A Comparison of Natives and Non-natives' Attachment to their Place: A Case Study in Iran

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All over the world, there are many people who migrate in search of better situations. The relationship between immigrants and their new situations is an important issue that must be taken into consideration by architects and urban planners. In Iran cities, like Qazvin, receive many immigrants from other cities due to their special agricultural, economic and academic potentials. In such cases, different cultures and sub-cultures of Iran co-exist within these cities. In the current study, the rate of emotional bonds to place, "place attachment"; is investigated in two groups: native and non-native inhabitants of Qazvin city in its most important public space. In this study, 598 Qazvin-citizen participants were chosen for interviews by the systematic non-random sampling. The data were analyzed using analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA). The results indicated that belonging to a non-native group is not a significant factor in anticipating place attachment. However, place identity, a dimension of place attachment, had a significant correlation with this factor. In addition, participants' age and income have a significant relationship with place attachment among native and non-native groups.

***Keywords*:** place attachment, native, non-natives, emotional bond, functional bond, behavioral bond, cognitive bonds.

There is already a vast compilation of research and theory describing individuals' and groups' connections and interactions within a physical environment. Most of the studies are explicitly or implicitly tied to environmental psychology which emerged in the late 1960s and early

1970s. These studies explore the association between individuals and their immediate environment as well as the impact of environmental quality on human health. The psychology of place assumes that individuals require an adequate environment in order to form an emotional bond to this environment. People are linked to their environment through three key psychological processes: familiarity, attachment and identity. Familiarity refers to the processes by which people develop detailed cognitive knowledge of their environments. Attachment refers to the bond between a person and a beloved place. Place identity is concerned with the extraction of a sense of self based on the places in which one has lived and explored life's journey (Fullilove, 1996).

Displacement breaks these emotional connections. The ensuing disorientation, nostalgia, and alienation may undermine the sense of belonging and mental health (Fullilove, 1996; Dixon & Durrheim, 2004). When immigrants with different cultures and subcultures must co-exist in the same environment, it is important that they share an emotional bond to that environment.

Although many Iranians encounter various cultures migrating from one region to another in Iran, their attachment to new places upon relocation has not yet been studied. This aspect of a person to place relationship tends to be neglected in cities with heterogeneous areas. The current study explores non-natives' place attachment and will examine two hypotheses:

- There is a lack of emotional bonds between people and their environment in urban public places in heterogeneous communities.

- Native groups have stronger place attachment to urban areas than non-natives groups.

Literature Review

Place attachment is an affective bond or link between people and specific places (Hidalgo & Hernandez, 2001; Moore & Graefe, 1994; Williams, Patterson, Roggenbuck & Watson, 1992) based on cognition and affect (Low & Altman, 1992; Proshansky, Fabian & Kaminoff, 1983).

This term has been defined by Low & Altman (1992) as a positive emotional bond with a particular place). Low & Altman (1992) explain that, "*place attachment subsumes or is subsumed by a variety of analogous ideas, including topophilia, place identity, insidedness, genres of place, sense of place or rootedness, environmental embeddedness, community sentiment and identity to name a few*" (p. 3). In addition, place attachment facilitates a sense of security and well-being, defines group boundaries, and stabilizes memories (Halbwachs, 1980) over the passage of time (Logan & Molotch, 1987; Chawla, 1992; Marcus 1992; Reed, Payton & Bond 1997; Rubinstein & Parmelee 1992).

Gieryn (2000) argues that place attachment results from many factors including accumulated geographical experience, socially and culturally shared activities and the geography and architecture of the place. Experiences that produce place attachment are described as "*fulfilling, terrifying, traumatic, triumphant, secret events that happen to us there*" (Gieryn, 2000, p. 481). The longer people have lived in a place, the more rooted they feel, and the greater their attachment will be (Elder, King & Conger, 1996; Hartig, Kaiser & Bowler, 1997). Gieryn (2000) stated that the loss of place and its meaning have negative implications for individuals' collective identity, memory and history. In a study about the workplace, Milligan (1998) found that place attachment is based on nostalgic memories of past experiences in a physical setting and anticipations that positive encounters might continue in the future.

Giuliani and Feldman (1993) defined place attachment as the multiple affective, cognitive, and behavioral relationships between people and the socio-physical environment. Similarly, Low and Altman (1992) considered the range of place attachment definitions in literature and noted that one consistently defining aspect of the concept was its emotional quality. They did not overemphasize this quality, but pointed to others in the field who had argued that place attachment also includes cognition and behavior: "*That is, an interplay of affect and emotions,*

knowledge and beliefs, and behaviors and actions in reference to place" (Low and Altman, 1992, p. 5).

Theorists have tried to categorize place attachment. For example, Schreyer Jacob, and White (1981) considered place attachment in terms of two dimensions; functional and emotional. Williams and Roggenbuck (1989) also empirically defined place attachment as consisting of two-dimensions: place identity and place dependence.

Place identity. The notion of place identity is described as "*those dimensions of self that define the individual's personal identity in relation to the physical environment by means of a complex pattern of conscious and unconscious ideas, beliefs, preferences, feelings, values, goals and behavioral tendencies and skills relevant to this environment. While an individual's place identity reflects the specific experiences and socialization unique to that individual, place identity also reflects those experiences common to all individuals and groups of individuals living in particular kinds of settings*" (Proshansky, 1978, p. 155). Place identity is also described as the symbolic connection between an individual and a place (Stedman, 2002). Place identity is a psychological investment in a place that has developed over time. In this regard, place affirms individual or group identity referring to indicators of emotional or affective attachment. Place identity can be both cognitive and affective; yet it remains unclear how these separate factors operate in defining place identity (Williams & Patterson, 1999). "*These cognitions represent memories, ideas, feelings, attitudes, values, preferences, meanings, and conceptions of behavior and experience, which relate to the variety and complexity of physical settings that define the day-to-day existence of every human being. At the core of such physical environment-related cognitions is the 'environmental past' of the person; a past consisting of places, spaces and their properties which have served instrumentally in the satisfaction of the person's biological, psychological, social, and cultural needs*" (Proshansky et al, 1983, p. 59). Following Proshansky's study, Twigger-Ross and Uzzell (1996) attempted to describe place

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identity. They developed key aspects of identity: self-esteem, self-efficacy, distinctiveness and continuity; based on Breakwells' (1986) identity process model. Their study can be used as a means of conceptualizing the relationship between individuals or groups and places (Austin, 2003).

Place dependence. The second component of Williams and Roggenbuck's (1989) scale, place dependence is conceptually similar to both Schreyer et al. (1981) and Stokols and Shumaker's (1981) components. Functional attachments, or what Stokols and Shumaker (1981) describe as place dependence, have to do with the opportunities the setting affords for fulfillment of specific goals or activity needs? Place dependence is a functional attachment associated with the capacity or potential of a place to support the needs, goals, or intended activities of a person (Stokols & Shumaker, 1981; Williams & Vaske, 2003).

Williams and Roggenbuck (1989) developed instrumentation to measure these two components of place attachment that has been shown to be valid and reliable over time (Jorgensen & Stedman, 2001; Williams & Vaske, 2003). Williams and Vaske (2003) developed a valid and reliable 12-item, 5-point Likert-scale place-attachment survey, initially used in recreational settings. However, it can be generalized to other situations. Internal-consistency reliability (Cronbach's alphas ranging from .81 to .94) for the final 12-item survey was also reported (Table 1). We adopted this valid and reliable instrument verbatim to measure place attachment in a public space discussed below.

Several studies have shown that place attachment is associated with environmentally responsible behavior (Vaske & Kobrin, 2001). In fact, positive attachments to a place may be linked to individuals' willingness to participate in the protection of that place (Relph, 1976; Schultz, 2000; Tuan, 1977; Walker & Chapman, 2003). Therefore, place attachment study has another important dimension that, in this study, was named behavioral bonds. In this regard, behavioral bonds are evaluated by the

effects of place attachment on enhancing participant's behaviors in a place.

Table1

12 Items for Surveying Place Attachment (Williams and Vaske, 2003)

1.	I feel that this place is a part of me.
2.	This place is the best place for what I like to do.
3.	This place is very special to me.
4.	No other place can compare to this place.
5.	I identify strongly with this place.
6.	I get more satisfaction out of being at this place than at any other.
7.	I am very attached to this place.
8.	Doing what I do at this place is more important to me than doing it in any other place.
9.	Being at this place says a lot about who I am
10.	I wouldn't substitute any other area for doing the types of things I do at this place.
11.	This place means a lot to me.
12.	The things I do at this place I would enjoy doing just as much at a similar site.

A model of place attachment was designed for this study by considering two main ideas. 1) Existing studies which categorized place attachment into: place dependence (based on functional dimensions of the place) and place identity (based on cognitive and emotional dimensions of the person to place relationship). 2) Behavioral bonds which refer to the effects of place attachment on individuals' responsible behavior. Hence, our model consists of four dimensions: functional, emotional, behavioral and cognitive bonds with a place (see Table 2).

Table 2
Model of this Study for Surveying Place Attachment

Dimensions	Sentences
Functional	I enjoy spending time at Khayyam
	I get more satisfaction out of visiting Khayyam than any other public spaces
	I prefer public spaces like Khayyam
	I wouldn't substitute any other public spaces for Khayyam
	Khayyam is the first place that I elect for spending time at the city
Emotional	I feel being at home when I am at Khayyam
	Khayyam is my favorite public space
	I have a lot of memories about Khayyam
	I think People at Khayyam are similar to me.
	If it is possible I would come to Khayyam every day
Behavioral	I am ready for support maintenance of Khayyam financially
	I'll do my best for maintenance of Khayyam
	I think people have respectfully behavior at Khayyam
Cognitive	There are some special characteristics in Khayyam that differentiate it from other pubic spaces in Qazvin
	When I think about Qazvin, first thing I remember, is Khayyam
	Khayyam have all characteristics of a good public space

Method

Before commencing this study, we translated the items in Table 1 into the Persian language. First, we evaluated these translated items with 50 participants. Based on the results and its Cronbach's Alpha, we changed sentences to adapt them to the Persian language. Interviews (concerning 16 items) were carried out with 598 participants based on a 5-point Likert-scale (Table 2). Results were analyzed based on a multivariate

analysis of variance (MANOVA) and analysis of variance (ANOVA) tests.

Study Setting

Qazvin, Iran, is approximately 165 km northwest of Tehran and south of the rugged Alborz range, in the province of Qazvin. It is about 1800 meters above the sea level, and has a cold but dry climate. The city was the location of the former capital of the Persian Empire and contains over 2000 architectural and archeological sites. It is a provincial capital today and has been an important cultural center throughout the history.

Today, Qazvin is a city with various industrial, academic and agricultural potentials that attract many immigrants from other cities. Due to the differing subcultures that exist within the city, Qazvin has a very heterogeneous population. In 2007, it had a population of 355,338 in its four urban regions; 96,000 of them were immigrants (Table 3).

Table 3
Qazvin Population (Administration of Management and Planning of Iran, 2007)

Title	Male population	Female population	Total population
Qazvin	181111	174227	355338
Region1	48309	46075	94384
Region2	34608	34959	69567
Region3	52860	50057	102917
Region4	45334	43136	88470

"Khayyam" is one of the ancient streets in Qazvin near the historical center of the city (Figure1). This street serves as a commercial center with plenty of activities and shopping opportunities. The street is a gathering area for the younger population and attracts people from various regions of the city for shopping, walking and spending their time. Khayyam was

selected for this study based on its attractiveness and the opinions of locals (by interviewing 70 participants in Qazvin).
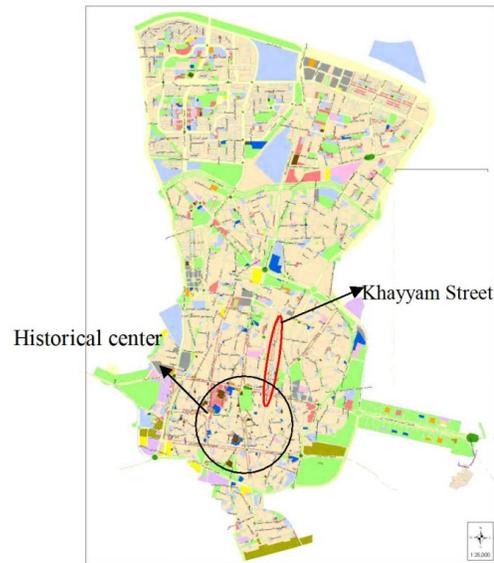
Figure 1
Qazvin Map (Municipality of Qazvin, 2007)

Design and Sample

Data were collected from individuals on Khayyam Street over the summer and fall of 2008. A sample of 598 people, from Khayyam Street, participated in this study. In this stage of our study, we established a research team of 5 university students of (2 males and 3 females) with similar age ranges. All of the students were studying in the "Human Sciences" field and have trained for survey study at the university. After several meetings with our team and explanation of the study aim, interviews began. Our team located at different intersections of Khayyam Street with 5 different cross streets. They interviewed every 10th person passing by their location who agreed to participate in this study. In total, 598 users with different ranges of age, education (Table 4), sex (51%

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male and 49% female) and marital status (58.2% married and 47.8% single) were interviewed. The interviews took approximately 25 minutes each. The sample consisted of 181 non-natives and 417 natives (30.3% non-natives and 69.7% native). Though, non-native groups come from different regions of Iran with different cultures and languages, they are able to speak Persian as the Iranian national language.

Table 4
Social Characters of Participants

Social Character	Mean	Std. Dev.	Min	Max	N
Age	27.94	11.326	14	80	598
Education	12.70	3.030	0	20	598

Results

In order to analyze the data we first calculated the internal consistency of the scale used. The results indicated a high degree of reliability with a Cronbach's alpha of 0.83 for the scale as a whole. Based on the comparison of the responses to different dimensions of place attachment, we found that cognitive bonds have the highest score among the different dimensions (see Table 5).

Table 5
Mean Scores of Place Attachment and its Dimensions

	Mean	Std. Dev.	Min	Max	N
Functional	4.1639	2.06928	.00	10.00	592
Emotional	4.7678	1.71963	.00	10.00	594
Behavioral	4.9740	1.99754	.00	10.00	592
Cognitive	5.0436	1.93648	.00	10.00	592
Place Attachment	4.7254	1.61255	.00	9.50	594

The aim of this study is to compare the degree of attachment in non-native and native citizens in Qazvin. Therefore, we calculated the mean scores for the different types of attachment. As shown in Table 6, the

mean attachment scores of these two groups vary according to the total as well as the dimensions. We compared the degree of place attachment between non-native and native citizens. After analyzing the means of place attachment for each group, it was found that in all of the dimensions (except for the emotional bond); the highest means belong to the non-natives groups (Table 6). This means that, the scores of the natives' emotional bonds in this case are higher than those of the non-natives.

Table 6
Mean Scores of Place Attachment and its Dimensions in Natives and Non-Natives

	Native	N	Mean	Std. Deviation
Functional	Non-natives	180	4.3194	2.12051
	Native	412	4.0959	2.04539
Emotional	Non-natives	181	4.7468	1.72724
	Native	413	4.7770	1.71830
Behavioral	Non-natives	180	5.1795	1.96596
	Native	412	4.8842	2.00694
Cognitive	Non-natives	180	5.3241	1.91653
	Native	412	4.9211	1.93471
Place Attachment	Non-natives	181	4.8720	1.64371
	Native	413	4.6612	1.59648

In the next stage of this study, we evaluated the difference between the native and non-native groups and the degree of the four dimensions of place attachment by applying a MANOVA test (Tables 7-8). The F of 2.731 and the p of .028 indicate a significant difference between the mean canonical variant values for native and non-native groups. The results show that there is no significant difference between functional bond to place (F=1.463 and P =.227), emotional bond (F=.010 and P =.919) or behavioral bond (F=2.745 and P =.098). However, there is a difference

between belonging to native group and cognitive bonds to place (F=5.465 and P =.020).

Table 7
Multivariate Tests

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.941	2336.585	4.000	587.000	.000
	Wilks' Lambda	.059	2336.585	4.000	587.000	.000
	Hotelling's Trace	15.922	2336.585	4.000	587.000	.000
	Roy's Largest Root	15.922	2336.585	4.000	587.000	.000
Native	Pillai's Trace	.018	2.731	4.000	587.000	.028
	Wilks' Lambda	.982	2.731	4.000	587.000	.028
	Hotelling's Trace	.019	2.731	4.000	587.000	.028
	Roy's Largest Root	.019	2.731	4.000	587.000	.028

Table 8
Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	Functional	25.046	1	25.046	1.463	.227
	Emotional	.173	1	.173	.010	.919
	Behavioral	18.454	1	18.454	2.745	.098
	Cognitive	29.291	1	29.291	5.465	.020
Intercept	Functional	90179.945	1	90179.945	5269.304	.000
	Emotional	77970.268	1	77970.268	4676.176	.000
	Behavioral	36556.833	1	36556.833	5437.166	.000
	Cognitive	41925.304	1	41925.304	7822.662	.000
Native	Functional	25.046	1	25.046	1.463	.227
	Emotional	.173	1	.173	.010	.919
	Behavioral	18.454	1	18.454	2.745	.098
	Cognitive	29.291	1	29.291	5.465	.020
Error	Functional	10097.380	590	17.114		
	Emotional	9837.623	590	16.674		
	Behavioral	3966.870	590	6.724		
	Cognitive	3162.086	590	5.359		
Total	Functional	115278.000	592			
	Emotional	102063.000	592			
	Behavioral	46418.000	592			
	Cognitive	51703.000	592			
Corrected Total	Functional	10122.426	591			
	Emotional	9837.796	591			
	Behavioral	3985.324	591			
	Cognitive	3191.377	591			

Discussion

A review of the literature about place attachment shows that there are two main ideas categorizing different dimensions of place attachment. The first idea described the dimensions of place attachment to emotional bonds and place dependence. The second idea described place attachment as place identity and place dependence. By combining these two ideas, we can categorize dimensions of place attachment to emotional (attachment to place and social networks in place), functional and cognitive bonds. Most of these aspects refer to the process of forming place attachment.

However, we added the dimension of behavioral bonds which are the result of place attachment in the form of responsible behavior. We designed a questionnaire for evaluating place-attachment with a Cronbach's alpha of 0.83 which indicated a high degree of reliability. It consisted of 12 sentences in a 5-point Likert-scale. Our model of evaluating place attachment has been done for the first time in Iran in the Persian language.

As we anticipated in the first research hypothesis, emotional bonds between people and place have the lowest scores among other place attachment dimensions. This result shows that public places are just the means to meet individuals' daily life needs rather than their higher needs. While feeling emotional bonds with people and the environment is an essential human need in urban public places. In this regard, architects and urban planners should find and improve dimensions of the environment so that citizens can experience more of an emotional bond with others and with the environment.

A comparison of the mean scores of different dimensions of place attachment (see Table 6), allows us to conclude that in this sample population, cognitive bonds between person and place are higher than other dimensions. As Gieryn mentioned; effects of displacement vary (Brown & Perkins, 1992) depending upon whether the dislocation is forced, as in natural disasters (Erikson, 1967), in urban renewal (Gans, 1962) and in political exile (Bisharat, 1997, Malkki, 1995, Portes & Stepick, 1993); or voluntary, such as job relocations and tourism (McConnell, 1976). Effects of displacement also vary depending on whether the displacement is temporary or permanent (Mitchell, 1996; Kasinitz, 1992). There are several reasons for immigration to Qazvin. Most of the cases are due to job opportunities, education, weather condition and location of Qazvin near the capital of Iran, Tehran. The study on immigration reasons and motivations and their effects on non-natives' relationship with their new places will be an interdisciplinary study between social sciences and urban design fields.

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Finally, future studies can focus on discovering physical elements of places (especially public places) which cause non-natives to feel higher emotional bonds with that place. As mentioned before; non-natives' motivations and their efforts to adjust and identify with new situations should be investigated in the future. To generalize the findings of this study, it needs to be applied in other similar cases in different areas.

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