

DOI: [10.38027/ICCAUA2022EN0080](https://doi.org/10.38027/ICCAUA2022EN0080)

Investigating the Role of Vernacular Architecture as a Sustainable and Eco-Friendly Architecture in City Branding

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Abstract

Regarding the tough competition among cities to strengthen tourism industry, building specific identity with distinguishing features of the city has been further emphasized. Vernacular architecture as an eco-friendly architecture with minor impacts on the natural areas, through reflecting the community culture and characteristics of the environment, has the potential to promote the city's brand. In this research, the role of vernacular architecture in making city image has been investigated to provide in-depth knowledge in boosting city image, and the city of Masouleh in Iran has been considered as the case study. Regarding the qualitative nature of this project, in-person interview with main types of users (residents, Iranian tourists, and foreign tourists) has been used. Analyzing the results showed that key factors of vernacular architecture including natural landscape, sustainable design, unique local design, and cultural values have significant effects on city branding.

Keywords: Vernacular Architecture; Sustainable Design; Eco-Friendly Architecture; City Branding; Masouleh.

1. Introduction

The majority of places around the world are facing the effects of globalization in several aspects. In such a situation, the world's cities compete to attract tourists, businessmen, and talents to achieve their goals, and the strategic idea of branding is increasingly getting the main factor of urban growth, development, and quality of life. It seems necessary for cities to distinguish themselves by highlighting and communicating their distinctive features and create a positive image in their users' minds (Aziz Amen, 2022, Amen & Nia, 2020). In fact, cities are making a hard effort to become a brand (Pilenska, 2012; Vela, 2013). Cities that are categorized as ones with quality of living, should have best sites of commerce and art, public spaces, and many other elements that play significant roles as integral parts of human beings' life. Related to this matter, vernacular architecture, which is a built environment on the basis of meeting habitants' needs via using natural potentials and local materials of the area, can be an interesting concept to be considered more thoroughly. This research focused on city of Masouleh Located in Gilan Province, Iran as a case study and investigated that how the vernacular architecture of Masouleh has potentials to affect the city branding.

2. Material and Methods

In this section, before discussing the effect of vernacular architecture on city branding, it is dispensable to highlight both definitions and features. Vernacular architecture is a type of architecture harmonized with local materials, local ecological environment and morphology, climatic factors, and local-based culture and traditions to develop sustainable living within the context of the surrounding environment (Mobaraki, & Oktay Vehbi, B, 2022; Tawayha et al, 2019; Philokyprou and Michael, 2021, Amen 2021). Karahan and Davardoust (2020) asserted that vernacular architecture is a functional architecture characterized by its social, ecological, traditional, and cultural features to protect the natural resources of the environment (Karahan and Davardoust, 2020; Khafizova, 2018). Since adaptation to the environment is a critical factor shaping the vernacular architectural patterns, climate change adaptation should receive sufficient attention (Nguyen et al., 2019). The term climate change adaptation refers to the process of adjusting in the actual or expected future climate of the region to improve human beings' comfort by the use of proper factors such as form, orientation, and materiality of the buildings (Ozyavuz et al., 2018; Karahan and Davardoust, 2020; Nguyen et al., 2019; Lodson, 2018). Research indicates that local people attempt to tackle the faced predicaments by a) developing their experience-based learning knowledge, b) cultivating innovative ideas, c) transmitting their collected and shared traditions, and d) focusing on their natural surroundings and constraints (Tawayha et al., 2019; Philokyprou and Michael, 2021; Karahan and Davardoust, 2020). This type of design not only has the potential to demonstrate an economical use of local building resources, but also can show the cultural values of the local communities (Ozyavuz et al., 2018; Karahan and Davardoust, 2020; Hasanpour et al., 2014; Wuisang and Jones, 2015).

Many authorities count the general image of their cities as a key item of development and focus on uniqueness, authenticity, and city branding as a significant strategy for redeveloping the cities' picture (Shamai and Ilatov, 2005). Psychological research works show that in a first glance, majority of users and visitors look at the architecture of the city when they take a tour from a city (Soltani et al., 2018). Soltani et al. (2018) defined city branding as a management process to develop the city's distinct identity with distinguishing features (Soltani et al., 2018).

Ashworth & Kavaratzis (2010) defined it as the process of applying brand strategy, marketing techniques and disciplines to the social, political, economic, and cultural growth of the cities (Ashworth & Kavaratzis, 2010). Research indicated that city branding has a crucial effect on city marketing, financial promotion, city identities, and city values; therefore, city branding should be designed and programmed as a product carefully (Kotler and Levy, 1999). City branding could be implemented in the context of city space to transform the city into a public space and cultural product (Vela, 2013). Considering such an important fact, vernacular architecture, which represents the traditional cultures of the society, local customs, values, and beliefs of the dwellers, can be an interesting concept to be addressed to search for more correlations between that type of architecture and city branding (Ju et al., 2012; Choi and Yu, 2011; Rafat and Elahi, 2011). While there are many research works on the vernacular architecture and city branding separately, reviewing the literature indicates that none of them have been focused on the analysis of the correlation between vernacular architecture and city branding directly.

This study focuses on the stairs city of Masouleh in Gilan province, Iran, where vernacular architecture can reflect the brand in the consistency of the environmental design and traditional local values. The intention of this research is to look at the unique attributes of the vernacular architecture, employing a branding lens to provide insights into how environmental features of architecture can be bolstered to develop sustainable and adaptive urban landscape in a way that promote city image.

3. Case Study: Masouleh

Masouleh located in Gilan province, approximately 60 kilometres southwest of Rasht and 32 kilometres west of Fuman (Kiani et al., 2016). The city is about 1,050 meters above sea level in the Alborz Mountain range, near the southern coast of the Caspian Sea (Kiani et al., 2016). Masouleh has located in a mild, humid region of Iran, its rainfall is generally about 700 millimeters, and snow is 800 millimeters per year (Kiani et al., 2016). Considering its strategic location, on the slope of a mountain, it is a stairs village, where the maximum difference height level in this city is about 100 meters (Nasehi et al., 2017; Reza, 2011; Farnian, 2016; Amini, 2019). In the unique urban pattern of Masouleh, the roofs have diverse functions such as yard, roof, and public places (Reza, 2011; Farnian, 2016; Amini, 2019). Not only does this structure provide profound and durable connectivity among the wide-ranging places of the urban, but also develops an exceptional city image in users' minds. In addition, the narrow way, as well as many stairs, has prohibited using vehicles in this traditional city (Kiani et al., 2016; Nasehi et al., 2017). The vernacular design of Masouleh looks like a design of a garden city with the co-existence of the natural environment and human-made architecture by utilizing local materials (Nasehi et al., 2017; Reza, 2011; Farnian, 2016; Amini, 2019). In order to adapt to the climatic and topographic conditions of the area, the houses include several zones such as entrance, winter room, summer room, living room, staircase, storeroom, and balcony (Kiani et al., 2016; Nasehi et al., 2017). The houses are elevated from the ground, mostly 3 levels (Farnian, 2016; Amini, 2019).



Figure 1. City of Masouleh (Source: Author).

The ground floor is dedicated to storerooms and the higher levels function as residential places. Having several openings to maximize the natural ventilation and get away from the humidity of the permanent rainy weather and

efficient use of the natural light for heating are other factors of such a brilliant vernacular architecture. Gray soil (as an insulation material on roofs), yellow clay, local wood, and stones are the primary construction materials that moderate the problem of excessive moisture (Farnian, 2016; Amini, 2019; Kiami et al., 2016; Nasehi et al., 2017). Moreover, walkability can play as a constructive factor in enhancing social interactions among local people, visitors, and tourists (Elahi and Ardaneh, 2012).

Put simply, Masouleh is an obvious vernacular architecture in a form of stepped city by having more than 700 traditional houses and public buildings. The architectural design of Masouleh indicates its unique pattern and design based on its specific location to protect the natural resources of the environment and develop the social life of people. Research by Rossini and Nervino (2019), "City Branding and Public Space", demonstrates that unique and evolved urban public spaces have the potential to enhance the city image and the essence of the culture and tradition of the local communities and develop and manage the city brand effectively (Rossini and Nervino, 2019).

4. Research Methodology

As this research was categorized as a qualitative study, structured interview method was applied in the phase of data collection (Interviewees included local people, Iranian visitors, and foreign tourists. In the selection of residents, purposive sampling was applied (Robinson, 2014; Bowen, 2008). Timing and environment for interviews were scheduled effectively in a relaxed environment, without any pressure and friendly atmosphere for all interviewees. In addition, being open to every viewpoint without showing any disagreements were considered in all steps and each interview lasted about 30 minutes. Each interview had two steps. At the first step, the main topic (effect of vernacular architecture on city branding) did not discuss straight and open questions such as "Tell us more about the city image based on your perspective" and "how do you describe the effective features of the city at the first glance, when you arrived and during your visiting time?". In the next step, the main topic was asked and discussed directly. Overall, 56 interviews were carried out including 20 interviews with Masouleh dwellers (60% male and 40% female) in the range of 17- 65 years old, 20 interviews with Iranian visitors (55% male and 45% female) in the range of 24-50 years old, and 16 interviews with foreign tourists (50% male and 50% female) in the range of 20-52 years old. The recorded interviews were transcribed and a phenomenological thematic hermeneutic analysis was done by using NVivo software.

5. Result and Data Analysis

Classifying and coding of the collected data resulted in recognizing three main themes including a) Natural landscape of the city, b) Architectural design of the city, and c) Cultural values of the city, as important factors of vernacular architecture that affects city branding significantly. Subthemes (subgroups) were identified as follows (See Table 1).

Table 1. Recognized factors affecting city branding, (Developed by Author).

Theme	Subthemes	# of interviewees who pointed out the related subject		
		Residents (n=20)	Iranian visitors (n=20)	Foreign visitors (n=16)
Natural landscape of the city	Location of the city	5 out of 20	15 out of 20	16 out of 16
	View of Masouleh (fronted green plains)	6 out of 20	13 out of 20	7 out of 16
Unique local design of the city	Sustainable architecture of the city	19 out of 20	3 out of 20	11 out of 16
	Stepped design and visual beauty of the city	11 out of 20	20 out of 20	16 out of 16
Cultural values of the city	Hospitality of local people	3 out of 20	6 out of 20	16 out of 16
	Traditions and customs	20 out of 20	11 out of 20	14 out of 16

Theme A: Natural landscape of the city

The specific location of the Masouleh was mostly be declared by the tourists, especially foreign visitors. According to the conducted interviews, this theme encompasses two subthemes namely 1) specific location of the city (located on the slope of mountains) and 1) specific view of Masouleh to surrounding green plains. One of the interviewees mentioned the following statement:

“The reason that I would travel to Masouleh is its specific location in comparison to the other tourist hubs I have visited so far. Masouleh has a unique natural landscape. Blended city in the mountain is a lifetime memory from Masouleh for me, it’s like that the mountain has embraced the city”. (A Foreign tourist, interviewee # 5)

Theme B: Architectural design of the city

Analyzing the data showed that architectural design of the city includes two subthemes namely 1) sustainable architecture of the city (which was more important in residents’ view) and 2) stepped design and visual beauty of the city (that influenced both of visitor groups). One of the Iranian tourists mentioned the following statement:

“Masouleh reflects the unique traditional architecture. The main image of that in my mind is a quite village where I can get away from the hustle and bustle of the capital city Tehran. If the vehicles were allowed in this city, Masouleh would not be a calm and peaceful city. Thanks to local architectures because of designing narrow ways and staircases. I enjoyed such a romantic place”. (An Iranian tourist, interview #18)

Theme C: Cultural values of the city

The third theme referred to the significance of Masouleh’s cultural values. While the Iranian visitors mostly did not mention this theme, the foreign tourist and local people paid more attention to that. This theme includes two subthemes: a) hospitality of the indigenous people and 2) traditions and customs. One of Masouleh’s residents mentioned the following statement:

“Today, I noticed that belonging to this place, living with our values, preserving our traditional customs are the most important parts of my hometown”. (One of Masouleh’s residents, interviewee # 13)

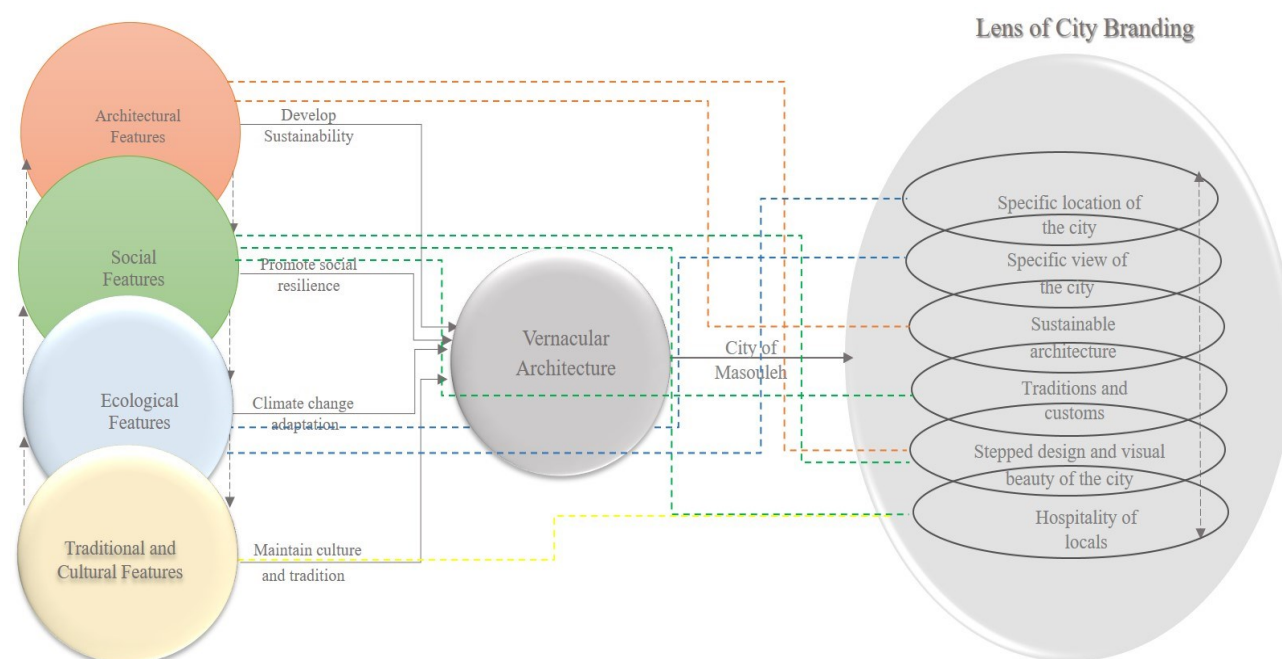


Figure 2. Recognized factors affecting city branding, (Developed by Author)

6. Discussion

Analysing the result verifies that residents considered “Traditions and Customs” as well as “Sustainable Architecture of the City” as the main factors affecting the city image, and ranked the hospitality as the last effective factor. Foreign tourists fascinated by the “Hospitality of Indigenous”, “Stepped Design and Visual Beauty of the City”, and “the Location of the City”; they mentioned all these factors as important variables affecting the city branding. Iranians tourists mentioned “Stepped Design and Visual Beauty of the City” as the important factor affecting their city image. It seems that “Local Design of city” theme was the highest important factor that effects the city branding in Masouleh and “Cultural Values of City” and “Natural Landscape of City” had the second and third priority in making city image based on interviewees’ points of view.

7. Conclusions

The goal of this study was to investigate the effect of vernacular architecture on city branding. In the recent decade, cities are making more efforts and going through more challenges to introduce themselves effectively in a global

scale and attract more users, investments, residents, and industries. Cities should strategize their goals and follow a set of actions to build an effective and long-term positive image for users to gain a competitive merit among other urbans. In this way, preservation and utilization of vernacular architecture can be taken into account as one the practical solutions with significant effects on city branding development. In this research paper, Masouleh, which has a vernacular architecture and design, was studied and investigated. It showed that vernacular architecture as a unique and significant symbol of a city can have a significant effect on positive image development and city branding. Unique local design of place would be attractive for various groups of people, ranging from locals to visitors. The results verified not only does vernacular architecture enhance the city branding, its image and users' conception of the place, but also has a productive domino effect on other factors such as values and cultures. Considering natural landscape and cultural values and paying adequate attention to the unique local design of the buildings in cities can have a significant effect on city image development. Thus, preserving and developing the aspects of vernacular architecture to satisfy the users and make positive feeling and perceptions for them, is a vital factor in city branding development.

Acknowledgements

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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