

## Article

# Spatial Liminality as a Framework for Revitalising Dilapidated Abandoned Buildings in Historic Cities: A Case Study

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**Abstract:** This paper develops the theory of liminality as a guideline for revitalising disused urban fabrics in historic cities. Since Middle Eastern historic cities exist as a transitional phenomenon, spatial liminality is identified as an epistemological tool for their investigation. This paper sets up a mixed-method approach based on questionnaire surveys and field studies in twelve urban blocks in historic Yazd and Kashan. Using an interpretive historical study, it is verified that, during the premodern eras, spatial liminality has been synonymous with the formation of sense of place/citizenship, mainly generated as a result of the existence of in-between spaces in historic cities, which, in turn, could have facilitated the rites of passage for residents. In a quantitative layer, the correlation between dilapidated abandoned buildings (DABs) (i.e., disused urban fabrics) and sense of place/citizenship is investigated in case studies, which unfolds associations that lack of sense of place amongst local communities could convey to the meaning of spatial liminality. The analysis demonstrates DABs are associated with lack of spatial liminality, contributing to the breakdown of sense of community identification/place. Therefore, DABs need to be reutilized while maintaining their heritage values. The discourse identifies in-between spaces that once facilitated spatial liminality and demonstrates a guideline for revitalising historic cities. This study put forward a theoretical contribution that enables the use of spatial liminality to guide the understanding and management of historic cities.

**Keywords:** dilapidated abandoned buildings (DABs); spatial liminality; territorial interdependence; revitalization; historic city



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## 1. Introduction

The transformation of Middle Eastern cities was initiated during the 19th century, where Islamic preindustrial cities started to transform into modern cities. From the 1970s onwards, the proportion of people living in urban areas in the Middle East, particularly in Iran, has risen rapidly. Consequently, historic Middle Eastern cities have become subject to an exogenous phenomenon [1]. Ever since, the historic cores inside a lot of (major or minor) contemporary cities have mainly been subject to gradual decay, with an exodus of population and abandonment of buildings for more than half a century [2]. As a result, today, large areas of historic areas can be considered as dilapidated abandoned buildings (DABs) [3–5]. Today, due to such a vast proportion of DABs, historic cities in the Middle East have been transformed into disaggregated and fragmentary areas that have remained unattended or have been filled by new developments that have inharmonious relationships with surrounding environs. Therefore, DABs and their relevant redevelopment regulations are conceptually challenging, and have been largely neglected within the socio-spatial planning context of historic cities [6,7].

In Iranian historic urban areas, similar to other historic cities in the Middle East, several factors contribute to a lack of sense of belonging to place and citizenship among residents,

which makes original inhabitants leave historic areas [8]. Such lack of sense of place could occur as a result of lack of neighbourhood satisfaction, which may be generated as a result of the rapid growth of poor households, the deterioration of physical structures, the existence of DABs [9,10], or lack of infrastructure and social capital [11]. Moreover, inefficient planning models along with such socio-spatial problems encourage mass emigration of original residents to city fringe developments and generate larger extents of DABs in Iranian historic cities. Consequently, the contemporary correlations between the extent of DABs and the emigration of original residents need to be considered a serious issue [12]. Here, DABs have become a tangible-dependent variable suspended between past and present, which arguably accelerates the formation of socio-spatial vulnerability by creating physical dilapidation and dissatisfaction on the part of residents [9].

Despite great efforts, several factors have caused further segregated and underutilised heritage areas in Iran. First, the revitalisation of historic cities in Iran is not seen as a priority among relevant government agencies, either because of the obsolete image of historic areas among the public or lack of technical and institutional capability to come to grips with such a complex mix of physical and social problems [13]. Second, decision-makers are rarely provided with technical approaches and institutional tools that could demonstrate the viability of alternative, more appropriate models of intervention. This has hastened the development of cities far beyond the historic areas and contributed to an unreasonable urban sprawl [3]. Third, revitalisation programs in historic Iranian cities have been limited to document heritage contexts, providing building regulations, and defining heritage buffer zones. Plans have concentrated on pedestrianisation, place-making, and façade restoration [14]. Fourth, there has been an underlying emphasis on physical linear renewal and delivery of flagship projects as a prevalent approach, mainly employed by the central government [15]. However, various moves toward redevelopment have undermined historic Iranian cities.

Therefore, the broad aim of this research is to provide an innovative method for understanding such socio-spatial vulnerability associated with DABs that can facilitate strategies for revitalising historic cities. This study aims to determine the extent to which liminality can inform revitalisation projects and processes against the formation of DABs. Accordingly, this article focuses on studying the correlation between lack of sense of belonging to the place/citizenship and the extent of DABs, which can be exclusively associated with the transitory–liminal situations related to the emigration of residents.

## 2. Literature Review

### 2.1. Theoretical Backgrounds: Socio-Spatial Revitalisation of Historic Cities

Since the 18th century, several global schools of thought have reiterated a need for the revitalisation of heritage sites and cultural properties [11]. The methods of urban revitalisation in historic cities may include several approaches, from mere preservation to physical intervention or a combination of both [16]. Cultural heritage values should direct levels of intervention for the revitalisation of historic cities, and any intervention that would lessen or compromise such values is objectionable and should not occur [17]. It is crucial to understand that the preservation of cultural heritage sites and objects is underpinned by values projected by the public onto essentially inanimate objects that are not static but possess mutable qualities on an intergenerational scale [18].

Since the 1970s, historic cities in the Middle East have undergone a reassessment of their importance [3]. In the 21st century, historic revitalisation is largely associated with city planning and development. Advocates promote preservation as a key driver of urban revitalisation; however, there is a shortage of empirical research that addresses this connection, especially in an Iranian setting [3]. In this respect, the progressive development of regeneration programs created awareness of the impossibility of separating historic centres (either in analytical or in planning terms) from their municipal, territorial, and social contexts, which are linked by mutual, deep relationships [18]. Nonetheless, today, identity generation and empowerment of local communities have become an indispensable

part of any regeneration program, especially in the case of old city centres or other historic environments at risk of abandonment [2].

## 2.2. *Liminality as a Theoretical Tool in Historic Cities*

As discussed earlier, the transformation of historic Middle Eastern cities was the result of social-spatial changes caused by the industrial age, despite changes in architectural fabrics occurring naturally and organically during previous centuries [15]. Such socio-spatial disruptions generated an ever-widening chasm between past and future, pulled the present of historic cities apart, and emptied it of many of its essential qualities. Historic areas in Middle Eastern cities can thus be assumed to be entities suspended in-between the premodern and contemporary epochs [9], neither entirely losing their traditional properties (e.g., unique structures/land grains/narrow roads), nor capable of adapting themselves to the surrounding modern built environment. Liminality can thus draw new insights into understanding spatial and temporal transitions between heritage fabrics and spaces of everyday life [6,19]. As a result, liminality is a suitable tool for understanding socio-spatial vulnerability in the context of urban regeneration in historic Iranian/Middle Eastern cities, whereby DABs can meaningfully reflect the liminal qualities of life. Here, a gap in the relevant scholarship is the relationship between the extent of DABs and the formation of socio-spatial vulnerability, which can be examined using spatial liminality [19].

In anthropology, liminality is used as a measure for understanding the vulnerability of individuals or social groups, living in limbo, among (and in interaction with) other human beings [20]. Arnold Van Gennep [21] first coined liminality, upon which he distinguished rites that mark the passage of an individual or social group from one status to another. Following van Gennep, by coining spatial liminality, Thomassen [22] indicated the third dimension of liminality as place, moving beyond the dichotomy of time and event as the foundations of liminality. Thomassen noted van Gennep's specification that liminality is essentially a spatial concept, demonstrating that, perhaps, the physical passage of a threshold somehow preceded the rites that demarcate a symbolic or spiritual passage.

By elaborating on "spatial liminality", Thomassen advanced Karl Jaspers' theory of axial ages, demonstrating that there are substantial grounds to believe that Jaspers' axial age theory could be comprehended using liminality [22], suggesting that in-between spatial positioning could be the primary cause for the simultaneous generation of rites of transition among neighbouring societies.

In addition, Stavrides suggested that in-betweenness can indeed become activated by the unblocking of the paralysed potentialities of a threshold space [23]. He further described how a threshold space can generate socio-spatial conditions in which people undergo the transition from one social identity to another, and suggested that societies explicitly control these transitional periods by regulating rites of passage to ensure that liminal people pass to a different social role without threatening social reproduction [23]. Stavrides believes that such threshold spaces could be marked by experiences of social liminality in which in-between spaces do not merely circumscribe a defined area of use, but instead offer a passage from one social status to another [24].

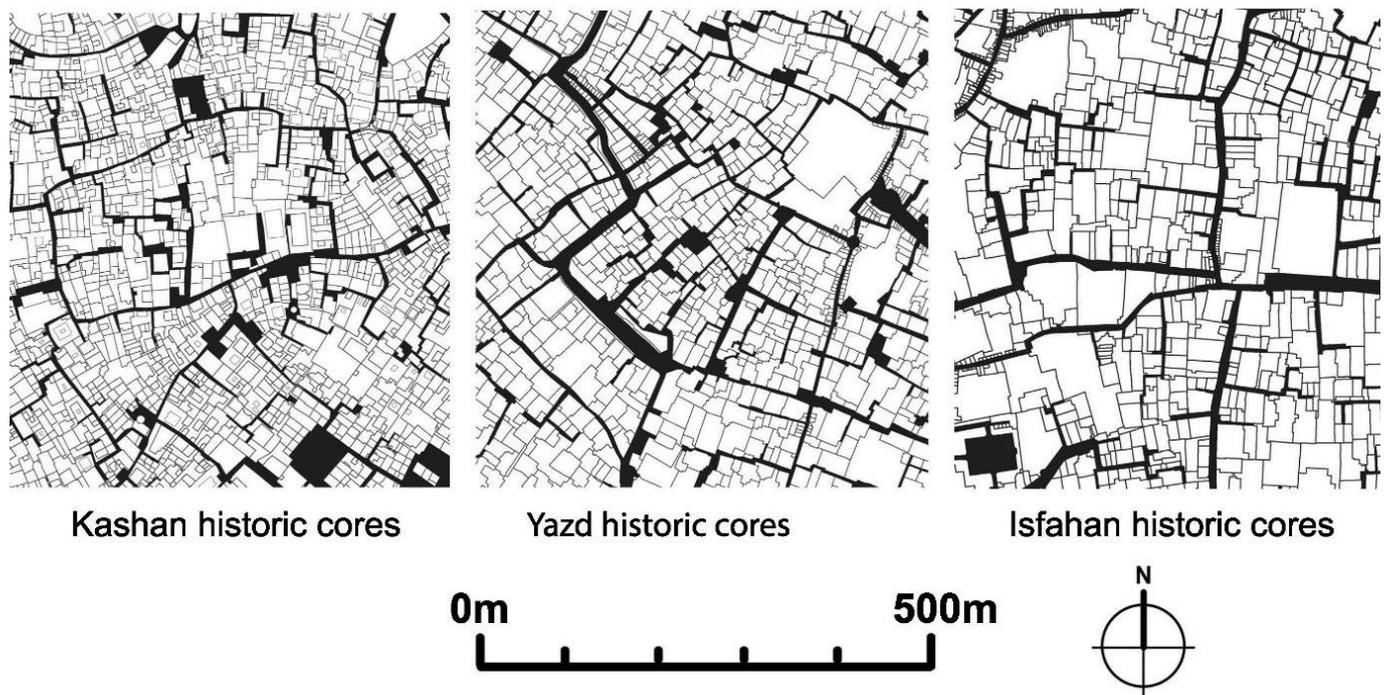
Thus, in-between places are spaces with the power to institute comparisons and encourage new relations/communications between different people. Here, a threshold space connects and separates individuals at the same time [25]. Thus, thresholds as prearranged structures enable societies symbolically construct their experience of negotiation and, simultaneously, material artefacts that allow negotiations and generational changes to take place [23].

Threshold spaces can thus offer areas for conciliation and encounters with otherness, which may be created between permeable and evolving identities. In this sense, distinctive cultures can infuse/diffuse across borders and among adjacent interdependent communities [26]. Consequently, porous in-between spaces can arguably be seen to be specifically relevant to the formation of spatial liminality by generating socio-spatial interdependence that, in the past, brought meaning to space in Middle Eastern medieval cities/neighbourhoods, and thus be productive of place formation [6].

### 2.3. The Formation of Liminal Middle Eastern States

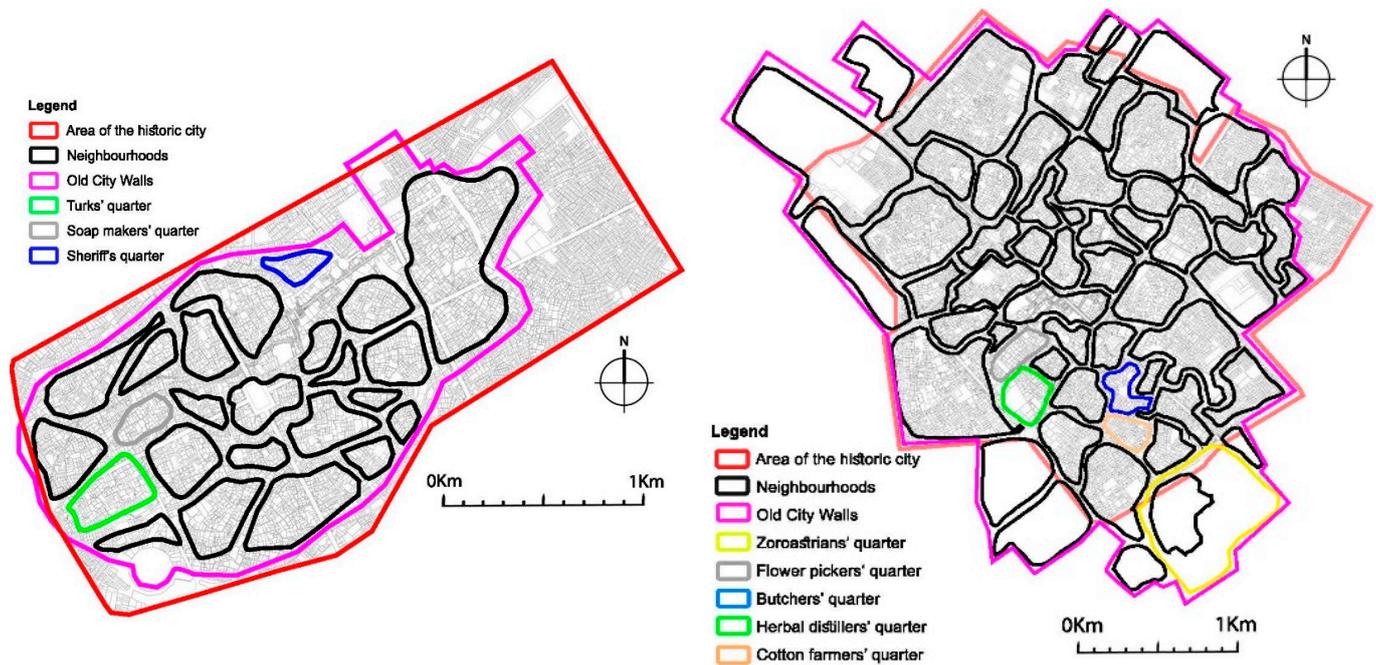
In contrast to the condition of modern territorial states, territorialities of medieval states in the Middle East can be clearly described by spatial liminality, characterised by osmotic borders and territorial interdependence that together facilitate rites of passage amongst neighbouring states. In addition, rites of passage are here, as opposed to the physical crossing of borders, including a real-life transition. Therefore, in a historic city, it seems that liminality operates at different scales: civic/communal (e.g., religious groups and subgroups), as well as national and transnational [6].

Generally, in Middle Eastern historic cities, the social interconnections between heterogeneous communities were established by private, blind alleys, or semi-private spaces, such as lanes. Cul-de-sacs were regarded strictly as an extension of the household's private space and could be a place for social interaction between local women and children [27]. As citizens moved from blind alleys to lanes, social relations increased from extended families (or several related families) in blind alleys to more diverse families in semi-private lanes (Figure 1). As residents bypassed these lanes and passages, they became concentrated in small squares that caused even more collisions and formed subsequent social relations amongst diverse neighbourhoods [28].



**Figure 1.** The cul-de-sac worked as a semi-private space in historic Iranian cities, while tiny squares provided access to dwellings and generated social groupings. Maps show the somehow untouched condition of these cities in 2018 [6].

Therefore, public and semi-public roads could accommodate interneighbourhood interactions, thanks to adjacent shops, mosques, caravanserai, schools, and other public spaces, which made such small communities/neighbourhoods interdependent [29]. As a result, most urban traffic used major thoroughfares, roads, and in-between spaces to link important areas for commercial or religious purposes, while neighbourhoods were accessible only by immediate cohorts in a distinct community (Figure 2) [30]. Consequently, diverse communities could establish intergroup negotiations and have access to communal spaces, namely public squares, neighbourhood centres, bazaars, mosques, and schools, using connecting roads [27].



**Figure 2.** Heterogeneous neighbourhoods in the medieval city of Yazd (right) and Kashan (left) were formed as a result of the accumulation of people with mutual religious identities or similar types of occupations in one place [31].

From a road network system perspective, in historic cities, three types of roads are identifiable: firstly, public roads that connected major neighbourhoods and could be extended as traditional bazaars or stretched to a city gate; secondly, semi-public roads that interconnected public roads and facilitated access to neighbourhoods, including local shops, which also served as a neighbourhood centre for social interaction, a playground for children, and/or a stage for jugglers or street vendors; and thirdly, dead-end alleyways, or semi-private roads branched out from semi-public roads, that provided access to a cluster of private houses [14]. Not unlike roads, the territorial implication of open spaces in historic cities is apparent in the functionality of in-between spaces (e.g., courtyards) and across scales, containing private, semi-private, and public areas in historic cities [32]. In a historic Middle Eastern city, courtyards facilitated multipurpose spaces for communal relations, group games, social entertainment, religious rituals, commercial activities and trades, ceremonial events, and interneighbourhood collaborations/negotiations. A courtyard could have facilitated socio-ethical arrangements for extended families (or smaller social groups) to live mutually around a semi-private threshold space. Here, in-between spaces tend to generate complex borders among neighbourhoods, while in most cases, these boundaries are not accurate [31]. Within a traditional neighbourhood, small courtyards in cul-de-sacs functioned as semi-private spaces, used by all the inhabitants of surrounding dwellings for social and recreational activities. These tiny squares, surrounded by and providing access to dwellings/buildings in old cities, generated social values by enhancing socio-spatial associations between residents (Figure 3) [27].

Therefore, those hierarchical divisions arguably reflect that in-between spaces somehow facilitated spatial liminality inside neighbourhoods within historic cities during the medieval era and became porous membranes that led to the facilitation of the rites of passage among social groups (Figure 4) [31].

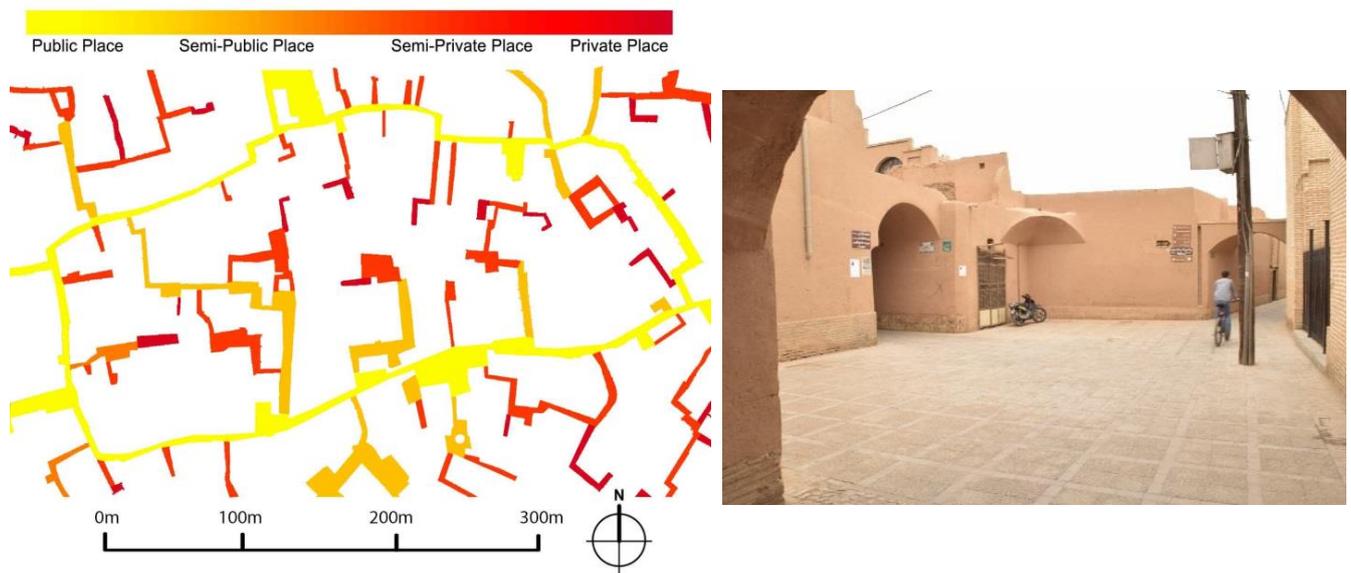


Figure 3. Hierarchical in-between spaces and the formation of spatial liminality in historic Kashan [31].

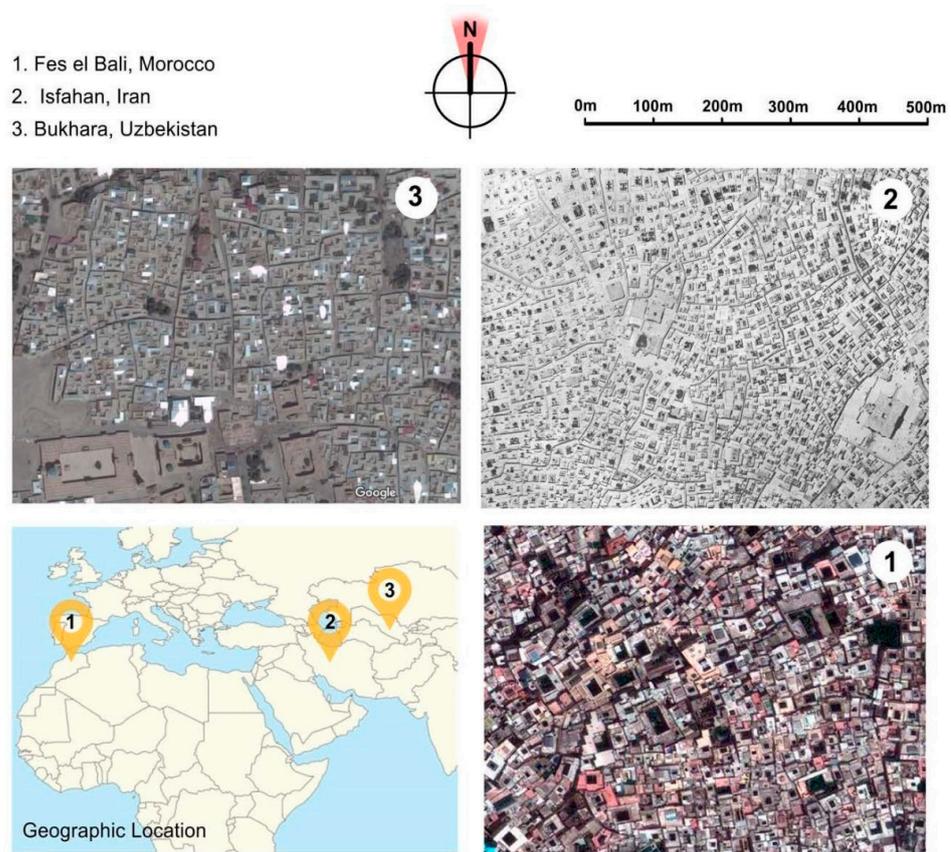


Figure 4. The morphology of courtyard structures in Middle Eastern and North African cities [31].

#### 2.4. Social Aspects of Spatial Liminality

Spatial aspects of liminality as a substructure for social interaction involve widespread social ramifications that emerge once people cross a threshold [33]. In this respect, social aspects of liminality in historic cities had been relevant to the formation of sense of place, engendered by socio-spatial exchanges, that may occur within in-between spaces.

The design of those cities thus reinforced the sense of citizenship by implementing special zoning practices, including building semi-private quarters or blocks allocated to cohorts according to their ethnic/citizenship origin. Accordingly, such neighbourhood zoning became socially ideal, as each social group was accustomed to maintaining strong ties between its members, preferring to live in a territory close to each other. However, the implication of such communitarian design practices, e.g., neighbourhood zoning (that generated the territoriality of social groups), and the consequent intergroup negotiations/relations (via in-between spaces) fostered multiple communities in historic cities to live together, which culminated in medieval diversity [34].

Based on the above discussion on liminality, it could be assumed that rites of passage (generated via spatial liminality) for communities, as described by Thomassen [33], had occurred as a consequence of socio-spatial intergroup relationships within threshold spaces, which occurred amongst social groups (made up of individual citizens) separated by spatial territorialities. Here, Thomassen's [33] discussion regarding in-between spatial positioning, in-between spaces, and the formation of interacting/liminal societies as signifying territorial interdependence, is not dissimilar to what Stavrides [35] described as "heterotopia", by which he refers to interdependent places that maintain osmotic boundaries/territorialities while generating porous urban spaces, suitable for "acts of encounter" between communities. Stavrides refers to Foucault's assertion that "heterotopias always presuppose a system of opening and closing that isolates them and makes them penetrable at one and the same time": those "other places", therefore, are simultaneously connected to and separated from the places from which they differ [35]. Here, such resemblances between descriptions of the two thinkers of liminality (Thomassen and Stavrides) verify that rites of passage in both cases could represent spatial liminality as specified in this article, must have at least five intrinsic qualities: Firstly, within heterotopia, medieval Middle Eastern states/neighbourhoods and centres of axial ages, several unique social groups need to coexist. Secondly, individuals within such distinct social groups receive a special membership in terms of being a right-bearing citizen of the community. Thirdly, such heterogeneous communities should be bounded by specific territorialities that make certain places different from other places [5]. Fourthly, for the survival of such social groups, different socio-spatial interactions need to be established. Fifthly, (and most importantly in our discussion) the existence of threshold and osmotic (in-between) spaces becomes necessary for the improvisation of such socio-spatial interactions. Such qualities clearly show the relational status of spatial liminality in heterotopia, medieval Middle Eastern states/cities and identity societies of an axial age (Table 1).

**Table 1.** Five essential elements of spatial liminality, as developed in this paper.

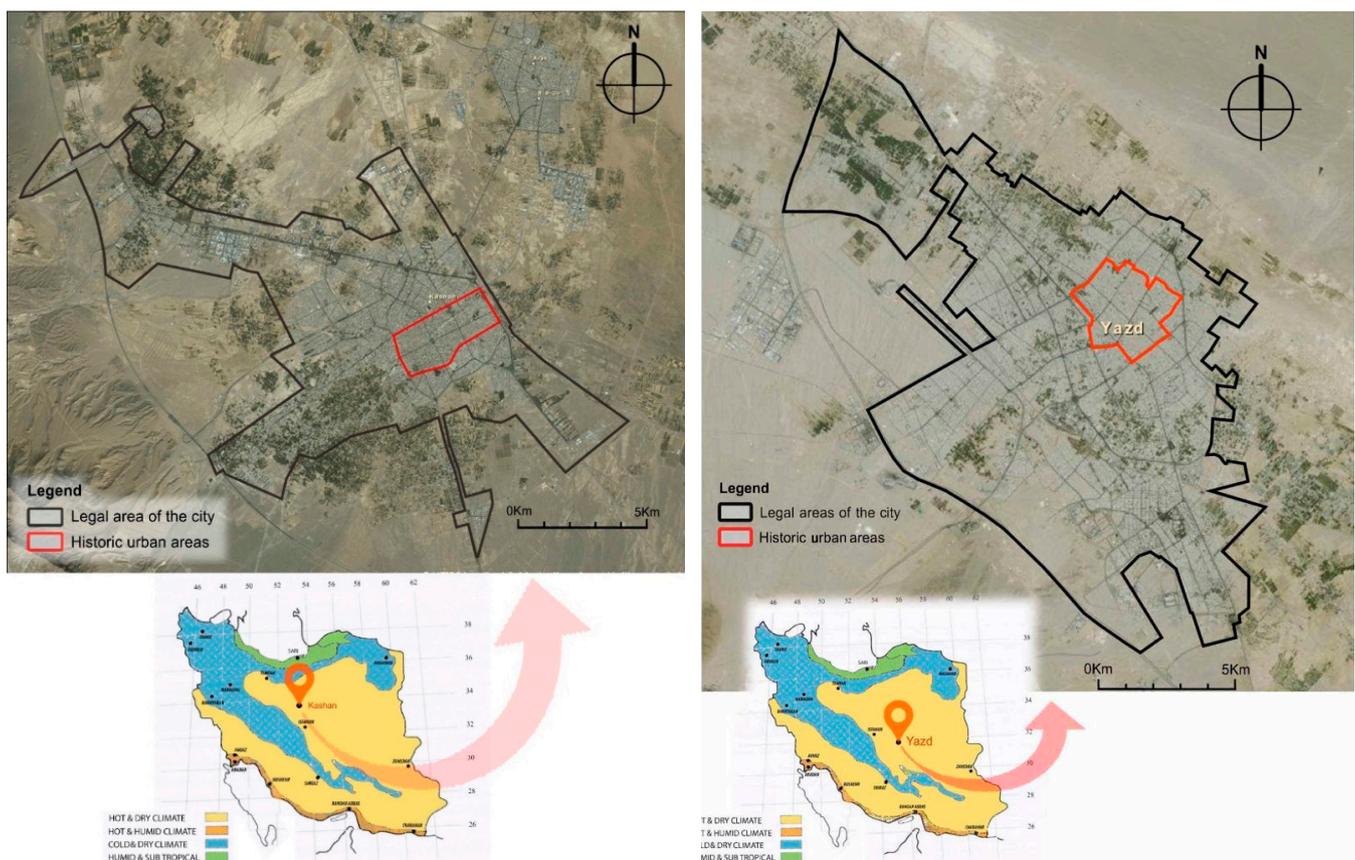
Components of Spatial Liminality	Heterotopia	Axial Ages	Middle Eastern States	Neighbourhoods in Middle Eastern Cities
<b>Citizenship/membership</b>	Membership of the heterotopia as opposed to the surrounding spaces of normality.	Membership of a specific civilization or religion	Membership of a specific state	Membership of a specific neighbourhood/community
<b>Formation of interdependent social/identity groups</b>	Social groups in neighbourhoods	Larger societies, nationalities	Interdependent states	Interdependent neighbourhoods/communities
<b>Formation of territoriality</b>	Physical areas inside the boundaries of neighbourhoods	Continents, countries or larger geographic-ethnic regions	Countries and States	Physical areas inside the boundaries of neighbourhoods
<b>Formation of socio-spatial interactions</b>	Interneighbourhood relationships (e.g., trades, negotiations, games, etc.)	International discourses, large-scale wars, trades, and religious debates	Interstate discourses, regional wars, trades, and religious debates	Interneighbourhood relationships (e.g., trades, negotiations, games, etc.)
<b>In-between/threshold spaces as places of negotiation/interactions</b>	In-between public spaces among neighbourhoods	Thresholds in-between countries (e.g., Mesopotamia)	In between boundary zones	In-between public spaces among neighbourhoods (e.g., roads and courtyards)

### 3. Materials and Methods

The current research aims to analyse complex issues within the boundaries of historic cities; therefore, a mixed methodology is proposed. Initially, following the approach of Creswell (2003), the current inquiry includes characteristics of interpretive historical research by making use of multiple historic sources of evidence covering spatial liminality. Here, case study research can also be used as an empirical inquiry that inspects a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident [36]. The research questions were addressed using street surveys and field observation to reveal the associations that lack of sense of belonging to a place could convey to the meaning of spatial liminality in Yazd and Kashan. For measuring sense of belonging to place/citizenship associated with DABs, several quantifiable tools are proposed in this inquiry, including the percentage of areas occupied by local residents, the percentage of DABs (i.e., independent variables), as well as questionnaires measuring levels of sense of place satisfaction amongst local residents (as dependent variables) in all case studies.

#### 3.1. Case Study Selection

The case study selection procedure in this research aims to cover a wide range of population densities in historic Iranian cities. Thus, historic Kashan and Yazd were selected as larger case studies that accommodate lower and mid-range populations, respectively, while possessing the largest areas of urban heritage areas in Iran (Figure 5).



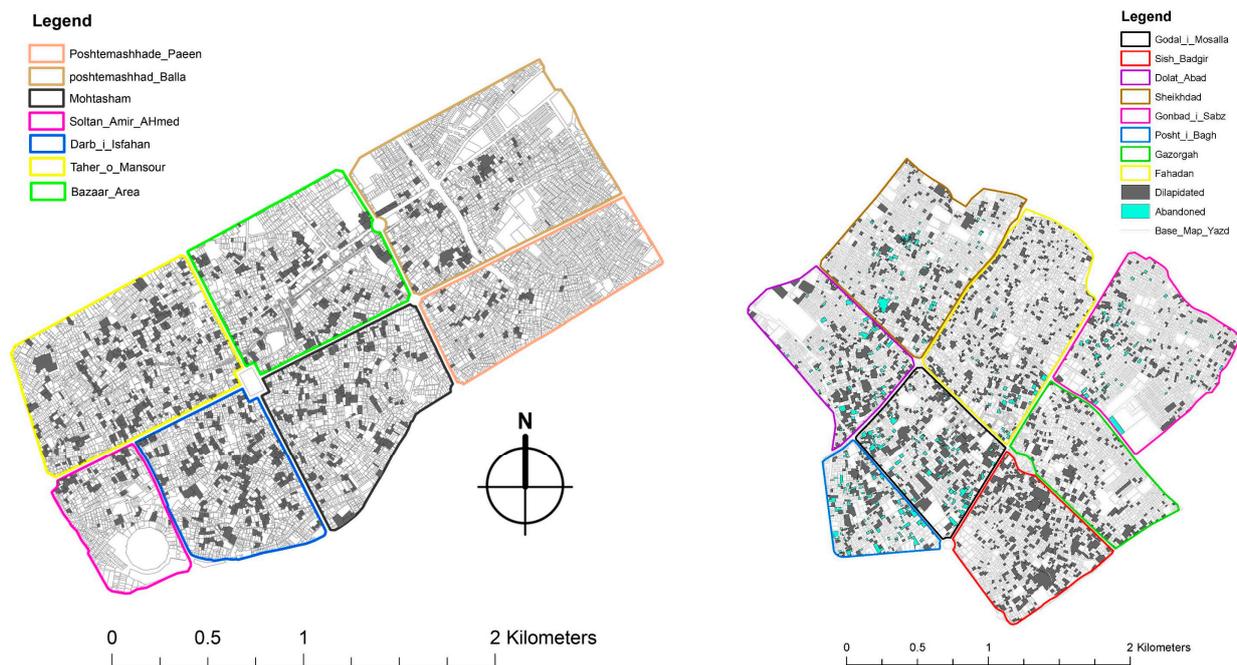
**Figure 5.** Historic urban areas within the contemporary city of Kashan (left) and Yazd (right) [31].

At the next level, the selection procedure aims to capture the maximum variation of DABs in historic cities, thus singling out urban tissues with higher, medium, and lower percentages of DABs in Yazd and Kashan. Accordingly, Darb-i-Isfahan, Mohtasham, and

Posht-i-Mashhad-i-paeen are selected as urban tissues that, respectively, developed higher (27%), medium (15%), and lower (4%) percentages of DABs in Kashan as previously measured by Mirmiran [12]. Godal-i-Mosalla, Dolat-Abad, and Gonbad-i-Sabz were also selected as urban tissues that, respectively, developed higher (25%), medium (17%), and lower (10%) percentages of DABs in Yazd, as calculated by Behzadfar [11].

After selecting a variety of urban tissues (that characterise a broad range of DABs), smaller urban elements need to be investigated as tangible case studies. In Middle Eastern historic cities, an urban block could be conceived as a group of several dwellings including semi-private and in-between spaces [27]. Such clusters thus best represent the smallest identifiable urban component that forms traditional neighbourhoods, known as urban blocks [37].

Consequently, two urban blocks were nominated in each selected tissue, which should have developed a higher and lower percentage of DABs per urban block, to capture the maximum variation of disused areas. The selection criteria were based on two logical aspects: (1) the reliable size of urban blocks (should have areas between 15,000 to 60,000 m<sup>2</sup>) and (2) the intactness quality of roads and physical structures, which can indicate public segregation, as a result of lack of vehicular accessibility. Consequently, twelve sample blocks were chosen for further investigation. Among all selected cases, six blocks are positioned in Kashan (B-1 and B-2 in Darb-i-Isfahan, B-15 and B-16 in Mohtasham, B-3 and B-5 Posht-i-Mashhad-i-paeen urban tissues), as calculated by Mirmiran [12] (Figure 6 (left)). Another six blocks are located in Yazd including Godal-i-Mosalla (B-30 and B-43), Dolat-Abad (B-9 and B-28), and Gonbad-i-sabz (B-8 and B-47) urban tissues, as measured by Behzadfar [11] (Figure 6 (right)).



**Figure 6.** The seven urban tissues of historic Kashan as surveyed by Mirmiran (2011) (left) and the eight urban tissues of historic Yazd based on Behzadfar [11] (right).

### 3.2. Data Collection

Two primary methods of data collection were implemented, namely questionnaire surveys and field observations. Consequently, two categories of data were gathered, namely spatial and attitudinal. Spatial data were collected using field studies along with the observation of nonparticipant behaviours, aimed at exploring the extent of local Iranian settlements against the proportion of DABs in selected urban blocks. Attitudinal items ask for the respondent's attitudes and perceptions on sense of belonging to the place/citizenship. In Iranian historic areas, residents can be classified into two major groups: (a) refugees or

non-Iranian disadvantaged communities, and (b) local Iranian-born residents [6]. To avoid complications, in this article, the second group is recognised thus as the subject of spatial liminality in historic cities, although in many circumstances, non-Iranian residents could also be liminal.

Data were gathered based on five questions and in line with what Behzadfar [11], Mirmiran [12], and Tavassoli [38] suggested—previous definitions that can measure spatial liminality:

- “Why did you move to historic areas?” highlights lesser levels of sense of belonging to place amongst residents by identifying people who have settled in purely for occupying cheaper housing opportunities.
- “What are the most chronic problems in historic areas?” and “what does make your neighbourhood unsafe?” represent residents’ perceptions regarding the sense of place satisfaction.
- “What do you think about dilapidated abandoned buildings?” signifies the sense of place satisfaction amongst local residents regarding DABs that characterize a real or perceived lack of safety.
- “Do you swap house to reach an equal accommodation option outside historic areas?” reflects a sense of place identity among residents.

Since the average number of properties (i.e., statistical subject matter in this research) in each sample block can reach about 100, the overall statistical target population reached about 1200, wherein street surveys should be conducted. In a statistical target setting with a population of about 1200, the optimal sample size of about 120 properties (10% of the overall statistical population) seems reliable [39]. Thus, street surveys were conducted among residents of 141 properties including 61 residences in Kashan and 80 residences in Yazd. This research includes street surveys; therefore, ethical approval, from human participants was sought (see Appendix A).

#### 4. Results

By making use of historical sources and nonquantifiable information, this research involves a detailed examination of the theory of spatial liminality and its relationship with in-between spaces and sense of place amongst residents in historic cities in Iran during the middle ages. Earlier in this article, using an interpretive historical study and literature review, it was demonstrated that spatial liminality is synonymous with the formation of sense of place/citizenship, mainly generated as a result of the existence of in-between spaces, such as courtyards and roads in traditional neighbourhoods. In the spatial layer, this article focused on the percentages of DABs and their correlation with sense of belonging to place citizenship among Iranian-born residents in each urban block. In a cluster analysis, the average percentage of areas occupied by local Iranian-born residents showed a reverse correlation with the extent of DABs in Yazd and Kashan. In all sample blocks, the average size of areas occupied by Iranian-born residents became higher when the percentage of DABs was reduced. Such quality demonstrates the deleterious effects of DABs, upon which sense of belonging was weakened, encouraging further emigration of residents and shrinking the size of areas occupied by local populations (Table 2).

**Table 2.** Analysing aspects of spatial liminality of DABs in 12 case studies.

Levels of DABs	The Average Percentage of Areas Occupied by Local Iranian Residents	Surveyed Blocks
Historic Kashan (average percentage of local settlements per urban block)		
High 44% < DABs	48% (Lowest)	(B-1 and B-15)
Medium 21% < DABs < 44%	58% (Medium)	(B-2 and B-3)
Low DABs < 21%	78% (Highest)	(B-16 and B-5)
Historic Yazd (average percentage of local settlements per urban block)		
High 39% < DABs	42% (Lowest)	(B-43 and B-8)
Medium 32% < DABs < 39%	62% (Medium)	(B-30 and B-28)
Low DABs < 32%	74% (Highest)	(B-9 and B-47)

In the attitudinal layer, the majority of respondents in Kashan (65.6%) reported that accessing cheaper housing opportunities was the major reason for their immigration to historic areas. On the contrary, less than half of the respondents in Yazd (43.7%) reported that the existence of cheaper housing opportunities was the main reason for their immigration to historic zones. The results from respondents in Kashan confirm previous studies, where Behzadfar [11], Mirmiran [12], and Tavakoli [31] suggested that the existence of cheaper housing opportunities is the major reason for the immigration of vulnerable refugees and disadvantaged communities to historic areas. A cluster analysis of the percentage of socio-spatial concerns (stated by participants) demonstrates that lack of sense of belonging to place (arguably generated as a result of lack of spatial liminality) can be a prevalent problem in historic urban areas, which is closely related to the larger extents of DABs (Tables 3 and 4). Here, a descriptive analysis indicates that a large proportion of residents in Kashan have moved to historical areas for accessing cheaper housing options that may have developed little or no sense of belonging to the place. The results outlined that levels of such lack of sense of place (arguably generated as a consequence of lack of spatial liminality) are strongly correlated to the proportion of DABs in Kashan. The analysis reiterates that levels of sense of place identity among local residents (which arguably equates to spatial liminality) in historic sample blocks of Yazd and Kashan are extremely low, and have become independent of DABs.

**Table 3.** Analysing aspects of spatial liminality in 12 urban blocks.

Historic Kashan (Local Residents' Concerns)								
Levels of DABs	Access cheaper housing options	Lack of public security	Existence of DABs	DABs must be reutilized	Pests and vermin	Foreign refugees	I Will leave my house	Surveyed blocks
High 44% < DABs	69% (High)	31% (High)	85% (High)	69% (High)	8% (High)	17% (High)	77% (High)	(B-1 and B-15)
Medium 21% < DABs < 44%	61% (Medium)	14% (Medium)	64% (Medium)	73% (Medium)	10% (Medium)	10% (Medium)	90% (High)	(B-2 and B-3)
Low DABs < 21%	49% (Low)	11% (Low)	69%	43% (Low)	0% (Low)	0% (Low)	73% (High)	(B-16 and B-5)

**Table 4.** Analysing aspects of spatial liminality in 12 urban blocks.

Historic Yazd (Local Residents' Concerns)									
Levels of DABs	Lack of public security	Existence of DABs	DABs must be reutilized	DABs are dangerous	Pests and vermin	Foreign refugees	Addicts or criminals	I Will leave my house	Surveyed blocks
High 39% < DABs	63% (High)	83% (High)	70% (High)	74% (High)	15% (High)	40% (High)	68% (High)	65% (High)	(B-43 and B-8)
Medium 32% < DABs < 39%	45% (Medium)	71% (Medium)	49% (Low)	54% (Medium)	13% (Medium)	20% (Medium)	42% (Medium)	57% (High)	(B-30 and B-28)
Low DABs < 32%	23% (Low)	74% (Medium)	49% (Low)	23% (Low)	0% (Low)	14% (Low)	34% (Low)	67% (High)	(B-9 and B-47)

A chi-square test of independence also suggested that the proportions of residents who have moved into historic areas to access cheaper housing options are significantly related to the extent of DABs in Kashan ( $\chi^2(1, n = 61) = 11.100, p < 0.05$ ) but not in Yazd ( $\chi^2(1, n = 80) = 10.439, p > 0.05$ ). The analysis reiterates that residents may have developed little or no sense of belonging to the place ( $\chi^2(1, n = 141) = 6.621, p < 0.05$ ). However, the results show no significant relationship between the sense of belonging/attachment to the place (as indicated by residents wishing to emigrate from the historic areas) and the extent of DABs in historic cities ( $\chi^2(1, n = 141) = 2.948, p > 0.05$ ). This, in turn, may be related to the unclear nature of this question requiring cautious and sometimes unreal answers to be proposed by vulnerable respondents. Additionally, in both Yazd and Kashan, there were no significant relationships identified between other reasons for immigrating to historical areas, such as closeness to work or friends and families ( $\chi^2(1, n = 141) = 0.004, p > 0.05$ ), accessibility to other districts ( $\chi^2(1, n = 141) = 3.167, p > 0.05$ ), and other factors

( $\chi^2(1, n = 141) = 2.373, p > 0.05$ ). This, in turn, also reiterates the lack of sense of place (or perhaps lack of spatial liminality) amongst residents in the selected historic areas.

In all case studies, there are meaningful grounds upon which to believe that the percentage of residents' concerns regarding (a real or perceived) lack of public safety ( $\chi^2(1, n = 141) = 12.537, p < 0.05$ ), the stated problems associated with DABs ( $\chi^2(1, n = 141) = 4.128, p < 0.05$ ), and the presence of foreign refugees ( $\chi^2(1, n = 141) = 13.103, p < 0.05$ ), as well as a local demand that DABs must be reutilized ( $\chi^2(1, n = 141) = 5.138, p < 0.05$ ) are correlated to the extent of DABs. This, in turn, reconfirms the lack of sense of place/citizenship accompanied by the absence of spatial liminality amongst respondents in relevant historic areas. The results also show a significant relationship between (a perceived or real) lack of security and the proportion of DABs in Yazd ( $\chi^2(1, n = 80) = 10.717, p < 0.05$ ), but not in Kashan ( $\chi^2(1, n = 61) = 2.494, p > 0.05$ ). It is also evident that the percentage of concerned residents who believe DABs are dangerous (due to attracting antisocial behaviours) is closely related to the extent of DABs per urban block in Yazd ( $\chi^2(1, n = 80) = 5.952, p < 0.05$ ).

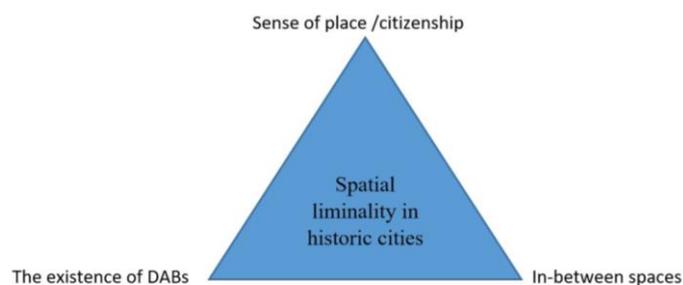
The results along with the data triangulation and analysis suggest that today's lack of spatial liminality in targeted historic areas has contributed to a lack of sense of place, identity, and citizenship amongst residents, which, in many circumstances, are strongly related to the extent of DABs in historic areas. The results and analysis advocate the second assumption that the existence of DABs (as a tangible aspect) could be strongly related to the lack of spatial liminality within the studied urban blocks, the absence of which can further eradicate historic cities.

## 5. Discussion

Due to such a vast proportion of DABs in Iranian historical cities, this study aimed to determine the extent to which liminality can inform revitalisation projects and processes against the formation of DABs. The findings in this research contribute to exploring the role of place as the third dimension of liminality along with time and event, as proposed by van Gennep [21]. The discussion draws upon van Gennep's theory of liminality along with Thomassen's [33] spatial liminality and Stavrides' social liminality [35], positioning liminality as an emancipatory theoretical and analytical framework, to interpret the nature and meaningfulness of life in historic cities. The discourse investigates the vulnerability of citizens in real-life events, which (in line with Van Gennep's notion of liminality) develops a post-structuralist approach for analysing conditions of liminality that can be seen as empirical, lived reality in social science [20]. The theoretical contribution as proposed here brought about a perspective where spatial liminality can be utilised as a guideline for understanding and handling historic cities.

By comparing liminal structures of axial ages [33] with the concept of territorial interdependence [26,35], it was found that the socio-spatial trade-offs amongst social groups on a larger scale had arguably generated spatial liminality, indicating real-life transitions in medieval Iranian cities. In addition, the result revealed that, in Iranian historic cities, heterogeneous communities had recurrently become liminal and undergone their rites of passage in conjunction with their adjacent neighbouring communities.

Correspondingly, qualitative interpretive analysis suggested that the correlation between several aspects of spatial liminality (i.e., sense of place, citizenship, territoriality, and identity amongst residents) and the formation of in-between spaces was significant during premodern eras in Iranian historic cities. This result is in agreement with those of a number of previous studies [11,12,27]. The quantitative analysis demonstrated that the present-day correlation between the extent of DABs and lack of spatial liminality (i.e., the current lack of sense of belonging to place/citizenship) amongst residents is substantial too. This reveals multifaceted associations that a sense of belonging to place/citizenship, the disposition of in-between spaces, and the existence of DABs could convey to the existence of spatial liminality amongst residents in historic areas and within the larger context of contemporary Iranian and perhaps Middle Eastern cities (Figure 7).



**Figure 7.** Current multifaceted associations could change levels of spatial liminality in historic cities.

Spatial liminality encouraged the formation of interdependent neighbourhoods, built security and sense of place/citizenship in the district, and effectively promoted communal participation, which generated self-growing public institutions. Regarding the theoretical implications of this study, the research reiterates a theory that emigration from historical neighbourhoods has arguably destabilised and displaced such pre-existing socio-spatial ecosystems by weakening present day spatial liminality. As spatial liminality discloses socio-spatial mechanisms, its formation can enhance social life and encouraging residents to meet personal needs through collective life [40]. Therefore, the formation of social groups in such neighbourhoods has been observed as a progressive aspect in Middle Eastern cities that has somehow secured life for multiple minorities by generating spatial liminality. This study's findings indicate that such positive socio-spatial qualities relevant to spatial liminality no longer exist (or only exist in fragmentary cases) in historic cities today, due to the emergence of contemporary urban transformation [41]. Here, along with Behzadfar [11], the current study found that current urban problems and the existence of DABs can encourage further emigration of local residents, and culminates in the formation of larger extents of DABs.

As spatial liminality represents a new approach beyond contemporary revitalisation methods, it can contribute to generalising socio-spatial problems and revealing historic city realities. Here, the major reason for the formation of DABs in historic urban areas is the emigration of local residents due to current urban problems, lack of spatial liminality, and the lack of sense of place/identity. The ramification of such emigration proved to be correlated with the formation of further DABs, which consequently encourages more families to abandon their properties.

This study's findings demonstrate that DABs are strongly associated with lack of spatial liminality, the absence of which amounts to a breakdown in community identification and sense of place/citizenship, which can further eradicate historic cities. Regarding the practical implication of this study, morphologically informed design methods need to be developed, particularly in historic areas where there is no reasonable economic stimulation for transforming DABs to reasonable in-between public spaces for re-establishing socio-spatial interactions and the consequent spatial liminality. In this sense, this paper acknowledges a need for replacing DABs with morphologically informed courtyards with regard to the revitalisation of historic cities. Hence, the proposition of such in-between public courtyards/roads can arguably facilitate rites of passage for local residents (as opposed to the physical crossing of borders), including a real-life transition contributing to the sense of community identification and sense of place/citizenship.

## 6. Conclusions

The decay of historic cores within contemporary cities, the exodus of population, and the abandonment of many buildings have resulted in large portions of historical areas being transformed into dilapidated abandoned buildings (DABs). Spatial liminality, along with mapped DABs, informs us that the percentage and distribution of DABs increased by an average of 14% between 2008 and 2018, proving that current revitalisation processes are inefficient; have lagged far behind a deleterious phenomenon; and have been linear,

physical, and mostly concentrated on freestanding interventions, rather than considering grassroots of social life. In response to this problem, this research proposed an original methodology for understanding socio-spatial vulnerability in historic Middle Eastern cities (focusing on the Iranian context) by proffering a specific focus on the correlation between DABs and spatial liminality. The results and analysis section compared several types of correlation between dependent and independent variables of spatial liminality in historic cities in Iran.

By discovering the correlation between lack of spatial liminality (that can encourage the emigration of residents) and the higher proportion of DABs, this study's findings indicated that the association between revitalisation programs and liminal conditions in the context of historic cities of Iran proved to be crucial. Through the lens of spatial liminality, it was suggested that DABs act as a deleterious phenomenon, which could pertain to a lack of sense of belonging, citizenship, and place identity among residents. This redresses a gap in the knowledge; that is, understanding spatial liminality and its social, cultural, physical and financial implications must be seen as a significant prerequisite for the proposition of revitalisation programs in all Iranian and perhaps Middle Eastern historic cities. In fact, this study demonstrated how spatial liminality offers a practical guideline for forming a strong sense of belonging to place and citizenship in historic cities. Subsequently, the findings confirmed past studies' results that residents' sense of belonging can be the driving force for revitalisation programmes. In this respect, the research outcomes also line up with the contemporary literature, where revitalisation of historic cities has become a holistic matter, to be highly associated with larger city planning and social development schemes. The research also opens up innovative opportunities for practitioners and policymakers to be provided with new integrated types of regulations and programs, which are equally legible among governmental layers, and can directly address infill building practices inside historic cities.

By highlighting the current and previous spatial arrangements of traditional fabrics, the research results revealed that when DABs do not include significant/registered heritage buildings, it is best to reutilise them, either by implementing building restoration or by creating new morphologically and socioeconomically informed infill developments in historic cities that can meet local/regional needs. Nonetheless, in line with liminality of DABs, this paper acknowledges that other cultural, social, and financial implications of disused buildings need to be further scrutinised to improve the theory of spatial liminality in conjunction with spatial cultural affairs. In this respect, the rehabilitation of DABs should consider restoration and rehabilitation in place and unchanged, as well as revitalisation using the provision of social and economic services. In this regard, studies on cultural aspects of spatial liminality can become detrimental to future research that pursues the implementation of in-between spaces as a morphologically informed method for the socio-spatial revitalisation of historic cities. These aspects are necessarily related to larger political, spatial, and commercial arrangements pertaining to the implementation of socially sustainable architecture, appropriate change in land use, and adaptive reuse of existing structures, as well as generating affordable housing and employment opportunities for local communities in historic cities.

The current research undertook case studies in 12 urban blocks, within six urban tissues, in two historic cities of Iran. Street surveys were also conducted among 141 participants. In the current research, the number of local Iranian residents who participated in street surveys would seem to be insufficient, especially for reaching reliable outcomes that can be generalised in historic cities of Iran. Therefore, a larger number of case studies and participants need to be investigated. The theory of liminality, as discussed here, can be further developed by studying spatial liminality in historic cities in countries other than Iran. In this case, reference to the field research on sub-cultures in different historic Middle Eastern cities could provide a rich context for conducting further exploration on spatial liminality. The theory can be further developed by studying spatial liminality in other historic cities in Europe, Oceania, Asia, Africa, and America.

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**Institutional Review Board Statement:** This study was conducted according to the guidelines of the University of Adelaide, and approved by the Office of Research Ethics, Compliance, and Integrity, The University of Adelaide (protocol code H-2018-047 on 9 March 2018).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in this study.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author.

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**Conflicts of Interest:** The authors declare no conflict of interest.

## Appendix A

Appendix A: Ethics approval	
<p>Our reference 32794</p> <p>09 March 2018</p> <p>Associate Professor Julian Worrall School of Architecture &amp; Built Environment</p> <p>Dear Associate Professor Worrall</p> <p><b>ETHICS APPROVAL No:</b> H-2018-047 <b>PROJECT TITLE:</b> Application of spatial liminality in urban design, towards an approach for revitalising unexploited land areas historical Iranian cities</p> <p>The ethics application for the above project has been reviewed by the Low Risk Human Research Ethics Review Group (Faculty of Arts and Faculty of the Professions) and is deemed to meet the requirements of the <i>National Statement on Ethical Conduct in Human Research (2007)</i> involving no more than low risk for research participants.</p> <p>You are authorised to commence your research on: 09/03/2018 The ethics expiry date for this project is: 31/03/2021</p> <p><b>NAMED INVESTIGATORS:</b></p> <p>Chief Investigator: Associate Professor Julian Worrall Student - Postgraduate Doctorate by Research (PhD): Mr Hamed Tavakoli Associate Investigator: Mr Ehsan Sharifi Associate Investigator: Dr Nigel Westbrook</p> <p><b>CONDITIONS OF APPROVAL:</b> The revised application provided 06.03.2018 and the revised table 1 and table 7 provided 08.03.2018 have been approved.</p> <p>Ethics approval is granted for three years and is subject to satisfactory annual reporting. The form titled Annual Report on Project Status is to be used when reporting annual progress and project completion and can be downloaded at <a href="http://www.adelaide.edu.au/research-services/oreci/human/reporting/">http://www.adelaide.edu.au/research-services/oreci/human/reporting/</a>. Prior to expiry, ethics approval may be extended for a further period.</p> <p>Participants in the study are to be given a copy of the information sheet and the signed consent form to retain. It is also a condition of approval that you immediately report anything which might warrant review of ethical approval including:</p> <ul style="list-style-type: none"> <li>serious or unexpected adverse effects on participants,</li> <li>previously unforeseen events which might affect continued ethical acceptability of the project,</li> <li>proposed changes to the protocol or project investigators; and</li> <li>the project is discontinued before the expected date of completion.</li> </ul> <p>Yours sincerely, Dr Anna Olijnyk Convenor Dr Jungho Suh Convenor The University of Adelaide</p>	 <p><b>THE UNIVERSITY of ADELAIDE</b></p> <p>RESEARCH SERVICES OFFICE OF RESEARCH ETHICS, COMPLIANCE AND INTEGRITY THE UNIVERSITY OF ADELAIDE LEVEL 4, RUNDLE MALL PLAZA, 50 RUNDLE MALL, ADELAIDE SA 5000 AUSTRALIA TELEPHONE +61 8 8313 5137 FACSIMILE +61 8 8313 3700 EMAIL <a href="mailto:trrc@adelaide.edu.au">trrc@adelaide.edu.au</a> CRICOS Provider Number 00123M</p>

## References

- Bican, N.B. Public mass housing practices in Turkey: The urgent need for research-based spatial decision-making. *J. Hous. Built Environ.* **2020**, *35*, 461–479. [[CrossRef](#)]
- Tanrikul, A.; Hoşkara, Ş. A new framework for the regeneration process of Mediterranean historic city centres. *Sustainability* **2019**, *11*, 4483. [[CrossRef](#)]
- Tavakoli, H.; Marzbali, M.H. Urban Public Policy and the Formation of Dilapidated Abandoned Buildings in Historic Cities: Causes, Impacts and Recommendations. *Sustainability* **2021**, *13*, 6178. [[CrossRef](#)]
- Farhad, S.; Maghsoodi Tilaki, M.J.; Hedayati Marzbali, M. Returning to historic neighborhoods: Exploring the role of architectural identity elements on the formation of physical identity. *Hous. Care Support* **2022**, *25*, 90–106. [[CrossRef](#)]
- Hosseini, A.; Finn, B.M.; Momeni, A. The complexities of urban informality: A multi-dimensional analysis of residents' perceptions of life, inequality, and access in an Iranian informal settlement. *Cities* **2023**, *132*, 104099. [[CrossRef](#)]
- Tavakoli, H.; Westbrook, N.; Sharifi, E.; Marzbali, M.H. Socio-spatial vulnerability and dilapidated abandoned buildings (Dabs) through the lens of spatial liminality: A case study in Iran. *A/Z ITU J. Fac. Archit.* **2020**, *17*, 61–78. [[CrossRef](#)]
- Jucu, I.S. When Service-Led Activities and Tertiarization Processes Replace Old Industries and Local Brownfields: Changes, Perceptions and Perspectives in the Northern Industrial Area of Lugoj, Romania. *Land* **2022**, *12*, 37. [[CrossRef](#)]
- Askarizad, R.; Dadashpour, A.; Faghirnavaz, J.; He, J.; Safari, H. Organizing worn-out neighborhoods with the new-urbanism approach using mixed methods in Rudsar, northern Iran. *Smart Sustain. Built Environ.* **2023**, *12*, 128–155. [[CrossRef](#)]
- Maghsoodi-Tilaki, M.J.; Marzbali, M.H.; Safizadeh, M.; Abdullah, A. Quality of place and resident satisfaction in a historic-religious urban settlement in Iran. *J. Place Manag. Dev.* **2021**, *14*, 462–480. [[CrossRef](#)]
- Bevilacqua, C.; Sohrabi, P.; Hamdy, N.; Mangiulli, F. Mapping Connections between Neighborhoods in Response to Community-Based Social Needs. *Sustainability* **2023**, *15*, 4898. [[CrossRef](#)]
- Behzadfar, M. *Strategic Plan for Historic Yazd Volume 6-1*; Ministry for Roads and Urban Development: Tehran, Iran, 2012.
- Mirmiran, H. *Kashan Strategic Plan Volume 3. Ministry-of-Housing-and-Urban-Development*; Pars-Naghsh-e-Jahan-Consultants, Ed.; Ministry of Housing and Urban Development: Tehran, Iran, 2011; Volume 3.
- Rezaei, N.; Alborzi, G.; Alilou, L. Transformation of historic neighborhoods: How tourism is changing the historic center of Kashan, Iran. *Herit. Soc.* **2019**, *12*, 176–196. [[CrossRef](#)]
- Habibi, K. *Behsazi va Nosazi-e Bafthaye-i Kohane-i Shahri [Urban Rehabilitation and Renovation in the Old Textures]*; Nashri Entekhab: Tehran, Iran, 2010.
- Tavakoli, H. Spatial Liminality as a Framework for Evaluating Revitalisation Programs in Historic Iranian Cities: The Case of the Imam-Ali Project in Isfahan. In Proceedings of the What If? What Next? Speculations on History's Futures, Perth, Australia, 18–25 November 2020; pp. 261–278.
- Spennemann, D.H. The Shifting Baseline Syndrome and Generational Amnesia in Heritage Studies. *Heritage* **2022**, *5*, 2007–2027. [[CrossRef](#)]
- Australia ICOMOS. *Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*; Australia ICOMOS: Burwood, Australia, 1999.
- Roberts, P.; Sykes, H.; Granger, R. *Urban Regeneration*, 2nd ed.; Sage: London, UK, 2016.
- Roberts, L. *Spatial Anthropology: Excursions in Liminal Space*; Rowman & Littlefield: London, UK, 2018.
- Szokolczai, A. Liminality and experience: Structuring transitory situations and transformative events. *Int. Political Anthropol.* **2009**, *2*, 141–172.
- van Gennep, A. *The Rites of Passage: A Classic Study of Cultural Celebrations*; University of Chicago: Chicago, IL, USA, 1960.
- Thomassen, B. Revisiting liminality: The danger of empty spaces. In *Liminal Landscapes*; Routledge: London, UK, 2012; pp. 37–51.
- Stavrides, S. *Towards the City of Thresholds, Professional Dreamers*; Professional Dreamers: Toronto, ON, Canada, 2010.
- Stavrides, S. Open space appropriations and the potentialities of a "City of Thresholds". In *Terrain Vague*; Routledge: London, UK; New York, NY, USA, 2014; pp. 62–75.
- Simmel, G. The metropolis and mental life. In *The Urban Sociology Reader*; Routledge: London, UK, 1997; pp. 37–45.
- Foucault, M.; Miskowiec, J. Of other spaces. *Diacritics* **1986**, *16*, 22–27. [[CrossRef](#)]
- Mortada, H. *Traditional Islamic Principles of Built Environment*; Routledge: Abingdon, UK, 2003.
- Habib, F.; Moztafzadeh, H.; Hodjati, V. The concept of neighborhood and its constituent elements in the context of traditional neighborhoods in Iran. *Adv. Environ. Biol.* **2013**, 2270–2279.
- Holt, P. The Islamic city. Edited by AH Hourani and SM Stern. *J. R. Asiat. Soc.* **2011**, *104*, 147–148. [[CrossRef](#)]
- Correia, J. Looking beyond the lens' veil. In *Inside/Outside Islamic Art and Architecture: A Cartography of Boundaries in and of the Field*; Bloomsbury Publishing: New York, NY, USA, 2021; p. 61.
- Tavakoli, H. *Dilapidated Abandoned Buildings (DABs) and Socio-Spatial Vulnerability: Application of Spatial Liminality for Revitalising Historic Iranian Cities*; The University of Adelaide: Adelaide, Australia, 2020.
- Alawadi, K. A return to the old landscape? Balancing physical planning ideals and cultural constraints in Dubai's residential neighborhoods. *J. Hous. Built Environ.* **2019**, *34*, 235–263. [[CrossRef](#)]
- Thomassen, B. *Liminality and the Modern: Living through the In-Between*; Routledge: London, UK, 2016.
- Saoud, R. Introduction to the Islamic City. In *Discover the Golden Age of Muslim Civilization*; Foundation for Science Technology and Civilization: Manchester, UK, 2001; pp. 90–98.

35. Stavrides, S. Heterotopias and the experience of porous urban space. In *Loose Space*; Routledge: London, UK, 2007; pp. 174–192.
36. Yin, R.K. *Case Study Research: Design and Methods*; Sage: Thousand Oaks, CA, USA, 2009; Volume 5.
37. Hakim, B.S. *Arabic Islamic Cities: Building and Planning Principles*; Routledge: London, UK, 1989.
38. Tavassoli, M. *Qavaid Va Meyarhay-i Tarahi-i Fazay-i Shahri [Urban Space Design Criteria]*, 2nd ed.; UARC (Urban Planning and Architecture Research Center of Iran): Tehran, Iran, 2015.
39. Edwards, J.E.; Thomas, M.D.; Rosenfeld, P.; Booth-Kewley, S. *How to Conduct Organizational Surveys: A Step-by-Step Guide*; Sage: Thousand Oaks, CA, USA, 1997.
40. Farhad, S.; Maghsoodi Tilaki, M.J.; Hedayati Marzbali, M. Architectural identity and place attachment in historic neighbourhoods: An empirical study in Sanandaj, Iran. *J. Place Manag. Dev.* **2021**, *14*, 148–162. [[CrossRef](#)]
41. Akbar, J. Crisis in the Built Environment: The Case of the Muslim City. *Rev. Middle East Stud.* **1992**, *26*, 150–152.

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