step process, as shown in Figure 2, was employed to select relevant articles. The process involved merging search results from different databases, excluding duplicates, screening articles by reading titles, abstracts, and full-texts, and applying the criteria and exclusion criteria outlined in Table 1. The final selection resulted in the inclusion of 13 articles. Additionally, one article that appeared relevant but was not identified in the initial search results was manually added to the review.

("sense of place" OR "place attachment" OR "place meaning")

AND

("planning" OR "spatial planning" OR "spatial design" OR "landscape planning" OR "landscape design" OR "landscape architecture")

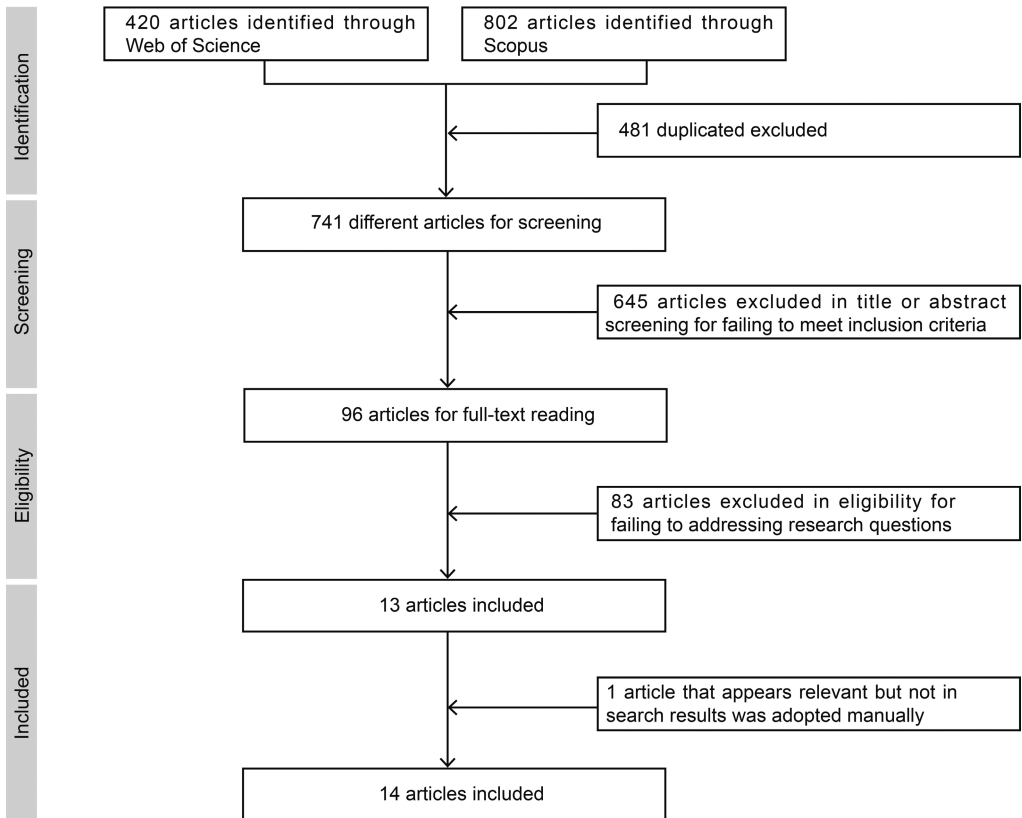Figure 1: The search strings / Source: the author

Identification		
	420 articles identified through Web of Science	802 articles identified through Scopus

481 duplicated excluded

741 different articles for screening

645 articles excluded in title or abstract screening for failing to meet inclusion criteria

96 articles for full-text reading

83 articles excluded in eligibility for failing to addressing research questions

13 articles included

1 article that appears relevant but not in search results was adopted manually

14 articles included

Identification

Screening

Eligibility

Included

Figure 2: The working flow of reviewing the literature, drawing on Wen/Albert/von Haaren (2018) / Source: the author

Inclusion criteria	Exclusion criteria
1 Journal article, conference article, book chapter	1 Review, report, book, or gray literature
2 Written in English	2 Written in non-English
3 Studies that explicitly addressed the integration of place attachment into spatial planning were included in the review.	3 The mere collection or description of local data on place attachment, without any subsequent utilization of such information in the context of spatial planning, was excluded.
4 Article accessible	4 Article inaccessible

Table 1: The inclusion and exclusion criteria / Source: the author

3   Results

Based on the reviewed literature, the integration of place attachment into spatial planning can be achieved through the use of theoretical knowledge and local data about place attachment across several procedural planning stages, or by mobilizing local stakeholders to participate in the spatial planning process.

3.1   Incorporating place attachment into the scoping stage

During the scoping stage, incorporating data on place attachment can impact the development of strategies, as demonstrated by Zhang/Liao's (2022) case study of a village transformation project in Guangzhou, China. The project's success was attributed to effective collaboration between planners and villagers, which contributed to recognition of the strong attachment and self-identification of local people with their villages. Villagers' concerns regarding potential harm to local culture and heritage from commercial development were taken into account, leading to a shift in the project's aim from commercial and economic development to "preservation and development".

3.2   Incorporating place attachment into the stage of assessment and monitoring

Incorporating place attachment into spatial planning processes can also be achieved through spatial assessment and analysis, usually undertaken in the second stage of assessment and the fifth stage of monitoring. There are three primary ways to integrate place attachment data or knowledge in these stages.

The first way involves using collected data to inform stakeholders in participatory workshops about local people's place attachment and stimulate discussions and reflections among these stakeholders. Through these communications and de-

liberations, the data can be analyzed and can provide support for further spatial decisions. Research conducted by Gottwald et al. (2021) illustrates a good example. In this study, the researchers first employed a meaningful place indicator in the PPGIS method to collect citizens' sense of place and subsequently integrated the data into a geo-design workshop. During the workshop, participants were tasked with creating coherent clusters concerning place attachment on geo-referenced maps and analyzing the underlying reasons for these preferences. Through communication, stakeholders' interpretations of these meaningful places were constantly refined, forming the basis for potential spatial development strategies. The authors argue that the two-step integration approach, consisting of instrumental PPGIS methods and deliberate geo-workshops, is effective. However, the reliability and representativeness of survey data collected through the PPGIS method require further research.

The second incorporation method involves developing analysis tools to help planners interpret collected data. For instance, McIntyre/Moore/Yuan (2008) proposed a "spatial valuation zones" tool, employing a density clustering approach to analyze mapped information on place attachment from various sources. The identified density zones are considered socially defined spatial valuation zones (SVZs). The authors suggest that predicted SVZs can be determined based on characteristics extrapolated from the socially defined ones, representing opportunities for future development. The authors also note that the parameters used to determine SVZs should be context specific.

The third way to integrate place attachment into spatial assessment and analysis is by establishing frameworks or models for appraisal, evaluation, and prediction. Researchers have developed methods to evaluate the overall status of landscapes, with Jones et al. (2020) developing a method for assessing the quality of cultural ecosystem services, with sense of place as a service type, and Halpern et al. (2014) developing an Ocean Health Index that includes sense of place as a primary criterion to evaluate ocean and coastal landscape health. These assessment frameworks can be used not only to evaluate current states and monitor changes after implementation, but also to evaluate different scenarios and support final decisions, indicating that these frameworks can also be incorporated into the third stage. Additionally, researchers have developed models to analyze and predict land-use conflicts based on knowledge relating to place attachment (Brown/Raymond 2014).

3.3 Incorporating place attachment into the stage of developing spatial responses

Two ways of incorporating place attachment into the stage of developing spatial responses can be identified. The first way involves concretizing place attachment into spatial guidelines for specific places or some types of places. These guidelines serve not only as a platform for negotiation among stakeholders to develop detailed spatial measures but also as a means to evaluate proposals or completed projects. The second way involves developing proposal assessment methods to guide the choices of proposals.

Studies by Puren/Drewes/Roos (2008) and Puren/Roos/Coetzee (2018) are two good examples of concretizing data on place attachment into spatial guidelines for certain landscapes. Puren/Drewes/Roos (2008) emphasized local people's sense of place and translated it into specific types of experiences essential for maintaining or strengthening the original sense of place. The planning processes were conducted by planners as professional experts without any participatory processes. In contrast, Puren/Roos/ Coetzee (2018) adopted a collaborative interdisciplinary approach, gathering data on place attachment from participants with psychological or planning backgrounds who first experienced the landscape as tourists and later participated in a workshop to generate planning ideas collaboratively. The data on place attachment and the planning ideas were analyzed and integrated by researchers and finally translated into spatial guidelines. Instead of focusing on landscapes within certain areas, Stevens/ Salmon (2014) focus on developing a design template for some type of place, in this case, an ideal footpath system that embraces both safety and sense of place, based on the theoretical knowledge of place attachment, especially its relationship with the physical environment.

The second way to incorporate place attachment in the third planning stage involves predicting and evaluating the quality of proposals and the level of acceptance from affected stakeholders. As previously discussed, scenario assessment methods such as those proposed by Jones et al. (2020) and Halpern et al. (2014) can be utilized for this purpose. Escobar-Avaria et al. (2022) proposed a territorial analysis scheme to estimate community acceptance for hydroelectric development projects in Chile based on an in-depth case study. Their case study concluded that sense of place is a crucial factor that influences the development of a community attitudes and should be integrated into acceptance analysis models to improve the accuracy of predictions. However, this scheme is still in a preliminary stage.

Along with predicting public acceptance based on place attachment data and knowledge, researchers also consider utilizing place attachment to increase acceptance levels. Upham et al. (2018) proposed a hypothesis that, during participatory scenarios or visioning processes, local people can be stimulated towards a positive view of renewable energy infrastructure if planners can guide them to connect their existing positive image and place attachment with the social representations of these new infrastructures and spatial forms, which are often negative. By changing the image of these new spatial elements, local people's receptiveness to spatial changes can be increased. However, this hypothesis still needs to be tested in practice.

3.4   Leveraging place attachment to promote participatory planning engagement

Public participation is widely acknowledged as a crucial element for the success of spatial planning, and it is recommended that it be emphasized at each stage of the planning process (von Haaren/Lovett/Albert 2019). Scholars have suggested that leveraging place attachment can be an effective strategy to encourage local engagement in participatory planning processes (Glover/Stewart/Gladdys 2008;

Stages of spatial planning	Incorporation approaches	The way place attachment is conceptualized or operationalized	The role of planners	Literature	With participatory processes	Participants	Tasks of the participatory processes
Scoping	The definition of development strategies	Concretizing place attachment into development strategies	Place attachment as local knowledge; operationalized as meanings, stories	as planning experts; as communicators; as facilitators	(Zhang/Liao 2022)	✓	Local villagers	To mobilize villagers to actively express their feelings and attachments to the village, as well as their views on the transformation project, to uncover more nuanced and profound place meanings
	The analysis	Integrating place attachment into participatory workshops	Place attachment as local knowledge; operationalized visually as meaningful place indicators on geo-referenced maps	as facilitators	(Gottwald et al. 2021)	✓	Representatives from all institutions responsible for designing this river landscape	To create coherent clusters concerning place attachment on geo-referenced maps and analyze the underlying reasons for these preferences; To design spatial river landscape scenarios by changing land uses and drawing different measures
Analysis and assessment		Developing analysis tools to interpret collected data on place attachment in terms of spatial planning	Place attachment as local knowledge; operationalized visually as meaningful place indicators on geo-referenced maps	as planning experts	(McIntyre/Moore/Yuan 2008)	-	-	-
	The assessment	Establishing frameworks or models for quality assessment and evaluation, and land use conflict prediction	Place attachment as scientific knowledge serving as the foundation for assessing frameworks or models; place attachment as local knowledge providing necessary data input for frameworks or models; often operationalized quantitatively as numeric data, but sometimes also qualitatively	as planning experts using frameworks and models	(Halpern et al. 2014)	-	-	-
					(Brown/Raymond 2014)	-	-	-
					(Jones et al. 2020)	-	-	-
Spatial response development	The development of spatial responses	Concretizing place attachment into spatial guidelines for specific places or some types of places	Place attachment as scientific knowledge for general spatial guidelines and as local knowledge for site-specific spatial guidelines, often operationalized qualitatively	as planning experts	(Puren/Drewes/Roos 2008)	-	-	-
					(Stevens/Salmon 2014)	-	-	-
					(Puren/Roos/Coetzee 2018)	✓	Interdisciplinary experts	To transform abstract place attachment information into more design-related languages
	The selection on spatial responses	Developing scenario assessment tools	Place attachment as scientific knowledge serving as the foundation for assessing frameworks or models; place attachment as local knowledge providing necessary data input for frameworks or models; often operationalized quantitatively as numeric data, but sometimes also qualitatively	as planning experts using the frameworks and models	(Halpern et al. 2014)	-	-	-
		Developing analysis frameworks or models to predict the public acceptance level of alternatives			(Jones et al. 2020)	-	-	-
					(Escobar-Avaria et al. 2022)	-	-	-
		Using place attachment as the strategic resource in participatory scenario visioning processes to increase public acceptance level	Place attachment as local knowledge, often operationalized qualitatively	as communicators; as facilitators	(Upham et al. 2018)	✓	Local people	To change local people's attitude towards new spatial elements and increase the acceptance level
Implementation	-	-	-	-	-	-	-	-
Monitoring	The monitoring and assessment	Establishing frameworks or models for quality tracking and evaluation	Place attachment as scientific knowledge serving as the foundation for assessing frameworks or models; place attachment as local knowledge providing necessary data input for frameworks or models; often operationalized quantitatively as numeric data, but sometimes also qualitatively	as planning experts using the frameworks and models	(Halpern et al. 2014)	-	-	-
					(Jones et al. 2020)	-	-	-
					(Brown/Raymond 2014)	-	-	-
The empowerment of local participation	The empowerment of locals for facilitating all planning stages above	Utilizing techniques such as learning circles and photo elicitations to effectively foster constructive dialogues within local communities, increase the awareness of social relations, and unearth a wide range of place attachments associated with particular places and shared values for their developments	Place attachment as scientific knowledge serving as the foundation for developing techniques that promote effective communication; place attachment as local knowledge to be uncovered as meanings, stories; operationalized as communication techniques	as communicators; as facilitators	(Glover/Stewart/Gladdys 2008)	✓	Local people	To empower local people to participate proactively in all stages of planning processes
					(Stewart/Glover/Barkley 2013)	✓	Local people	
					(Fenster/Misgav 2014)	✓	Local people	

Table 2: Summarized results of incorporating place attachment into procedural planning stages / Source: the author

Stewart/Glover/Barkley 2013; Fenster/Misgav 2014). Specifically, these scholars propose using civic forums or communication workshops incorporating techniques such as photo elicitation and narrative to facilitate participants' discussions about their local landscapes, thus drawing on their attachment to their places and their curiosity about others' stories.

Through sharing memories and stories, coupled with related photographs, in such civic forums or workshops, participants can gain a more diverse understanding of their places and even develop new shared values for their communities, which is beneficial for planners who seek to understand places in a more holistic way (Stewart/ Glover/Barkley 2013; Glover/Stewart/Gladdys 2008). Furthermore, sharing spatial memories and stories can help reveal similarities, differences, and disagreements between people, thereby increasing awareness of social relations and fostering greater activism and leadership (Fenster/Misgav 2014). However, effectively engaging and mobilizing the first group of participants is crucial for this approach to be effective.

The summarized results of incorporating place attachment into spatial planning are displayed in Table 2. All selected literature is also listed.

4   Discussion

The literature review focuses on incorporating place attachment into spatial planning and identifies four approaches. Firstly, using data on place attachment to influence development strategies in the scoping stage. Secondly, integrating place attachment data or knowledge in spatial assessment and analysis. Thirdly, concretizing place attachment into spatial guidelines or developing proposal assessment methods in the stage of developing spatial responses. Lastly, leveraging place attachment to encourage local engagement in participatory planning processes. The former three underline how to incorporate place attachment in various procedural steps of spatial planning. The last one concerns the strategic role of place attachment in promoting participatory planning.

Surprisingly, among the 741 papers examined, only 13 specifically address investigating strategies for integrating place attachment into spatial planning. Despite the substantial amount of literature revolving around the topic of place attachment and spatial planning, many of the papers reviewed do not directly address the question of how to effectively integrate place attachment into the planning process. Rather, they focus on collecting local data on place attachment, developing improved methods for data collection, or emphasizing the significance of incorporating place attachment into the planning process for long-term sustainability. As such, the literature reviewed often deviates from the specific focus of this study, underlining the need for more research into this topic.

The results reveal that the literature on incorporating place attachment into the procedural stages of spatial planning primarily focuses on the stages of assessment and analysis, spatial response development, and monitoring, with limited attention to the stages of scoping and implementation.

The scarcity of literature on the scoping stage can be attributed to the high complexity of spatial planning projects, which require consideration of numerous factors. Although place attachment is an essential dimension in the planning process, its significance may vary depending on project backgrounds and cultural-social contexts.

The limited literature on the implementation phase is likely due to the fact that this stage necessitates a significant level of professional expertise and knowledge to make decisions regarding operative measures and implementation. Knowledge or data on place attachment may not be particularly useful during this stage. However, involving local experts can reduce implementation costs and timeframes. Furthermore, engaging local individuals in the construction process can further enhance their attachment to places. Such collaborative construction processes can also serve to reinforce community identity and social cohesion. These issues are closely related to the fourth approach that involves leveraging place attachment as a means to encourage local engagement in participatory planning processes.

The examples illustrated for the fourth approach demonstrate that employing place attachment to involve local individuals necessitates planners acting as organizers and facilitators rather than relying solely on their role as planning experts. The shift in the role requires planners to comprehend the intricate and subjective emotional relationships between humans and places, which may require intuition and empathetic abilities. More interdisciplinary cooperation among planners, psychologists, and sociologists is further required, as noted by Manzo/Perkins (2006).

Manzo/Perkins (2006) suggest that place attachment has the potential not only to empower citizens but also to identify the commonalities and differences between different groups, which can facilitate the coordination of social relationships and mitigate conflicts among different groups. However, the reviewed papers only briefly touch on the latter point. For instance, the use of civic forums or workshops where local people are encouraged to share their memories and stories (see Section 3.4) can enrich participants' perspectives and understanding of place meanings, which may also influence social relationships. Nonetheless, the reviewed literature does not provide clear guidance on how planners can leverage such similarities and differences in place attachment to facilitate conflict coordination. Thus, research in this direction is also required.

Participatory planning should be integrated into each stage of spatial planning (von Haaren/Lovett/Albert 2019), indicating that the tasks and goals of participatory planning should vary according to the stages of planning. Therefore, strategies or approaches for utilizing place attachment for citizen empowerment or conflict coordination should also be tailored to each stage of planning. For instance, in the analysis stage, the aim of mobilizing local individuals may be to elicit their rich emotional meanings and perspectives on their places, which can be achieved through activities such as story sharing or photo illustration. In contrast, mobilization in the implementation phase may aim to motivate individuals to actively provide their related knowledge and participate in real-life project construction. The tasks and strength of mobilization differ between these two stages, so the utilization of place attachment

should also be adjusted accordingly. Future research should also address these differences in utilizing place attachment for participatory planning in different planning stages.

Although this literature review shows that only a few studies have focused on the issue of integrating place attachment into spatial planning, it does not necessarily indicate that planners have given the matter little thought. Since planning is a discipline that closely intertwines practice and scholarship, practitioners have likely developed several effective methods in specific project practice that have not yet been reflected upon and theorized. Therefore, case studies analyzing existing programs that address this issue would be promising.

As this literature review was conducted by a single author, inter-rater reliability is limited. However, the criteria for screening and selecting articles remained consistent throughout the entire process. Therefore, the results can still provide a reliable overview of the current research status regarding the integration of place attachment into spatial planning.

5   Conclusion

This literature review identifies four approaches for incorporating place attachment into spatial planning, including integrating it into various stages of the planning process and utilizing it in participatory planning as an empowerment tool. It emphasizes the need for further research in this area, as many of the reviewed papers lack a pertinent focus on this topic. Furthermore, it suggests that participatory planning should be tailored to each planning stage, and strategies for utilizing place attachment for citizen empowerment or conflict coordination should vary accordingly. Finally, the review underscores the importance of analyzing existing practical planning projects that address this issue, as planning is a discipline that closely intertwines practice and scholarship.

─────────────
References

Alexander, E. R. (2016): There is no planning – only planning practices: Notes for spatial planning theories. In: Planning Theory 15 (1), 91-103.
Antrop, M.; van Eetvelde, V. (2017): Landscape Perspectives: The Holistic Nature of Landscape. Dordrecht. = Landscape Series 23.
Arts, B.; Buizer, M.; Horlings, L.; Ingram, V.; van Oosten, C.; Opdam, P. (2017): Landscape Approaches: A State-of-the-Art Review. In: Annual Review of Environment and Resources 42 (1), 439-463.
Brunckhorst, D. J. (2010): Using context in novel community-based natural resource management: landscapes of property, policy and place. In: Environmental Conservation 37 (1), 16-22.
Brown, G.; Raymond, C. M. (2014): Methods for identifying land use conflict potential using participatory mapping. In: Landscape and Urban Planning 122, 196-208.
Cresswell, T. (2004): Place: A Short Introduction (1st). USA, UK, Australia.
Drasdo, F. (2018): Der Mensch im Raum. Über verschiedene Verständnisse von Raum in Planung und Sozialwissenschaften und theoretische Ansätze zu Mensch-Raum-Beziehungen. Universität Stuttgart.

Escobar-Avaria, C.; Fuster, R.; Silva-Urrutia, K.; Bauer, C.; de la Fuente, A. (2022): Understanding Conditioning Factors for Hydroelectric Development in Chile: Bases for Community Acceptance. In: Sustainability 14 (22), 15224.
DOI: https://doi.org/10.3390/su142215224

Fenster, T., Misgav, C. (2014): Memory and place in participatory planning. In: Planning Theory & Practice 15 (3), 349-369.

Gustafson, P. (2001): Meanings of place: everyday experience and theoretical conceptualizations. In: Journal of Environmental Psychology 21(1), 5-16.

Gantioler, S. (2018): The Right to Ecological Space in the City. The Technical University of Munich.

Glover, T. D.; Stewart, W. P.; Gladdys, K. (2008): Social Ethics of Landscape Change. In: Qualitative Inquiry 14 (3), 384-401.

Gottwald, S.; Brenner, J.; Albert, C.; Janssen, R. (2021): Integrating sense of place into participatory landscape planning: merging mapping surveys and geodesign workshops. In: Landscape Research 46 (8), 1041-1056.

Healey, P. (2004): The Treatment of Space and Place in the New Strategic Spatial Planning in Europe. In: International Journal of Urban and Regional research 28 (1), 45-67.

Halpern, B. S.; Longo, C.; Scarborough, C.; Hardy, D.; Best, B. D.; Doney, S. C.; Katona, S. K.; McLeod, K. L.; Rosenberg, A. A.; Samhouri, J. F. (2014): Assessing the health of the U.S. west coast with a regional-scale application of the Ocean Health Index. In: PLoS One 9 (6), e98995.
DOI: https://doi.org/10.1371/journal.pone.0098995

Hernández, B.; Hidalgo, M. C.; Ruiz, C. (2021): Theoretical and methodological aspects of research on place attachment. In: Manzo, L.C.; Devine-Wright, P. (eds.): Place Attachment Advances in Theory, Methods and Applications (2nd). London and New York, 95-110.

Hidalgo, M. C.; Hernández, B. (2001): Place attachment: conceptual and empirical questions. In: Journal of Environmental Psychology 21 (3), 273-281.

Jones, L.; Holland, R. A.; Ball, J.; Sykes, T.; Taylor, G.; Ingwall-King, L.; Snaddon, J. K.; Peh, K. S. H. (2020): A place-based participatory mapping approach for assessing cultural ecosystem services in urban green space. In: People and Nature 2 (1), 123-137.

Kyle, G.; Graefe, A.; Manning, R.; Bacon, J. (2004): Effects of place attachment on users' perceptions of social and environmental conditions in a natural setting. In: Journal of Environmental Psychology 24 (2), 213-225.

Lewicka, M. (2008): Place attachment, place identity, and place memory: Restoring the forgotten city past. In: Journal of Environmental Psychology 28 (3), 209-231.

Lewicka, M. (2011): Place attachment: How far have we come in the last 40 years? In: Journal of Environmental Psychology 31 (3), 207-230.

Loupa Ramos, I.; Bianchi, P.; Bernardo, F.; van Eetvelde, V. (2019): What matters to people? Exploring contents of landscape identity at the local scale. In: Landscape Research 44 (3), 320-336.

Manzo, L. C. (2003): Beyond house and haven: toward a revisioning of emotional relationships with places. In: Journal of Environmental Psychology 23, 47-61.

Manzo, L. C.; Perkins, D. D. (2006): Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning. In: Journal of Planning Literature 20 (4), 335-350.

McIntyre, N.; Moore, J.; Yuan, M. (2008): A Place-Based, Values-Centered Approach to Managing Recreation on Canadian Crown Lands. In: Society & Natural Resources 21 (8), 657-670.

Morgan, P. (2010): Towards a developmental theory of place attachment. In: Journal of Environmental Psychology 30 (1), 11-22.

Puren, K.; Drewes, E.; Roos, V. (2008): A sense of place and spatial planning in the verdefort dome, South Africa. In: South African Geographical Journal 90 (2), 134-146.

Puren, K.; Roos, V.; Coetzee, H. (2018): Sense of place: using people's experiences in relation to a rural landscape to inform spatial planning guidelines. In: International Planning Studies 23 (1), 16-36.

Peng, J.; Strijker, D.; Wu, Q. (2020): Place Identity: How Far Have We Come in Exploring Its Meanings? In: Frontiers in Psychology 11 (294).
DOI: 10.3389/fpsyg.2020.00294

Raymond, C. M.; Kyttä, M.; Stedman, R. (2017): Sense of Place, Fast and Slow: The Potential Contributions of Affordance Theory to Sense of Place. In: Frontiers in Psychology 8 (1674).
DOI: 10.3389/fpsyg.2017.01674

Scannell, L.; Gifford, R. (2010): Defining place attachment: A tripartite organizing framework. In: Journal of Environmental Psychology 30 (1), 1-10.

Stedman, R. C. (2002): Toward a Social Psychology of Place: Predicting Behavior from Place-Based Cognitions, Attitude, and Identity. In: Environment and Behavior 34 (5), 561-581.

Stewart, W. P.; Glover, T. D.; Barkley, J. R. (2013): Sharing Stories of Place to Foster Social Learning. In: Stewart, W. P.; Williams, D. R.; Kruger, L. E. (eds.): Place-Based Conservation: Perspectives from the Social Sciences. Dordrecht, 137-150.

Stevens, N.; Salmon, P. (2014): Safe places for pedestrians: Using cognitive work analysis to consider the relationships between the engineering and urban design of footpaths. In: Accident Analysis and Prevention 72, 257-266.

Twigger-Ross, C. L.; Uzzell, D. L. (1996): Place and Identity Processes. In: Journal of Environmental Psychology 16 (3), 205-220.

Trentelman, C. K. (2009): Place Attachment and Community Attachment: A Primer Grounded in the Lived Experience of a Community Sociologist. In: Society & Natural Resources 22 (3), 191-210.

Thompson, I. (2014): Landscape Architecture: A Very Short Introduction. Oxford.

Upham, P.; Johansen, K.; Bögel, P. M.; Axon, S.; Garard, J.; Carney, S. (2018): Harnessing place attachment for local climate mitigation? Hypothesising connections between broadening representations of place and readiness for change. In: Local Environment 23 (9), 912-919.

von Haaren, C.; Warren-Kretzschmar, B.; Milos, C.; Werthmann, C. (2014): Opportunities for design approaches in landscape planning. In: Landscape and Urban Planning 130, 159-170.

von Haaren, C.; Galler, C. (2016): Spatial and Landscape planning: A place for ecosystem services. In: Potschin, M.; Haines-Young, R.; Robert, F.; Kerry Turner, R. (eds.): Routledge handbook of ecosystem services. London, New York, 568-581.

von Haaren, C.; Lovett, A. A.; Albert, C. (eds.) (2019): Theories and Methods for Ecosystem Services Assessment in Landscape Planning. In: Landscape Planning with Ecosystem Services, 19-42.

Wen, C.; Albert, C.; von Haaren, C. (2018): The elderly in green spaces: Exploring requirements and preferences concerning nature-based recreation. In: Sustainable Cities and Society 38, 582-593.

Williams, D. R. (2014): Making sense of 'place': Reflections on pluralism and positionality in place research. In: Landscape and Urban Planning 131, 74-82.

Williams, D. R.; Miller, B. A. (2021): Metatheoretical moments in place attachment research: Seeking clarity in diversity. In: Manzo, L.C.; Devine-Wright, P. (eds.): Place Attachment Advances in Theory, Methods and Applications (2nd). London and New York, 13-18.

Zhang, C.; Liao, L. (2022): The active participation in a community transformation project in China: constructing new forums for expert-citizen interaction. In: Journal of Chinese governance 7 (3), 372-399.

Author

Xiaozhen Li (*1992) *is a doctoral candidate at the Technical University of Munich. She focuses on the interdisciplinary field where environmental psychology, sociology and landscape planning meet. Specifically, she is dedicated to the transformation research of industrial landscapes.*