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## Reconceptualising sense of place: Towards a conceptual framework for investigating individual-community-place interrelationships

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### Abstract

While *sense of place* has been increasingly used in planning literature over the last five decades, its conceptualisation varies by disciplines and theoretical orientations, with disjointed elements. This study develops a three-theme conceptual framework articulating individual-community-place interrelationships by critically reviewing the literature on sense of place and place-based constructs of attachment, identity, and satisfaction. Theorising the interactions *in-between* contributes to theoretical debates on sense of place and developing conceptual clarity to understand the planning context, processes, and outcomes, informing decision- and policy-making. It also facilitates the analysis and synthesis of complex narratives in qualitative studies of people-place relations.

**Key words:** sense of place, conceptual framework, people-place relationships, place attachment, place identity, place satisfaction, literature review

### 1. Introduction

People shape their places and places reshape their inhabitants (Healey, 2005; 2006; Stephenson, 2010). The interrelationships between people and places can take multiple forms, experienced in widely varying ways by different social groups—indicating the complexity and diversity of people-place relations (Lin and Lockwood, 2014; Counted, 2016; Erfani, 2020; 2021). Although scholars from different disciplines may view and interpret this variation differently, they have long attempted to frame these complex relations and interdependencies in a theoretical domain. There are a variety of models and conceptual frameworks developed to map out the relationships between people and their places (Manzo and Devine-Wright, 2013; Eaton et al., 2019), or draw on some important reviews of place-based work in various environmental studies outlets (Droseltis and

Vignoles, 2010; Lewicka, 2011; Di Masso et al., 2019), such as ecology and society (Masterson et al., 2017), landscape and planning (Cross et al., 2011; Wartmann and Purves, 2018), and leisure research (Stedman et al., 2004; 2006). Manzo and Perkins (2006) developed a model to accommodate people-place relations in community participation and planning by which ‘place meaning and attachment can play a pivotal role in planning processes’ (p. 336). Scannell and Gifford (2010) proposed a person-process-place model to explain meanings attached to places in a ‘comprehensive’ and ‘structured’ manner. A recent work developed by Wartmann et al. (2021) suggested a multilevel model for conceptualising landscapes and people-place relations, aiming to inform planning practices and policymaking at national and local levels.

What these studies suggest is the diversity of definitions, conceptual frameworks, and/or empirical methods to study people-place relations. The clear lesson is that such diversity seems unlikely to coalesce into a single, integrated conceptual framework because so many different fields and subfields are using people-place concepts, i.e. the notion of ‘sense of place’ is often used in different ways. For example, planners and developers often include a sense of place component in their development plans as a desirable objective to improve the quality of life for the individuals living in a community. Whereas human geographers use a sense of place to explain various meanings that are individually attributed and socially constructed (Cresswell, 2009, 2014), landscape ecologists discuss a sense of place in the framework of intangible cultural ecosystem services (Wartmann et al., 2018). To a large extent this diversity is because these different approaches reflect very different substantive, epistemological, and even normative goals and perspectives. However, trying to combine currently disjointed elements under a common understanding is needed to advance the field. As such, this study acknowledges the diversity and proposes an overarching conceptual framework aiming to connect disjointed aspects of this field of research. This contributes to deepening the literature where ‘so little attention has been paid to development of a theory’ or a conceptual framework articulating the dynamic and multifaceted relationships between people and their places (Lewicka, 2011, p.226).

A frequency analysis of place-focused terms in google scholar or other research engines shows that much more has been added to the discourse of people-place relations in recent years. Searching on ‘sense of place’ in the Web of Science produced more than 2,200 total published articles dating back to 1972. As Fig. 1 shows, there is a rapid acceleration of

journal articles on this term over time with more than 70 percent of all articles published between 2010 and 2020. This rapidly growing number must be much bigger than that as it does not include books, doctoral dissertations, or other publications outside the Web of Science database. Although research on sense of place is wide and multidisciplinary (Convery et al., 2014), scholars in the environmental studies, geography, urban and planning literature have long given more attention to this topic as a relevant concern or area of research and practice (*see* Fig. 1). Within this extensive literature, however, there has continued less clarity and consistency about sense of place than the concepts of place attachment, place identity, place satisfaction, and other place-focused cognitions and emotions. Over time the topic has expanded to include different theoretical orientations from the phenomenology of Relph and Tuan in the 1970s (Seamon, 2012) to critical theory and social constructionism (Williams, 2014; Derrien and Stokowski, 2014), globalisation (Massey, 1991; Amin, 2002), mobilities and performative theory (Quinn et al., 2018; Benson and Jackson, 2013), and recently assemblage and systems theory (Dovey, 2020).

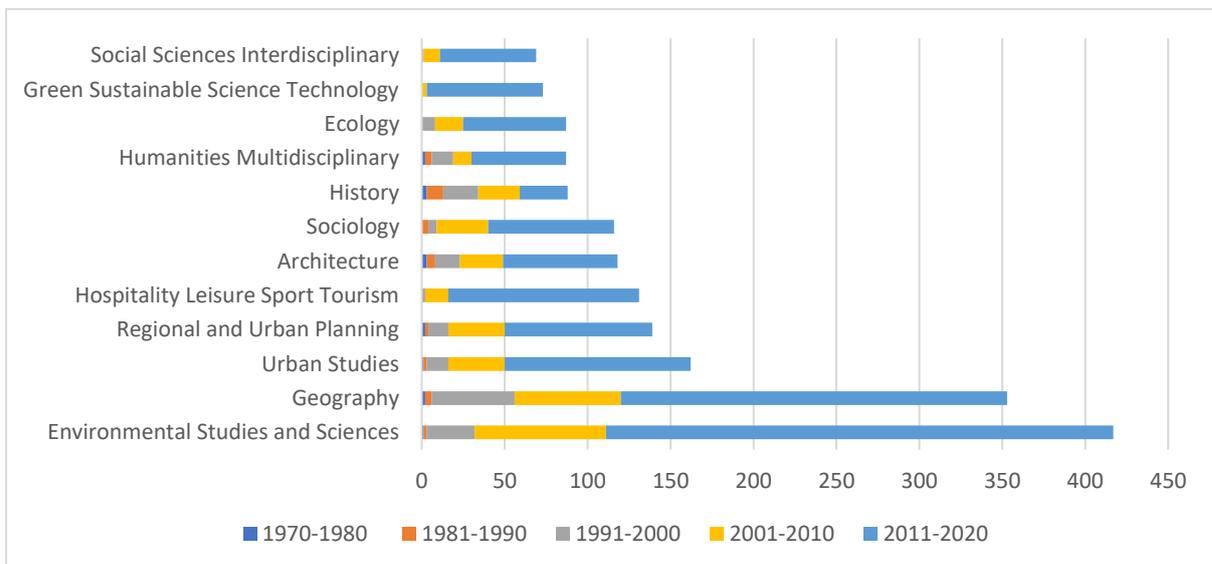


Figure 1: Number of journal articles on ‘sense of place’ by disciplinary area indexed in the Web of Science database from 1970 to 2020.

Scholars interested in examining planning practice and research have long argued the destructive role of urban planning policies, such as urban renewal, gentrification, and commercial development in residents’ sense of place. Bringing a preponderance of examples from New York, Jacob (1961) discussed when urban spatial (re-)developments

are far from ‘enough’ to deliver the diversity of population and uses, residents’ loyalty and urban sense of place would be disturbed. Drawing on empirical examples from the US and Europe, Whyte (1980) and Gehl (1987) have suggested that the ability of places to accommodate human activities as meaning-making processes (leading to social practices and actions) is an effective contributor to the success of urban places—and therefore to the development of the individual and collective sense of place over time. Overlooking such narrative meanings in the construction and maintenance of place can lead to the perception of displacement (Zuk et al., 2018) or placelessness as an ‘abstract geometric view of place, denuded of its human meaning’ as explained by Harvey Cox (in Relph 1976, p. 143). Some of these conceptions are well-established in other disciplines such as geography and more broadly in social sciences (*see* Massey, 1991, 1993; Cresswell, 2009, 2014). Human geographers use the term sense of place to describe the more dynamic subjective experiences and ‘nebulous meanings associated with a place: the feelings and emotions a place evokes’ (Cresswell, 2009, p.169) and how a sense of place can contribute to the success of urban regeneration practices and community well-being (Gao et al., 2020).

Because *sense of place* and *place attachment* are often classified in the literature under the umbrella of people-place relationships concepts, they are often used interchangeably and/or in overlapping ways (Trentelman 2009, pp. 199-200). However, this fact does not mean that ‘these terms necessarily reflect the same underlying phenomenon’ (Williams 2014, P. 76). As such, this study acknowledges the inter-relationality of these concepts but adopts sense of place as an overarching construct comprised of a broad way of constructing people-place relations (*see* Hashemnezhad et al., 2013) and reviews other place-based studies, including the literature on place attachment, to encompass a wide range of meanings that people, individually and in community, attribute to their place. The study recognises that there is some uncertainty in extrapolating the findings to the sense of place construct, and therefore, there is some degree of conjecture in that extension in the literature. As will be further substantiated in the following reviews, it is also crucial to discuss how sense of place has been investigated in various contexts by scholars from different disciplines using different ways. This review discussion contributes to the development and application of the conceptual framework that this study proposes. The proposed framework reconceptualises and theorises the interrelationships between people—individual and community—and places, extending the understanding and articulation of the complex and dynamic notion of sense of place and related concepts. The

complex construction of sense of place is not simply on the themes; rather, it is *in-between* them. The framework supports the understanding and articulation of place-based concepts, including *place attachment*, *place satisfaction*, and *place identity*, from an individual and community angle and their links.

## **2. The review of sense of place**

Much of the existing literature on people-place relations was inspired by place theorists such as Relph (1976) and Tuan (1975, 1977), who used the term ‘sense of place’ as an experiential process in which people interpret the meaning of place, insiderness and outsiderness, or placelessness (*see* Table 1). Seamon and Sowers (2008, p. 43) considered a key question for understanding a sense of place, building on Relph’s classic study of Place and Placelessness (1976): ‘How could one study place attachment, sense of place, or place identity without a clear understanding of the depth and complexity of place as it is experienced and fashioned by real people in real places?’. They link the question of sense of place to ‘the unique character of a place’ asking what distinguishes one place from another. Scholars (Seamon, 2012; Norberg-Schulz, 2019) refer it to as the ‘genius loci’ i.e. the spirit of a place, as well as ‘the experiential attributes of a place’ (Tuan, 1975): how people perceive and experience a place differently.

Using the Heideggerian thought of what a place as a phenomenological construct is, and what it wants to be, architectural theorist Norberg-Schulz (2019) discussed the term ‘genius loci’ with two connotations: meaning and structure. Meaning connotes the subjective interpretation of place assigned by an individual, mediated by the relationships between the place and other places. Structure denotes the objective meaning of place, which represents the physical aspects of place as an organisation of connections. Though the structure of place is constantly undergoing change, its ‘genius loci’ essentially does not extinguish and remains relatively stable; hence, places conserve their identity during a specific period of time through stability of place. Nevertheless, the appreciation of the ‘genius loci’ does not mean the duplication of historic places and buildings. Its meaning is to preserve the identity of place and reinterpret it in the new ways of recreation and representation of places. Therefore, the stability of place identity can lead to strength in ‘place attachment’ and

‘sense of belonging’, i.e. interpreted as emotional links with a place (*see* Twigger-Ross and Uzzell, 1996; Ujang, 2012).

This view of ‘stability’ of place, however, is in contrast with Massey’s (1991, 1993) argument of places as moments in spaces that are never fully independent of wider socio-spatial relations of power and authority, as further discussed by Dovey et al. (2009). It is also inconsistent with the recent argument made by Di Masso et al. (2019) that considered place attachment as the dialectical dynamics of fixity and flow—all of which seek to challenge the assumption of stability of place and place-focused constructs as well.

People experience and recall memories in relation to the places they live, work, and play, including the events that occurred there with other people. For the majority, the most influential and long-term memories centre around connecting with places, events, and relationships with other individuals and communities (Marcus, 1992). All together, these shape a sense of ‘self-identity’ (Proshansky, 1978). Through the interaction with place, people also represent a particular aspect of their identity (Anderson, 2004), which creates ‘place identity’ as a key ‘part[s] of self-identity’ (Lalli, 1992, p. 287). An empirical study by Twigger-Ross and Uzzell (1996) highlighted the constitutive role of *place* in identity processes to explain how resident groups become attached or non-attached to their local environment. As self-identity comprises specific and conscious convictions, interpretations and evaluations of oneself, place identity is an aspect of an individual’s identity, not a location of a particular place (Nanzer, 2014). Hence, place identity is understood as personal experiences created by certain conditions, and the individual understanding involved in the construction of a sense of place. Although more studies might presume a positive meaning for place identity (Manzo, 2005), Broto et al. (2010, p.964) argue that environmental changes in degraded areas can stigmatise place and ‘pose threats for the continuity of the residents’ identities’, which can negatively influence other place-based concepts e.g. sense of place and attachment.

Some scholars, mostly in community and sociological studies, have weighed the social aspect of a sense of place much more than the physical (*see* Greider and Garkovich, 1994; Eisenhauer et al., 2000). In this approach, sense of place is mainly an outcome of common behaviour, situational and cultural processes of identity and meaning constructions (Manzo, 2003; David et al., 2005) rather than the influence of perceptual and cognitive processes embedded in physical characteristics of place (Lewicka, 2010; Cao et al., 2018). This

approach was challenged by Stedman (2003a) who considers the important contribution of physical aspect to sense of place, by defining the physical and functional attachment to a place as 'place satisfaction'. A brief summary of the operative evaluation of the experienced physical environment embedded within sense of place is place satisfaction. Moreover, because place satisfaction is different from place identity, it should be considered in the investigation of sense of place; for instance, a sense of cultural identity does not always mean satisfaction with the place or the reverse. Therefore, sense of place is a broader concept composed of the combination of identity, and satisfaction.

Despite the various definitions of sense of place, emotional quality, cognition, and behaviour are common features within them (*see* Jorgensen and Stedman, 2001, 2006; Hashemnezhad et al., 2013). To investigate the relationship between sense of place and specific behaviour, Jorgensen and Stedman (2006, p. 317) underlined the 'cognitive (e.g. beliefs and perceptions), affective (e.g. emotions and feelings), and conative (e.g. behavioural intentions and commitments) domains'. They considered sense of place to be 'a multidimensional summary evaluation comprising place-specific beliefs (place identity), emotions (place attachment) and behavioural commitments (place dependence)'. Building on this idea, the components of sense of place are understood as: place identity representing an individual belief in relation to a place; place attachment i.e., a (positive) feeling of individual towards a place; and place satisfaction (operative dependence) indicating a functional expectation of a place.

On the other hand, several researchers have suggested place attachment as 'a holistic model for understanding the various attributes and perceptions of people-place relationships and experiences' (Counted, 2016, p. 7) or a model comprising of identity, dependence, and place as its dimensions (Manzo and Devine-Wright, 2013). The most comprehensive model was offered by Scannell and Gifford (2010), viewing place attachment in a three-dimensional, person-process-place organising structure. A *place* becomes meaningful to *people* through affective, cognitive, and behavioural *processes*. The different features of place are discussed on the spatial level, specificity, and the social/physical reputation of place. As such, place attachment in a social aspect has an individual/community meaning for place, while from a physiological aspect it is a cognitive, affective, and conative attachment to place. Nevertheless, the model does not clarify the relationship between these concepts and sense of place nor the consolidation of their links.

Table 1: Research background on sense of place and place-focused concepts

<b>Scholars</b>	<b>Disciplinary backgrounds</b>	<b>Key ideas and concepts</b>	<b>Terms used</b>
<b>Relph (1976) and Tuan (1975, 1977)</b>	Phenomenology and place theories	Sense of place as an experiential process where people interpret the meaning of place	Sense of place, Insideness, Outsideness, Placelessness
<b>Norberg-Schulz (1979)</b>	Architectural phenomenology	Sense of place is a generic phenomenon, associated with structural, spatial, and symbolic meanings	Sense of place, Genius loci
<b>Massey (1991, 1993)</b>	Human geography, globalisation, place theories	Places have multiple identities, constructed through social relations and communications with the wider world	Global sense of place, Progressive sense of place
<b>Lalli (1992)</b>	Environmental psychology	Place identity as a cognitive process to represent the environment	Place identity
<b>Stedman (2003a)</b>	Social and ecological resources	Place satisfaction as the physical and functional aspect of sense of place	Sense of place, Place attachment, Place satisfaction
<b>Cresswell (2009, 2014)</b>	Human geography and place theories	Place as a space invested with (subjective) meanings via personal, social, and/or cultural practices	Sense of place, Progressive sense of place
<b>Scannell and Gifford (2010)</b>	Environmental psychology	Place attachment is person-place bonds occurring through multidimensional, meaningful processes	Place attachment
<b>Lewicka (2011)</b>	Environmental psychology and place theories	Critical attention to theory-grounded principles of place attachment, specifically the physical nature of places	Place attachment, Sense of place, Place scale
<b>Manzo and Devine-wright (2013)</b>	Environmental psychology and people-place theories	Critical review of contemporary advancement in place attachment theory as a holistic concept to understanding people-place connections	Place attachment, Sense of place, Place bonding

<b>Wartmann, and Purves (2018)</b>	Geography	Integration of sense of place into the framework of intangible cultural ecosystem services	Sense of place, Landscape types
<b>Di Masso et al. (2019)</b>	Environmental psychology	Propose a fixity-flow framework to investigate place attachments in a mobile world	Place attachment

Scholars such as Ramkissoon et al. (2013) have attempted to explain the relationships between place satisfaction and attachment to place or how dissatisfaction in environmental changes can disrupt place attachment (Brown and Perkins, 1992). High dissatisfaction with a place, for instance, a constant lack of safety or unhealthy conditions, can convert place attachment to a negative sense and adversely affect the process of identification (Broto et al., 2010). However, again, it is unclear how place attachment is interrelated to, or reflects the structure of, the sense of place concept. Imagining a positive holistic concept, which can contain negative components, seems ambiguous, but as empirical evidence indicate, in place-meaning practices, undesirable experiences and outcomes can erode sense of place and provoke negative feelings and even anger that contribute to conflictual or destructive attitudes towards a place (*see* Shamai, 2018; Erfani, 2020; Erfani and Bahrami, 2022).

Place attachment, place identity, and place satisfaction can be respectively counted as the elements of sense of place, but these components of sense of place have various validity in different social psychology. For instance, building on the views of empirical researchers, place attachment is more an emotion-based construct (Low and Altman 1992; Jorgensen and Stedman, 2006), particularly when it is imagined as an overall approach to a place rather than conative- or cognitive-based. From this viewpoint, sense of place and place attachment are distinctive constructs in the literature that has mostly acknowledged that place attachment is a subset of sense of place (*see* Hashemnezhad et al., 2013).

There has been considerable emphasis in the literature that place satisfaction can lead to place dependence, physical and social bonding, contributing to the sense of place construct (Stedman, 2003a). Place satisfaction (operative dependence) is a functional reliance on a place built on the users' physical experience of the actual place. An individual understands and/or interprets how well a place provides opportunities for personal development e.g. recreation or economic income (Jorgensen and Stedman, 2001; Cross et al., 2011), which

is mainly dependent on place. Dependence on a place is regularly based on individuals' experiences and favourite actions, compared with existing alternatives (Williams and Roggenbuck, 1989).

In addition, these components influence each other in different ways. For example in the context of redevelopment interventions, the impacts of place satisfaction and place identity are opposite (Kyle et al., 2004). When redevelopment enhances the function and utility of places (place stratification), it interrupts the way the places were used and identified (place identity). Moreover, satisfaction with a place is linked to perceiving the place as an extension of self and identity (Droseltis and Vignoles, 2010), or 'an illustration of territoriality/protectionism' (Ashworth, 2008). Changes in these perceptions may interrupt place satisfaction. A study by Broto et al. (2010, p. 952) demonstrated that in environmentally degraded areas in Tuzla, Bosnia and Herzegovina, place identity was strengthened 'by the performance of adaptive identities' in reaction to a damaging ecological alteration while the residents were not functionally satisfied with the place.

However, the above-mentioned dimensions of sense of place with a composite of multi-layered interrelationships are not entirely substitutable variables. For instance, the distinctions of places affecting individual/collective behaviour may not influence emotions. Particular satisfaction with a place might also not be the key issue in beliefs about the place (Jorgensen and Stedman, 2006) and varies from one socio-demographic context to another (Mazloomi et al., 2014). These variant relationships between place identity, attachment, and satisfaction demonstrate that sense of place is complex, multi-layered, and subjectively experienced in a context-dependent manner.

The interrelationships between a community and its place should also be researched because of the strong connection between producing 'sense of place' and the concept of community (Stedman et al., 2006; Chamlee-Wright and Storr, 2009). As sense of place is individually understood and through the process of intersubjectivity is collectively imagined, the interrelationships between an individual (self), its community and place form the sense of place. Although this collective understanding may outline *community* more as a place-based concept, this study acknowledges the other forms of non-place-based communities, including a community of interests, circumstances, or virtual community (Fraser, 2005; Delanty, 2010), which may or may not overlap with a place-based community.

### **3. Investigating sense of place**

The review of the literature on 'sense of place' and place-based concepts (attachment, identity, satisfaction, and dependence) has shown that there is yet no consensus on theory, methods, and application to investigate these concepts (*see* Manzo and Devine-Wright, 2013). Different scholars have approached this concept differently. Several studies about sense of place (or place attachment) have relied on quantitative methods such as large-scale surveys followed by multivariate modelling (Bagozzi, 1978; Lalli, 1992; Stedman, 2003b; Shamai and Ilatov, 2005; Jorgensen and Stedman, 2006; Halpenny, 2010). These studies measured sense of place by asking how much people are attached to, identify themselves and are satisfied with, a particular place, and then the responses were classified into different degrees. Studies on place have also shown that sense of place may be differently affected by socio-demographic variables, including age, social position, or length of residence. For instance, younger people (under 30) consider a place more as an informal community, while older people focus on its geographical basis (Guterbock and Fries, 1997) or the close-to-home milieu, rather than the larger setting/community (Rowles and Watkins, 1993). A study by Brown et al. (2003) revealed that there is a significant correlation between length of dwelling time and place attachment. These studies show that people at different stages of life might have dissimilar opinions about their places (Mowl et al., 2000; Bergstén and Keskitalo, 2019). Moreover, the physical attributes of place have a direct impact on sense of place and an indirect impact on the meaning of place (Stedman, 2003b).

To investigate sense of place, Stedman et al. (2004, p. 581) split this concept into two different dimensions: evaluative and descriptive. The evaluative dimension has been more researched, and concerns how much a place is important to a person or a community. In this respect, place attachment, place dependence, and place identity are distinct notions, but all indicate a degree of attachment, dependence, and identity. Essentially, the investigation of these questions, how much a place is emotionally significant to an individual/community (place attachment) or provides opportunities to reach individual/collective goals (place dependence) or reflects self/community (place identity), points to the evaluative dimension of sense of place. In contrast, the descriptive dimension has been investigated less, and covers how a person/community sees meaning in the place and why this meaning is attached to the place.

The investigation of how an individual/community attaches the senses, beliefs, or behaviours to a place does not address any success or failure. Rather, this question and the investigation of why an individual or community forms a meaningful bond with places are exploratory, in-depth enquiries, particularly in urban design (Carmona et al., 2010; Ujang and Zakariya, 2015), where it provides a deeper understanding of the place and community, including potentially substantial implications for urban redevelopment and place making (Ujang, 2012; Kortelainen and Albrecht, 2021; Erfani, 2021). For instance, place-based community members may view their neighbourhood as a home, workplace, childhood place, religious place, or meeting place. These symbolic connotations describe the meanings and ways in which the attachment between people and place has been practised and developed.

The symbolic connotations reveal that places have multi-layered meanings attached to them. Individuals elicit diverse meanings and narratives from places based on their experiential relationships with that place (*see* Davenport et al., 2010). An individual may apply ‘my school’, ‘our park’ and/or a historical element for its neighbourhood, while another might link the place with its home, river and/or soundscape. Similarly, from a collective viewpoint, communities establish distinct meanings; for example, neighbours’ children may interpret their neighbourhood as a playground place, while women may attach a community meaning to the place in the neighbourhood garden. Such community meaning is not necessarily the most common sense/belief/behaviour between the (place-based) community members. Rather, the community meaning(s) of a place may vary from one resident to another, males and females, children from elders, and employees from retirees. Nevertheless, their meanings might overlap.

The literature underlines the crucial role of community engagement in constructing the shared meaning of a place. Studies on people-place relations by Relph (1976) and Ryden (1993) discuss that the people who have actually participated in collective activities and devoted more time to their place, sense the strongest attachment. Others such as Tuan (1977) emphasise the role of ‘chosen places’ in the attachment meaning of place; for instance, choosing attractive landscapes or deep experiences in a place can rapidly establish place attachment. Similarly, deep experience in a place can be constructed through social engagement and participatory practices. Although all highlighted the effect of community

engagement, the impact of participation and its community reasons are not explicit (Manzo and Perkins, 2006).

Reviewing the literature also shows that studies on sense of place and other place-focused concepts have typically considered the individual aspect rather than the collective, which indicates the need for further investigation on the community aspect. Community sense of place has been researched from two standpoints: first, the permanent residents' sense of the community's socio-cultural features as social networks and community benefits, and second, a community sense of belonging to the ecological features. One community may be more dependent on the socio-cultural attributes of a place, and another on the biophysical elements. However, socio-cultural factors are further highlighted compared with environmental factors (Stedman et al., 2004; Kopra, 2006). These different features and/or priorities should be considered, particularly in the context of how urban changes may produce conflict between individuals, communities, and professionals. A deep understanding of the sense of place in the eyes of community values can minimise the degree of such conflicts among different stakeholders, and maximise opportunities for them to benefit from community social and cultural values. This would facilitate the decisions and actions taken by urban planners, officials, and institutional stakeholders to improve the quality and outcomes of urban redevelopment projects as well as the process (Erfani and Roe, 2020).

Scholars have studied sense of place within certain types of places, for instance, within homes (Anton and Lawrence, 2014), neighbourhoods (Atkinson, 2015), cities (Droseltis and Vignoles, 2010), regions (Nanzer, 2014), countries (Shamai and Ilatov, 2005) or even a global sense of place (Massey, 1991; Knox, 2005). Others have explored a sense of place for rivers, forests, lakes (Beckley et al., 2004; Stedman et al., 2004; Kopra, 2006; Verbrugge et al., 2019), degraded environments (Broto et al., 2010), or else to compare different landscape types (Wartmann and Purves, 2018). Although these places have diverse scales and contexts, it indicates the extent and application of sense of place in studying the interrelationships between people and their physical, natural, and social environments.

Reviewing the literature revealed that to understand and investigate sense of place, there is a need to develop a wider and more expansive, relational approach that integrates cognitive-conative-affective processes between self, other people, and the natural and built

environment. This review suggests that the people-place interrelationships, affected by socio-cultural, institutional and environmental contexts, are complex and dynamic in nature. Sense of place can be studied in the eyes of the individual and/or community; however, presently the individual aspect has been more widely investigated. This study was therefore geared towards developing a conceptual framework that can clarify this complexity by presenting the individual-community-place links, and extending the boundaries of what is already a significant volume of literature.

Both qualitative and quantitative measures have been used in the investigation of the complex, multidimensional concept of sense of place. The review of the literature on sense of place (Stedman et al., 2004; Manzo, 2008; Manzo and Devine-Wright, 2013) shows that qualitative approaches are more sensitive in explaining the complicated interrelationships between humans and place, than quantitative measures. More importantly, the interrelationships can be even more complex when researchers aim to investigate in-depth explanations of how and why sense of place is changed by other complex socio-economic phenomena, such as participatory decision-making in urban redevelopments (Erfani, 2018; Erfani and Roe, 2020) or natural phenomena including hurricane (Chamlee-Wright et al., 2009) and earthquake (Magee et al., 2016). Qualitative approaches deepen our understanding of the participants' perceptions and experiences regarding 'in depth a process' (Creswell, 2009, p. 13). The key questions, *how* and *why* a complex phenomenon has influenced the individual and community sense of place, can be investigated through in-depth conversations (Miles and Huberman, 1994).

This study does not intend to preclude the use of quantitative measures nor analyse the potential variables constituting sense of place. Rather, building on the literature (Hummon, 1992; Kruger, 1996; Stedman et al., 2004), the study raises questions about how the holistic and qualitative concept of sense of place can be deconstructed and fragmented into precise, measurable variables, and then reintegrated through multivariate modelling. The typical use of quantitative models developed through statistical manipulation of isolated variables is to allow greater generalisability and application from one setting to another; the greater generalisability and applicability, the stronger the model. Nevertheless, this 'push for generalizability has provided few precedents for using variables to discern the complexities that make places distinct' and interesting (Paulsen, 2004, p.251). Significantly, as discussed before, sense of place is a complex concept, including profound meanings associated with

place and patterns in social life, notwithstanding any preferred investigation method. This study aims to contribute to the body of knowledge by developing a framework to reconceptualise sense of place as a holistic term including other place-based concepts about place—attachment, satisfaction, dependence, and identity, from an individual and community angle, and their links. While there is a large amount of literature on sense of place, the proposed framework extends its application in reconceptualising how sense of place may relate to earlier constructs in an interdisciplinary literature. As such, it is an in-depth investigation of complex groundwork.

#### **4. Conceptualised framework for studying sense of place**

The literature review has led to the development of an inclusive conceptual understanding of ‘sense of place’. To articulate the multifaceted interrelationships between individuals, community, and place, this study proposes a three-theme conceptual framework that articulates the notion of sense of place from an individual and community angle, and their links with other place-based concepts, including place attachment, place satisfaction, and place identity, as illustrated in the Venn diagram of Figure 2. This will help researchers to uncover the different but relevant issues within a logical structure that facilitates the understanding and investigation of the dynamic and multidimensionality of sense of place.

The sub-sections below detail the conceptualisation of the proposed framework and help to differentiate the present work from prior efforts. For example, what distinguishes this conceptual framework from the tripartite model by Scannell & Gifford (2010) lies in three aspects. First, the framework proposed by this study is much broader and includes not only place attachment, but also place identity, satisfaction, dependence. In addition, this framework highlights community as a key concept in developing people-place relations, while the third dimension of the Scannell & Gifford model is process. Lastly, the framework emphasises that the construction of a sense of place is *in-between* individual, community, and place, not simply on them or underneath of them. In a recently published study by Wartmann et al. (2021), the concepts of place attachment, place identity, and place satisfaction were jointly incorporated into the multilevel model investigating individual and landscape-level relationships. Nevertheless, despite the several references to the research focusing on sense of place, their study does not clarify the link(s) between sense of place and their suggested model, nor the place-focused concepts used in the study.

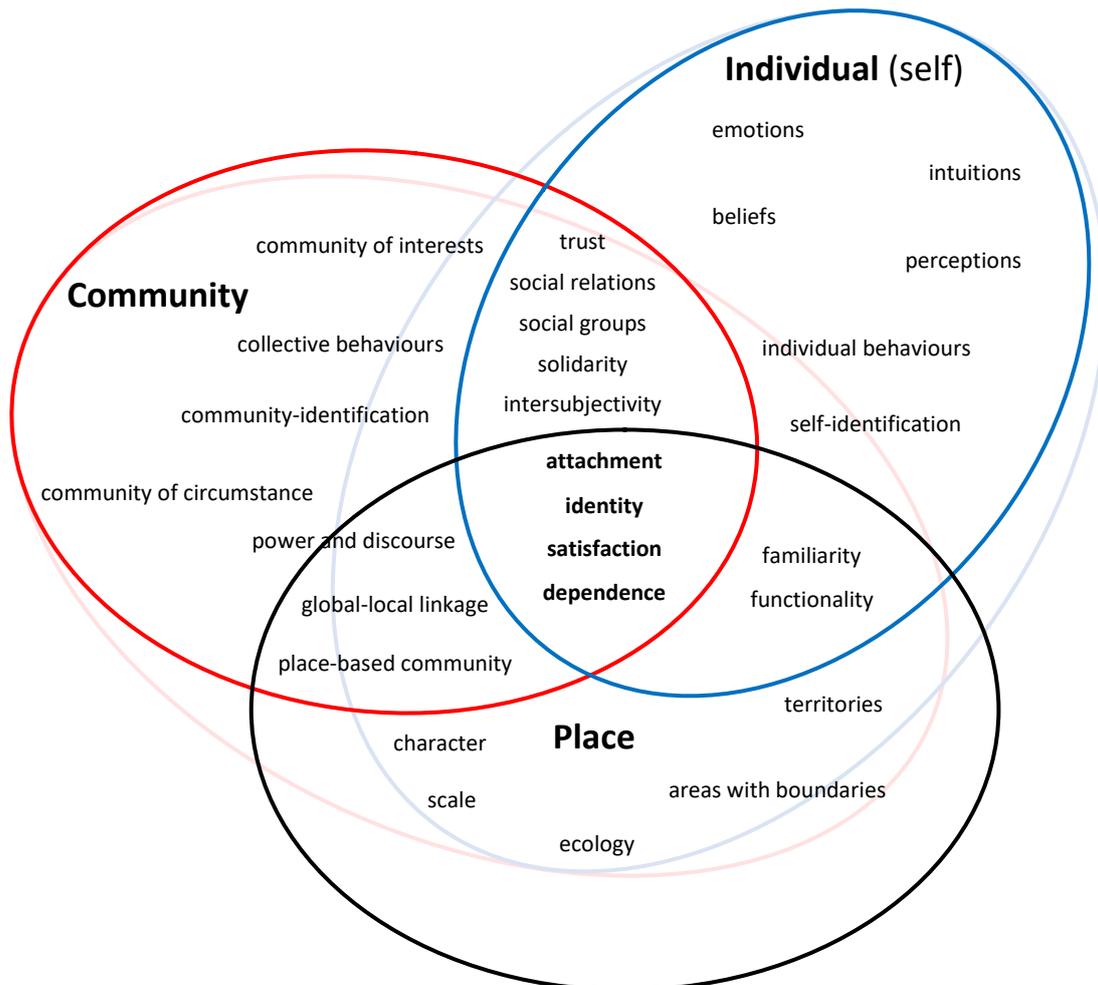


Figure 2. The interrelationships between individual, community, and place.

*Individual:* Individuals build self-boundary by sharing (or revising) their emotions, beliefs, and perceptions within continuous social relations in the global-local linkage (Massey, 1991). These boundaries can be imagined at different levels: the person’s sense of their own home, in a neighbourhood, city or country. Individuals share feelings, opinions, and social interactions, to build their unique and indivisible self-identification (La Fontaine,

1985) and practice territoriality as a socio-spatial control (Knox and Pinch, 2010; Clark, 2015) over the duration of residence (Anton and Lawrence, 2014). An individual also has social relations with other individuals, who have their own social relations with others, either separately or collectively. An individual through these social relations with other individuals builds in its own family, relatives, friends, neighbours, and other socially constructed categories. From a personal (highly subjective) viewpoint, a person may imagine the self through their home, family, and workplace, identifying the person from others.

*Community:* A review of the community studies literature indicates the acknowledgment of ‘psychological sense of community’ as a broad theoretical construct providing a sense of belonging to a particular area, social group, identity, emotional connection, and well-being (Fisher et al, 2002). A community is neither a static phenomenon, nor an inclusive notion for all citizens. Rather, a community essentially is a dynamic concept, in which citizens are constantly joining and leaving or at least claiming to do so, and understood differently in different political, theoretical, and ecological contexts (*see* Arai and Pedlar, 2003; Gregory et al., 2009). Whenever members of a community share a kinship relationship and sense of solidarity based on the place, a place-based community is constructed (Fraser, 2005). A place-based community is dependent on trust and familiarity among its locals, who possess kinship relations (Herbert, 2005). While from the Chicago School perspective, place-based communities dictate the ecological ideas of invasion, dominance, and succession (Sampson, 2002; Knox and Pinch, 2010, p. 157), the political economic school view is interrelated with socio-economic policies and political power (Harvey, 1993; Gregory et al., 2009; Delanty, 2010). The deep metamorphoses of urban environments through regeneration, gentrification, decentralisation, suburbanisation and social polarisation have led to the fragmentation of urban community networks (Delanty, 2010) and residential displacement (Zuk et al., 2018). Globalisation and technological innovation (Harvey, 1993; Knox, 2005) have also accelerated the destruction of community networks and the change of place-based communities to non-place-based communities (Knox and Pinch, 2010).

*Place:* After reviewing 40 years of literature on the construct ‘place attachment’, Lewicka (2011) calls for more attention to the definition of *place* and place-focused theories. Despite globalisation and technological advances, *place* is still a key element in shaping our

attachments, although the literature excessively highlights the individual/community element. The term *Place* is conceptualised as certain moments of social relations rather than only ‘as areas with boundaries around’ (Massey, 1991, p.28). These moments are constructed at the intersections of social interactions, movements, and communications through economic, political, and cultural connections to the wider world that is used to articulate the particular moment and the place, whether it is a home, neighbourhood, city or country. This way of conceptualising and understanding of how places are linked to or differentiated from each other, facilitates the recognition of ‘a global sense of the local, a global sense of place’ (p.27)—indicating how places integrate the *global* and the *local* together. In this sense, places are institutionalised by political-economic powers in which economic and political decision-making processes transform the built environment, for instance, by supporting local institutions and organisations (*see* Harvey, 1993; Logan and Molotch, 2007). In addition, frequently, places are narrating many other meanings, which may not be influenced only by individuals or a community, but the sense of place is affected. For instance, the bio-physical features of a place (ecological aspect) including seasons, weather, or perceived landscape views allow people to differentiate (and link) the differences in ‘sense of place as a cultural ecosystem service’ between different places. When unique elements and events are embedded within a place, the place constitutes cultural and symbolic meaning rather than merely a physical setting (*see* Vanclay, 2008; Wartmann and Purves, 2018).

*Individual and place:* An individual may apply, my home, my city, or my country in their narratives to establish the link with a particular place as a way to (re)define self-identification. When an individual believes and/or perceives that a place represents the self, then the individual’s identity can be represented through the place identity. This happens when the self-identification and place identity are overlapping, allowing the individual to be re-identified through the place. Moreover, the emotional and intuitional links between an individual and a place construct place attachment (Jorgensen and Stedman, 2001; 2006). In this case, physical and historical familiarities with the place may influence an individual’s feelings about the place (*see* Shamsuddin and Ujang, 2008). For instance, individual involvement in building a house or planting a tree can bring a sense of attachment since the person feels familiarity with that place, physically and during the process of transformation. Hence, individual involvement influences the individual’s attachment to a place. In addition, if an individual feels that a place offers him/her an

opportunity for personal development, he/she might have a desirable affect—‘pride, happiness, and love’ (Scannell and Gifford, 2010, p.2), and/or dependence on the place when the place provides the individual’s needs e.g. jobs and housing.

*Individual and community:* Individual-individual and individual-community interactions may help building or developing *trust* (Payton et al., 2005). Individuals may develop thick trust through their kinship and daily relationships. The relationship between individuals and community, or even individual/community and the institutions, is weaker (thin trust) when trust is constructed through the *intersubjectivity* between community members or the institutions. When community members and individuals perceive similar values, attitudes, and beliefs, thin trust is created (Paxton, 1999; Arai and Pedlar, 2003). The above studies did not discuss the influence of familiarity with places and/or involvement in decision-making processes on trust and citizen actions, but other research has argued that familiarity with neighbours or local institutions can lead a resident to trust or intrust in the community (Herbert, 2005).

Because the relationship between an individual and community (family, neighbours, and friends) is critical over the individual meaning of a place, it influences the individual sense of place. When a resident knows a neighbour/community/institution and can predict their behaviour and social norms, the local perceives a network of familiarity and trust between him/herself with others. While deep interrelationships between community members lead to an individual trust, shallow connections between a person and institution construct institutional trust (Herbert, 2005; Payton et al., 2005). Thus, the construction of trust and familiarity between the individual and (place-based) community or the institution, leads to an individual’s sense of belonging to the community and the place itself (Stedman et al., 2006). Behaviour is fundamentally individual, but scholars distinguish between individual and collective behaviours in shaping a sense of a place. Collective actions can contribute to a sense of collective achievement (Erfani, 2020), creating potential for long-term transformative change in socio-ecological systems (Masterson et al., 2017).

Social structural phenomena at the community level can influence individuals’ perceptions, attitudes, and behaviours (Brown et al., 2003; Long and Perkins, 2007; Entwisle et al., 2007). This demonstrates significant contributions of ‘community-contextual factors to individuals’ experiences of community’ (Flaherty and Brown 2010, p.504) and the development of a sense of community (attachment) as a multilevel, multifaceted construct

(Sampson, 1988; Brown et al., 2003; Long and Perkins, 2007). As such, it is limited or insufficient to understand individual-community relationships without contextualising individuals' subjective sense of community within the wider, more objective social cohesion, communitarianism, or organisation at the community level. In addition, from a human ecological perspective, community experiences and meanings are rooted in a (macro-level) socio-ecological context (Sampson, 1988; 2002). This argument resonates with the social-ecological theory, which posits that to understand individual-community relations, the entire social and ecological systems in which interactions occur need to be studied (Masterson et al., 2017).

*Community and place:* The behavioural intentions and commitments of community are linked to place in a way that may influence collective behaviours (Ramkissoon et al., 2013). Places are perceived friendly settings facilitating social relations when neighbourhood-based communities empower the kinship relationship between the residents. As such, the residents feel a sense of solidarity based on a common place that makes them satisfied and dependent (Chamlee-Wright and Storr, 2009). Indeed, when the members collectively share behavioural dependence on the place rather than a common personality, a place-based community is constructed through sharing subjectivities. Daily intersubjectivity leads to a continuous revision and reorganisation of community. Intersubjectivity between individual community members influences the connection between place and community attachment (Lefebvre, 1991; Knox and Pinch, 2010). The effects are reflected in the attitudes and behaviours of community members, for example, residents may share an attachment to a place, through an attachment to a local community. Indeed, satisfied involvement as a community member over time can generate a kinship relationship and spirit of solidarity from the viewpoint of an individual to the community, and this can affect place attachment. One such study was by Payton et al. (2005), who revealed that there is a significant relationship between place attachment and community actions. The qualitative study highlights the significance of the emotional and functional aspect of place, individual and institutional trust. Increasing place attachment directly raises trust and indirectly raises community involvement, and increasing trust directly raises community participation. Though in Payton's research, trust links place attachment to community involvement.

Local communities constantly develop and/or (re-)discover their senses of place by making and sharing meanings attributed to the place and activities. Involvement in these collective

meaning-making practices contributes to the articulation of community narratives about the place, how they conceptualise and talk about the place, and how power is situated within the discourses—indicating the inclusion of discourses of power in (re-)constructing sense of place (Stokowski, 2002). These practices include the interpretation of place meanings, language and discourse, material and socio-political interactions (Williams, 2014), and the various aspects of place, including location, character, and scale (Jorgensen and Stedman, 2001).

#### **4.1. Applied implications**

The developed framework allows various applications in urban studies and planning processes. Planning processes that integrate and develop elements central to the *in-between* interactions of individual-community-place, as detailed in the last section, contribute to enhancing sense of place and achieving desired planning outcomes. This application supports community-led planning initiatives aiming to actively involve individuals and community groups in the identification and articulation of meanings, feelings, attitudes, interests, needs, and how they should be addressed. A comprehensive understanding of *place* from an individual and community perspective, as the framework conceptualises, also contributes to resolving or minimising the potential conflicts and disagreements in development processes. Such understanding is crucial for informing planning researchers and practitioners involved in the decision- and policy-making processes. In addition, as people express their interrelationships with places through the three main themes—here/there (place), others (community), and me (self)—this framework facilitates categorisation and simple thematic analysis of narratives. Along with behavioural intentions and commitments (satisfaction), potential respondents can easily express their feelings (attachment), beliefs and perceptions (identity) towards a place based on a relationship between the three themes. Their narratives, indeed, are not drawn on just one theme, but are instead in between them: individual-community, individual-place, and community-place interrelations.

## **5. Conclusion**

*Sense of place* has recently gained increased attention in academic research, including environmental psychology, geography, urban and planning literature. In a variety of research contexts and for different purposes, different theories and approaches have been adopted in the investigation of sense of place. The discussion of the contributions from a plurality of approaches deepens our understanding of sense of place, its complexity, dynamic, and multidimensionality. The conceptual framework developed in this study theorises the interrelationships between individual-community-place in constructing a sense of place and where the other place-based concepts lie. The framework, organised in a three-theme structure, has the potential to facilitate the categorisation and (thematic) analysis of qualitative narratives and accelerate progress across a wide range of fields, including planning practice and research. The framework contributes to the debate on bottom-up policy development and social planning, which would consider the perceptions and attitudes of the local inhabitants as a major factor in the planning and management of urban habitats. The framework can also stimulate directions for future research by identifying potential gaps in the existing literature and linking place-based constructs in a structural paradigm by enhancing the understanding and articulation of sense of place from an individual and community angle and their links.

Interrelationships between the *individual*, *community*, and *place* shape the spectrum of sense of place. The community level of sense of place is formed through the process of developing ‘intersubjectivity’ between individuals (Lefebvre, 1991; Knox and Pinch, 2010). Intersubjectivity as the collective intersection of people’s subjectivities through time-space can lead to trust and familiarity, which identifies one community from another (community-identification). Since the word *place* is one of the most multi-layered and multi-purpose notions in semantics, any discussion about sense of place inevitably seems complex and vague. Consequently, sense of place as a multi-dimensional and abstract term, encompasses the socio-cultural and ecological attributes of a place. However, this notion is more than the statistical calculation of these components. People describe their cognitive, affective, and conative relationship with a place and others through a non-mathematical experience of place. Therefore, this qualitative concept is individually and collectively (community level) constructed through a combination of *place identity*, *place attachment*, and *place satisfaction*, which are in turn influenced by various contextual factors, including culture, institutional arrangements and organisations.

Place identity refers to a brief summary of an individual's sense of self in relation to a place. This cognitive-based aspect of sense of place is constructed once an individual believes that certain attributes of a place, either physical or symbolic, contributes to the sense of self identity. If a place represents the beliefs and values that an individual believes the self and others possess, the individual considers that the dwellers can be reidentified through that place. A concise summary of a (positive) emotional bond to a specific place developed through interactions between an individual/community and the place over time, structuralises the place attachment. For instance, an individual can be attached to their neighbourhood through social ties with people living there and/or childhood memories of growing up there. Place satisfaction reflects the conative-based aspect: a brief summary of functional expectations and values that a place offers to an individual/community, facilitating their preferred activities and satisfying their needs. When someone is satisfied with their place of living and/or work, it means the place functionally provides a space for the individual's desired activities and interests. An individual may feel dependent on the place for its certain facilities, such as offering a place to work and live, or expected social norms and activities from the community members. A sense of place can conceptualise a negative or ambivalent people-place relation (*see* Shamai, 2018), though often discussed as a positive concept. For example, an individual may develop a negative view of sense of place as certain features of place are in contrast interaction with the self-identity or because the place and community do not reflect the person's needs and values.

## References

- Anderson, J. (2004). The ties that bind? Self- and place-identity in environmental direct action. *Ethics, Place & Environment*, 7(1-2), 45-57. <https://doi.org/10.1080/1366879042000264769>
- Amin, A. (2002). Spatialities of globalisation. *Environment and planning A: Economy and Space*, 34(3), 385-399. <https://doi.org/10.1068/a3439>
- Anton, C.E. and Lawrence, C. (2014). Home is where the heart is: The effect of place of residence on place attachment and community participation. *Journal of Environmental Psychology*, 40, 451-461. <https://doi.org/10.1016/j.jenvp.2014.10.007>
- Arai, S. and Pedlar, A. (2003). Moving beyond individualism in leisure theory: A critical analysis of concepts of community and social engagement. *Leisure Studies*, 22(3), 185-202. <https://doi.org/10.1080/026143603200075489>

Ashworth, G. (2008). In search of the place identity dividend: Using heritage landscapes to create place identity. In Williams, A. and Eyles, J. (eds.) *Sense of place, health and quality of life* (pp. 185-196). London: Routledge. <https://doi.org/10.4324/9781315243474>

Atkinson, R. (2015). Losing one's place: Narratives of neighbourhood change, market injustice and symbolic displacement. *Housing, Theory and Society*, 32(4), 373-388.

Bagozzi, R.P. (1978). The construct validity of the affective, behavioral, and cognitive components of attitude by analysis of covariance structures. *Multivariate Behavioral Research*, 13(1), 9-31. [https://doi.org/10.1207/s15327906mbr1301\\_2](https://doi.org/10.1207/s15327906mbr1301_2)

Beckley, T.M., Stedman, R., Wallace, S. and Ambard, M. (2004). A new tool for understanding sense of place. Sustainable Forest Management Network Project Reports. University of Alberta, Edmonton, Canada.

Benson, M. and Jackson, E. (2013). Place-making and place maintenance: Performativity, place and belonging among the middle classes. *Sociology*, 47(4), 793-809. <https://doi.org/10.1177/0038038512454350>

Bergstén, S. and H. Keskitalo, E.C. (2019). Feeling at home from a distance? How geographical distance and non-residency shape sense of place among private forest owners. *Society & Natural Resources*, 32(2), 184-203. <https://doi.org/10.1080/08941920.2018.1533607>

Broto, V.C., Burningham, K., Carter, C. and Elghali, L. (2010). Stigma and attachment: Performance of identity in an environmentally degraded place. *Society & Natural Resources*, 23(10), 952-968. <https://doi.org/10.1080/08941920802705776>

Brown, B.B. and Perkins, D.D. (1992). Disruptions in place attachment. In Altman, I. and Low, S.M. (eds.) *Place attachment* (pp. 279-304). New York: Plenum Press. [https://doi.org/10.1007/978-1-4684-8753-4\\_13](https://doi.org/10.1007/978-1-4684-8753-4_13)

Brown, B., Perkins, D.D. and Brown, G. (2003). Place attachment in a revitalizing neighborhood: Individual and block levels of analysis. *Journal of environmental psychology*, 23(3), 259-271. DOI: [10.1016/S0272-4944\(02\)00117-2](https://doi.org/10.1016/S0272-4944(02)00117-2)

Cao, X., Wu, X. and Yuan, Y. (2018). Examining built environmental correlates of neighborhood satisfaction: A focus on analysis approaches. *Journal of Planning Literature*, 33(4), 419-432. DOI: [10.1177/0885412218765443](https://doi.org/10.1177/0885412218765443)

Carmona, M., Heath, T., Tiesdell, S. and Oc, T. (2010). *Public places - urban spaces: the dimensions of urban design*. Oxford: Architectural.

Chamlee-Wright, E. and Storr, V.H. (2009). "There's no place like New Orleans": Sense of place and community recovery in the Ninth Ward after Hurricane Katrina. *Journal of Urban Affairs*, 31(5), 615-634. DOI: [10.1111/j.1467-9906.2009.00479.x](https://doi.org/10.1111/j.1467-9906.2009.00479.x)

Clark, W.A. (2015). Neighbourhoods and the structure of society: Implications for work and residence in the Internet Age. In Mason, C., Reuschke, D., Syrett, S. and van Ham, M. (eds.) *Entrepreneurship in cities: neighbourhoods, households and homes* (pp. 39-57). Cheltenham: Edward Elgar.

Convery, I., Corsane, G. and Davis, P. (2014). *Making sense of place: Multidisciplinary perspectives*. Woodbridge, UK: Boydell & Brewer.

Counted, V. (2016). Making sense of place attachment: Towards a holistic understanding of people-place relationships and experiences. *Environment, Space, Place*, 8(1), 7-32. DOI: [10.5840/esplace2016811](https://doi.org/10.5840/esplace2016811)

Cresswell, T. (2014). *Place: an introduction*. Blackwell: Oxford.

Cresswell, T. (2009). Place. In Kitchen R. & Thrift N. (eds), *International Encyclopedia of Human Geography* (pp.169-177). vol. 8, Oxford: Elsevier.

Creswell, J.W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. 3rd ed. Thousands Oaks, California: SAGE Publications, Incorporated.

Cross, J.E., Keske, C.M., Lacy, M.G., Hoag, D.L.K. and Bastian, C.T. (2011). Adoption of conservation easements among agricultural landowners in Colorado and Wyoming: The role of economic dependence and sense of place. *Landscape and Urban Planning*, 101(1), 75-83. <https://doi.org/10.1016/j.landurbplan.2011.01.005>

Davenport, M.A., Baker, M.L., Leahy, J.E. and Anderson, D.H. (2010). Exploring multiple place meanings at an Illinois State Park. *Journal of Park and Recreation Administration*, 28(1).

David, S., Charles, H. and Nick, S. (2005). An exploration of place as a process: The case of Jackson Hole, WY. *Journal of Environmental Psychology*, 25(4), 397-414. <https://doi.org/10.1016/j.jenvp.2005.12.003>

Delanty, G. (2010). *Community*. London: Routledge.

Derrien, M.M. and Stokowski, P.A. (2014). Sense of place as a learning process: Examples from the narratives of Bosnian immigrants in Vermont. *Leisure Sciences*, 36(2), 107-125. <https://doi.org/10.1080/01490400.2013.862885>

Di Masso, A., Williams, D.R., Raymond, C.M., Buchecker, M., Degenhardt, B., Devine-Wright, P., Hertzog, A., Lewicka, M., Manzo, L., Shahrads, A. and Stedman, R. (2019). Between fixities and flows: Navigating place attachments in an increasingly mobile world. *Journal of Environmental Psychology*, 61, 125-133. <https://doi.org/10.1016/j.jenvp.2019.01.006>

Dovey, K. (2020). Place as assemblage. In Edensor, T., Kalandides, A. and Kothari, U. (eds.) *The Routledge Handbook of Place* (pp. 21-31). London: Routledge.

Dovey, K., Woodcock, I. and Wood, S. (2009). A test of character: Regulating place-identity in inner-city Melbourne. *Urban studies*, 46(12), 2595-2615. <https://doi.org/10.1177/0042098009344229>

Droseltis, O. and Vignoles, V.L. (2010). Towards an integrative model of place identification: Dimensionality and predictors of intrapersonal-level place preferences. *Journal of Environmental Psychology*, 30(1), 23-34. <https://doi.org/10.1016/j.jenvp.2009.05.006>

Eaton, W.M., Eanes, F.R., Ulrich-Schad, J.D., Burnham, M., Church, S.P., Arbuckle, J.G. and Cross, J.E. (2019). Trouble with sense of place in working landscapes. *Society & Natural Resources*, 32(7), 827-840. <https://doi.org/10.1080/08941920.2019.1568653>

- Eisenhauer, B.W., Krannich, R.S. and Blahna, D.J. (2000). Attachments to special places on public lands: An analysis of activities, reason for attachments, and community connections. *Society & Natural Resources*, 13(5), 421-441. <https://doi.org/10.1080/089419200403848>
- Entwisle, B., Faust, K., Rindfuss, R.R. and Kaneda, T. (2007). Networks and contexts: Variation in the structure of social ties. *American Journal of Sociology*, 112(5), 1495-1533. <https://doi.org/10.1086/511803>
- Erfani, G. (2018). Participatory urban redevelopment in Tehran: an investigation through sense of place. Doctoral dissertation, Newcastle University, Newcastle-upon-Tyne. Available at: <http://theses.ncl.ac.uk/jspui/handle/10443/4132>.
- Erfani, G. (2020). Sense of place as an investigative method for the evaluation of participatory urban redevelopment. *Cities*, 99, 102648. DOI: [10.1016/j.cities.2020.102648](https://doi.org/10.1016/j.cities.2020.102648)
- Erfani, G. (2021). Visualising urban redevelopment: Photovoice as a narrative research method for investigating redevelopment processes and outcomes. *Geoforum*, 126, 80-90. DOI: [10.1016/j.geoforum.2021.07.021](https://doi.org/10.1016/j.geoforum.2021.07.021)
- Erfani, G. and Bahrami, B. (2022). COVID and the home: the emergence of new urban home life practised under pandemic-imposed restrictions. *Cities & Health*. <https://doi.org/10.1080/23748834.2022.2029241>
- Erfani, G. and Roe, M. (2020). Institutional stakeholder participation in urban redevelopment in Tehran: An evaluation of decisions and actions. *Land Use Policy* 91, 104367. <https://doi.org/10.1016/j.landusepol.2019.104367>.
- Fisher, A.T., Sonn, C.C. and Bishop, B.J. (eds.) (2002). Psychological sense of community: Research, applications, and implications. New York, NY: Kluwer Academic/Plenum Publishers.
- Flaherty, J., and Brown, R. B. (2010). A multilevel systemic model of community attachment: Assessing the relative importance of the community and individual levels. *American Journal of Sociology*, 116(2), 503-542. <https://doi.org/10.1086/653600>
- Fraser, H. (2005). Four different approaches to community participation. *Community Development Journal*, 40(3), 286-300.
- Gao, Q., Yin, D. and Zhu, H., 2020. Urban regeneration and emotional politics of place in Liede Village, Guangzhou, China. *Habitat International*, 103, p.102199. <https://doi.org/10.1016/j.habitatint.2020.102199>
- Gehl, J. (1987). Life between buildings. New York: Van Nostrand Reinhold
- Gregory, D., Johnston, R. and Pratt, G. (2009). *The dictionary of human geography*. Oxford: Wiley-Blackwell.
- Greider, T., and L. Garkovich. (1994). Landscapes: The social construction of nature and the environment. *Rural Sociology*. 59(1):1-24. <https://doi.org/10.1111/j.1549-0831.1994.tb00519.x>

Guterbock, T.M. and Fries, J.C. (1997). *Maintaining America's social fabric: The AARP survey of civic involvement*. Washington, DC: American Association of Retired Persons

Halpenny, E.A. (2010). Pro-environmental behaviours and park visitors: The effect of place attachment. *Journal of Environmental Psychology*, 30(4), 409-421. <https://doi.org/10.1016/j.jenvp.2010.04.006>

Harvey, D. (1993). From space to place and back again: reflections on the condition of postmodernity. In Bird, J., Curtis, B., Putnam, T., Robertson, G. and Tickner, L. (eds.) *Mapping the futures: Local cultures, global change* (pp. 17-44). London: Routledge.

Hashemnezhad, H., Yazdanfar, S.A., Heidari, A.A. and Behdadfar, N. (2013). Comparison the concepts of sense of place and attachment to place in architectural studies. *Australian Journal of Basic and Applied Sciences*, 7(1), 219-227. <http://www.ajbasweb.com/old/ajbas/2013/January/219-227.pdf>

Healey, P. (2005). Editorial. *Planning Theory & Practice*, 6(1), 5-8. <https://doi.org/10.1080/1464935042000334930>

Healey, P. (2006). Relational complexity and the imaginative power of strategic spatial planning. *European Planning Studies*, 14(4), 525-546. <https://doi.org/10.1080/09654310500421196>

Herbert, S. (2005). The trapdoor of community. *Annals of the Association of American Geographers*, 95(4), 850-865. <https://doi.org/10.1111/j.1467-8306.2005.00490.x>

Hummon, D.M. (1992). Community attachment: Local sentiment and sense of place. In Altman, I. and Low, S.M. (eds.) *Place attachment* (pp. 253-278). New York: Plenum Press.

Jacobs, J. (1961). *The death and life of great American cities*. New York, NY: Vintage Books.

Jorgensen, B.S. and Stedman, R.C. (2001). Sense of place as an attitude: Lakeshore owners attitudes toward their properties. *Journal of Environmental Psychology*, 21(3), 233-248. <https://doi.org/10.1006/jevp.2001.0226>

Jorgensen, B.S. and Stedman, R.C. (2006). A comparative analysis of predictors of sense of place dimensions: Attachment to, dependence on, and identification with lakeshore properties. *Journal of Environmental Management*, 79(3), 316-27. <https://doi.org/10.1016/j.jenvman.2005.08.003>

Knox, P.L. (2005). Creating ordinary places: Slow cities in a fast world. *Journal of Urban Design*, 10(1), 1-11. <https://doi.org/10.1080/13574800500062221>

Knox, P.L. and Pinch, S. (2010). *Urban social geography: An introduction*. 6th ed. New York: Pearson Prentice Hall.

Kopra, K. (2006). Assessing SFM values: A tool for describing attachment to place. SFM Network Research Note Series, No. 21. <https://doi.org/10.7939/R3DJ58K79>

- Kortelainen, J. and Albrecht, M. (2021). Placelessness of urban design and industrial branding in small town planning. *Journal of Urban Design*, 26(4), 405-421. <https://doi.org/10.1080/13574809.2021.1877536>
- Kruger, L.E. (1996). Understanding place as a cultural system: Implications of theory and method. University of Washington (Doctoral dissertation).
- Kyle, G., Graefe, A., Manning, R. and Bacon, J. (2004). Effects of place attachment on users' perceptions of social and environmental conditions in a natural setting. *Journal of Environmental Psychology*, 24(2), 213-225. <https://doi.org/10.1016/j.jenvp.2003.12.006>
- La Fontaine, J.S. (1985). Person and individual: Some anthropological reflections. In Carrithers, M., Collins, S. and Lukes, S. (eds.) *The category of the person: Anthropology, philosophy, history* (pp.123-140). Cambridge: Cambridge University Press.
- Lalli, M. (1992). Urban-related identity: Theory, measurement, and empirical findings. *Journal of Environmental Psychology*, 12(4), 285-303.
- Lefebvre, H. (1991). *The production of space*. Translated by Nicholson-Smith, D. Oxford: Blackwell.
- Lewicka, M., (2011). Place attachment: How far have we come in the last 40 years? *Journal of Environmental Psychology*, 31(3), 207-230. <https://doi.org/10.1016/j.jenvp.2010.10.001>
- Lin, C.C. and Lockwood, M. (2014). Forms and sources of place attachment: Evidence from two protected areas. *Geoforum*, 53, 74-81. <https://doi.org/10.1016/j.geoforum.2014.02.008>
- Logan, J.R. and Molotch, H.L. (2007). *Urban fortunes: The political economy of place*. Berkeley: University of California Press.
- Long, D. A., and Perkins, D. D. (2007). Community social and place predictors of sense of community: A multilevel and longitudinal analysis. *Journal of Community Psychology*, 35(5), 563–581. <https://doi.org/10.1002/jcop.20165>
- Low, S.M. and Altman, I. (1992). Place Attachment. In Altman I. and Low S.M. (eds) *Place Attachment. Human Behavior and Environment (Advances in Theory and Research)*, (pp. 1-12). Boston, MA: Springer. [https://doi.org/10.1007/978-1-4684-8753-4\\_1](https://doi.org/10.1007/978-1-4684-8753-4_1)
- Magee, L., Handmer, J., Neale, T. and Ladds, M., (2016). Locating the intangible: Integrating a sense of place into cost estimations of natural disasters. *Geoforum*, 77, 61-72.
- Manzo, L.C. (2003). Beyond house and haven: Toward a revisioning of emotional relationships with places. *Journal of Environmental Psychology*, 23(1), 47-61. [https://doi.org/10.1016/S0272-4944\(02\)00074-9](https://doi.org/10.1016/S0272-4944(02)00074-9)
- Manzo, L.C. (2005). For better or worse: Exploring multiple dimensions of place meaning. *Journal of Environmental Psychology*, 25(1), 67-86. <https://doi.org/10.1016/j.jenvp.2005.01.002>
- Manzo, L.C. (2008). Understanding human relationships to place and their significance for outdoor recreation and tourism. In Kruger, L.E., Hall, T.E. and Stiefel, M.C. (eds.) *Understanding concepts of place in recreation research and management* (pp. 135-173).

Portland, Oregon: US Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Manzo, L.C. and Devine-Wright, P. (2013). *Place attachment: Advances in theory, methods and applications*. London: Routledge.

Manzo, L.C. and Perkins, D.D. (2006). Finding common ground: The importance of place attachment to community participation and planning. *Journal of Planning Literature*, 20(4), 335-350. <https://doi.org/10.1177/0885412205286160>

Masterson, V.A., Stedman, R.C., Enqvist, J., Tengö, M., Giusti, M., Wahl, D. and Svedin, U. (2017). The contribution of sense of place to social-ecological systems research: A review and research agenda. *Ecology and Society*, 22(1).

Marcus, C.C. (1992). Environmental memories. In Altman, I. and Low, S.M. (eds.) *Place attachment* (pp. 87-112). New York: Plenum Press.

Mazloomi, S.M., Ariffin, S.I. and Shahminan, R.N.R. (2014). A comparative analysis of perceptual and demographic predictors of sense of place dimensions in the State Mosques of Malaysia. *Asian Journal of Social Psychology*, 17(2), 128-140. <https://doi.org/10.1111/ajsp.12053>

Massey, D. (1991). A global sense of place. *Marxism Today*, (38) 24-29.

Massey, D. (1993). Power-geometry and a progressive sense of place. In Bird, J., Curtis, B., Putnam, T., Robertson, G. and Tickner, L. (eds.) *Mapping the futures: local cultures, global change* (pp.59-69). London: Routledge.

Miles, M.B. and Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.

Mowl, G., Pain, R. and Talbot, C. (2000). The ageing body and the homespace. *Area*, 32(2), 189-197. <https://doi.org/10.1111/j.1475-4762.2000.tb00129.x>

Nanzer, B. (2014). Measuring sense of place: A scale for Michigan. *Administrative Theory & Praxis*, 26(3), 362-381. <https://doi.org/10.1080/10841806.2004.11029457>

Norberg-Schulz, C. (2019). *Genius Loci: Towards a Phenomenology of Architecture* (1979). In Coddy, J. and Siravo, F. (eds.) *Historic Cities: Issues in Urban Conservation (Readings in Conservation)* (pp. 31-45). Los Angeles: Getty Conservation Institute.

Paulsen, K.E. (2004). Making character concrete: empirical strategies for studying place distinction. *City & Community*, 3(3), 243-262. <https://doi.org/10.1111/j.1535-6841.2004.00080.x>

Paxton, P. (1999). Is social capital declining in the United States? A multiple indicator assessment. *American Journal of Sociology*, 105(1), 88-127. <https://doi.org/10.1086/210268>

Payton, M.A., Fulton, D.C. and Anderson, D.H. (2005). Influence of place attachment and trust on civic action: A study at Sherburne National Wildlife Refuge. *Society & Natural Resources*, 18(6), 511-528. <https://doi.org/10.1080/08941920590947940>

- Proshansky, H.M. (1978). The city and self-identity. *Environment and behavior*, 10(2), 147-169. <https://doi.org/10.1177/0013916578102002>
- Quinn, T., Bousquet, F., Guerbois, C., Sougrati, E. and Tabutaud, M. (2018). The dynamic relationship between sense of place and risk perception in landscapes of mobility. *Ecology and Society*, 23(2). <https://www.jstor.org/stable/26799121>
- Relph, E. (1976). *Place and placelessness*. London: Pion.
- Ramkissoon, H., Smith, L.D.G. and Weiler, B. (2013). Relationships between place attachment, place satisfaction and pro-environmental behaviour in an Australian national park. *Journal of Sustainable Tourism*, 21(3), 434-457.
- Rowles, G.D. and Watkins, J.F. (1993). Elderly migration and development in small communities. *Growth and Change*, 24(4), 509-538. <https://doi.org/10.1111/j.1468-2257.1993.tb00136.x>
- Ryden, K.C. (1993). *Mapping the invisible landscape: Folklore, writing, and the sense of place*. Iowa City: University of Iowa Press.
- Sampson, R. J. (1988). Local Friendship Ties and Community Attachment in Mass Society: A Multilevel Systemic Model. *American Sociological Review*, 53(5), 766-779. <https://doi.org/10.2307/2095822>
- Sampson, R.J. (2002). Transcending tradition: New directions in community research, Chicago style. *Criminology*, 40(2), 213-230. <https://doi.org/10.1111/j.1745-9125.2002.tb00955.x>
- Scannell, L. and Gifford, R. (2010). Defining place attachment: A tripartite organizing framework. *Journal of Environmental Psychology*, 30(1), 1-10. <https://doi.org/10.1016/j.jenvp.2009.09.006>
- Seamon, D. (2012). Place, place identity, and phenomenology: A triadic interpretation based on JG Bennett's systematics. In Casakin, H. and Bernardo, F. (eds.) *The role of place identity in the perception, understanding, and design of built environments* (pp. 3-21). Bentham Science Publishers.
- Seamon, D. and Sowers, J. (2008). Place and placelessness (1976): Edward Relph. In Hubbard, P., Kitchin, R. and Valentine, G. (eds.) *Key texts in human geography* (pp. 43-51). London: Sage. <http://dx.doi.org/10.4135/9781446213742.n6>
- Shamai, S. (2018). Measuring negative sense of place: Israeli settlers' forced migration. *GeoJournal*, 83(6), 1349-1359. <https://doi.org/10.1007/s10708-017-9842-3>
- Shamai, S. and Ilatov, Z. (2005). Measuring sense of place: Methodological aspects. *Tijdschrift voor economische en sociale geografie*, 96(5), 467-476. <https://doi.org/10.1111/j.1467-9663.2005.00479.x>
- Shamsuddin, S. and Ujang, N. (2008). Making places: The role of attachment in creating the sense of place for traditional streets in Malaysia. *Habitat International*, 32(3), 399-409. <https://doi.org/10.1016/j.habitatint.2008.01.004>

- Stedman, R.C. (2003a). Is it really just a social construction?: The contribution of the physical environment to sense of place. *Society & Natural Resources*, 16(8), 671-685. <https://doi.org/10.1080/08941920309189>
- Stedman, R.C. (2003b). Sense of place and forest science: Toward a program of quantitative research. *Forest Science*, 49(6), 822-829. <https://doi.org/10.1093/forestscience/49.6.822>
- Stedman, R., Beckley, T., Wallace, S. and Ambard, M. (2004). A picture and 1000 words: Using resident-employed photography to understand attachment to high amenity places. *Journal of Leisure Research*, 36(4), 580-606. <https://doi.org/10.1080/00222216.2004.11950037>
- Stedman, R., Amsden, B. L. and Kruger L. (2006). Sense of place and community: Points of intersection with implications for leisure research. *Leisure/Loisir*, 30:2, 393-404, <https://doi.org/10.1080/14927713.2006.9651360>
- Stephenson, J. (2010). People and place. *Planning Theory & Practice*, 11(1), 9-21. <https://doi.org/10.1080/14649350903549878>
- Stokowski, P. A. (2002). Languages of place and discourses of power: Constructing new senses of place. *Journal of Leisure Research*, 34:4, 368-382. <https://doi.org/10.1080/00222216.2002.11949977>
- Trentelman, C.K. (2009). Place attachment and community attachment: A primer grounded in the lived experience of a community sociologist. *Society and natural resources*, 22(3), 191-210. <https://doi.org/10.1080/08941920802191712>
- Tuan, Y.F. (1975). Place: An experiential perspective. *Geographical Review*, 65(2), 151-165.
- Tuan, Y.F. (1977). *Space and place, the perspective of experience*. Minneapolis: University of Minnesota Press.
- Twigger-Ross, C.L. and Uzzell, D.L. (1996). Place and identity processes. *Journal of environmental psychology*, 16(3), 205-220. <https://doi.org/10.1006/jevp.1996.0017>
- Ujang, N. (2012). Place attachment and continuity of urban place identity. *Procedia-Social and Behavioral Sciences*, 49, 156-167. <https://doi.org/10.1016/j.sbspro.2012.07.014>
- Ujang, N. and Zakariya, K. (2015). The notion of place, place meaning and identity in urban regeneration. *Procedia-social and behavioral sciences*, 170, 709-717.
- Vanclay, F. (2008). Place matters. In Vanclay, F., Higgins, M. and Blackshaw, A. (eds.) *Making sense of place: exploring concepts and expressions of place through different senses and lenses* (pp.3-11). National Museum of Australia Press.
- Verbrugge, L., Buchecker, M., Garcia, X., Gottwald, S., Müller, S., Præstholt, S. and Olafsson, A.S. (2019). Integrating sense of place in planning and management of multifunctional river landscapes: Experiences from five European case studies. *Sustainability Science*, 14(3), 669-680. <https://doi.org/10.1007/s11625-019-00686-9>

- Wartmann, F.M. and Purves, R.S. (2018). Investigating sense of place as a cultural ecosystem service in different landscapes through the lens of language. *Landscape and urban planning*, 175, 169-183. <https://doi.org/10.1016/j.landurbplan.2018.03.021>
- Wartmann, F.M., Stride, C.B., Kienast, F. and Hunziker, M. (2021). Relating landscape ecological metrics with public survey data on perceived landscape quality and place attachment. *Landscape Ecology*, 36(8), 2367-2393. <https://doi.org/10.1007/s10980-021-01290-y>
- Williams, D.R. (2014). Making sense of 'place': Reflections on pluralism and positionality in place research. *Landscape and Urban Planning*, 131, 74-82. <https://doi.org/10.1016/j.landurbplan.2014.08.002>
- Williams, D.R. and Roggenbuck, J.W. (1989). Measuring place attachment: Some preliminary results. In NRPA Symposium on Leisure Research, San Antonio, TX (Vol. 9).
- Whyte, W.H. (1980). *The social life of small urban spaces*. Washington, DC: Conservation Foundation.
- Zuk, M., Bierbaum, A.H., Chapple, K., Gorska, K. and Loukaitou-Sideris, A. (2018). Gentrification, displacement, and the role of public investment. *Journal of Planning Literature*, 33(1), 31-44. <https://doi.org/10.1177%2F0885412217716439>