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Enhancing Living Quality: Cross-cultural Differences in Personal Space between Kurdish and Northern Women in Iran

Fatemeh Mohammad Niay Gharaei ^{a*} and Mojtaba Rafieian^b^a *Department of Art and Architecture, Science and Research Branch, Islamic Azad University, Tehran, Iran*^b *Faculty of Art and Architecture, University of Tarbiat Modares, Jalal Al Ahmad Highway, Nasr Bridge, Tehran, 14115-111, Iran*

Abstract

This study investigated cross-cultural differences in regard to the size of personal space among two Iranian sub-cultures (Kurdish and Northern women) vis-à-vis strangers. The study was undertaken through the methods of participatory observation, questionnaire, and stop-distance. A random size of 100 Kurdish and Northern women was selected in Sanandaj and Sari cities. Moreover, to examine the survey Chi-Square Test and Independent Sample Test were conducted. The results show that Kurdish women require more inter-personal space while walking and sitting than Northern (Mazani) women do. These findings assist environmental designers to represent strategies for achieving privacy in relation to Iranian sub-cultures.

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1. Introduction

Criteria such as privacy, personal space and territorial tendency affect environmental quality (Lang 1987). The need for privacy and consequently of personal space and territorial integrity is a general need

*Corresponding author. Tel.: +989151197922; fax: +985117620706.
E-mail address: fatemehgharaee@gmail.com

amongst human beings, but ways of expressing and achieving these differ in various societies (Hall 1966, Altman and Chemers 1980).

Urban designers can create heterogeneous environments for various urban spaces once a proper understanding of spatial behaviour, general human needs and their differences within different cultures are considered- thereby protecting humanity against crimes committed in the name of reconstruction (Hall 1959).

Edward Hall's theory (1966) is the basis of research conducted on the cultural effects of how people interpret space and utilize it. According to this research, cultural differences make a significant distinction between the spatial behaviour of Mediterranean and European cultures. He subsequently divided cultures into *communication* and *non-communication* cultures. Hall also states that differences in inter-personal distances are not limited to cultures, but actually encompass sub-cultures.

Following Hall, further researches were undertaken on personal space and inter-personal distance among and within different cultures and sub-cultures (Watson and Graves 1966, Forston and Larson 1968, Little 1968, Sommer 1968, Ziller, Long and Reddy 1968, Engerbretson and Fullmer 1970, Evans and Howard 1973, Hayduk 1983, Sanders, Hakky and Brizzolara 1985, Remland 1995). However, and despite these studies, there are still many cultures and sub-cultures globally whose spatial behaviour and utilization of space yet remain unstudied.

Iran has different sub-cultures with different modes of privacy response; however, no research has been undertaken on differences and similarities of these sub-cultures according to the criteria of the tendency to privacy and the functional mechanisms to achieve it. Hence, this article aims to study the size and dimensions of women's personal space vis-à-vis strangers by surveying and analysing two sub-cultures within Iran: the Kurdish and the Northern (Mazani).

As mentioned before, cultural differences amongst Iranians have led to differences in needs and spatial behaviour, nonetheless, the arrival of "modernity" in Iran prompted the design and development of urban environments in uniform patterns without due consideration of needs of residents and their cultural differences, subsequently decreasing the quality of urban environments in Iranian cities.

In order to compensate for this gap in knowledge, this paper covers two groups of women (Kurdish and Northern (Mazani)), assessing the size and structure of their personal space, in city parks, vis-à-vis *strangers* (men and other women) with similar or different cultures. In order to be more accurate for comparison purposes, economic and personality indicators were also utilized in the study.

1.1. The concept of personal space

Between the space inside the human body, and the physical architectural space that we live in, there is an invisible layer surrounding the human being. It is a personal space which surrounds one's body (Madanipour 2003). As Sommer (1969) mentioned: people are like hedgehogs in Schopenhauer's story – they want to be close and make friends, but at the same time still keep a distance so as not to disturb each other. Personal space is not a fixed geographical location, and it moves with the person – varying in size according to position and as necessary. This space does not necessarily have volume or is equally and linearly spread out – while it has been said to be similar either to a snail, a shell, a soap bubble, an aura or a "breathing space" (Sommer 1969).

Personal space is an abstract space that surrounds each individual, although it is neither physical nor visible. Nevertheless, personal space is a reality, given that individuals and others in the vicinity have reached an agreement on the limits of this space – although there may be no agreement on the methods or means whereby this personal space and distance is kept or measured. Personal space means individuals protect their territory and prevent others from intruding (Madanipour 2003). Others will have problems in

trespassing on these limits (Sommer 1969, Hayduk 1994) – such trespassing leading to stress, worry, escapism and aggression.

According to Altman (1975), privacy is observed through a set of behaviour mechanisms that may be verbal, non-verbal and environmental (like personal space and territory). So personal space is a mechanism used to monitor interactions and ability to achieve the desired privacy.

1.2. Personal space and the cultural, racial and ethnic background

Cross-cultural studies with respect to personal space flourished with the *adjacency theory* of Edward Hall (1966). Hall classified four kinds of inter-personal distance and demonstrated the effective cultural differences with regard to the personal space, believing that there are specific customs in any culture regarding use of space. Based on his studies, the spatial behaviour of Mediterranean and northern European people and cultures are significantly distinguishable: Mediterranean societies prefer proximate interactive distances while northern European societies prefer more extensive interactive distances. Hall's studies became the basis of subsequent research in the field of cultural effects on special behaviour and the personal space of citizenry. Researchers, working on the basis of Hall's classification, indicating Mediterranean (communicational) and northern European (non-communicational) characteristics, supported his results and ideas through surveys they had undertaken (Watson and Graves 1966, Forston and Larson 1968, Little 1968, Sommer 1968, Ziller, Long and Reddy 1968, Engerbretson and Fullmer 1970, Evans and Howard 1973, Hayduk 1983, Sandor, Hakky and Brizzolara 1985, Remland 1995).

Alongside inter-cultural studies on space usage and interactive distances among citizens, other research compared and examined personal space in various racial and ethnic group settings (Willis 1966, Baxter 1970, Aiello and Jones 1971, Frankel and Barrett 1971, Thompson and Baxter 1973, Scherer 1974). In the majority of this research, comparison was made in the United States between various American ethnic groups such as whites and blacks. In general, the information obtained from inter-cultural studies, contains both similarities and differences in terms of personal space. Also, social status, age, gender and economic-social factors are effective in the outcome of studies regarding cultural differences and similarities (Scherer 1974, Altman 1975).

1.3. Privacy tendency and the promotion of quality urban environments

From the perspective of urban citizens, a quality environment is one that can meet their needs and demands (Altman 1975). Privacy tendency is universal among human beings and results in the satisfaction of other needs such as security, self-actualization and self-esteem (Hall 1959, Sommer 1969, Altman 1975). Research indicates that privacy tendency and crowd avoidance are criteria for a quality urban environment (Van Poll 1997). Environmental designers are not just dealing with the physical environment so they must pay more attention to the creation of an environment in which behavioural, perceptual, cognitive, motivational states are also considered as criteria (Altman 1975). Urban designers will only create a quality environment by considering the needs and demands of urban citizenry. The desired level of privacy and crowd avoidance will only be achieved by considering behaviour mechanisms such as verbal, non-verbal, environmental, cultural and interactive behaviours (Altman 1975). Personal space is a mechanism of privacy achievement (Hall 1966, Altman 1975). Consequently, by considering personal space and use of effective factors such as age, gender, culture, characteristics and etc, environmental designers will be able to design quality urban environments in the future.

2. Methodology

2.1. Sample survey

In this study, 100 women who were using parks (specifically Abidar and Shahr parks) in Sanandaj and Sari were selected on a random basis: 50 of which were Kurdish and 50 were Northern (Mazani). The samples indicated healthy, extrovert, normal to high income average level. The age range of Kurdish women was from 18 up to 65 ($M=34.78$, $S.D=12.50$) and the age range of Northern (Mazani) women was from 18 up to 60 ($M=30.76$, $S.D=10.80$). Both groups go to parks alone or with their children.

2.2. Site selection

The research was done in AbidarPark (Sanandaj) and ShahrPark (Sari) - both in Iran. Sanandaj is the capital of Kurdistan province and Sari is the capital of Mazandaran province. Their population is almost the same. Sanandaj has 393,791 and Sari has 398,994 inhabitants. The culture of most inhabitants in Kurdistan is Kurdish and that of Mazandarani's is Mazani (Northern). Both parks were selected in urban areas and have an urban scale. Women go to these parks to do sport and for leisure activities. External visitors go to these parks in addition to the local population.

2.3. Process and Method

The study was undertaken through the methods of *participatory observation*, *questionnaire* and *stop-distance*. At first, researchers recorded their observations of women's behaviours in urban environments by moving around these two parks and taking photos and recording films. The researcher also schematically drew a map and noted inter-personal distances of women vis-à-vis strangers (men and women), with similar or different cultures, using a linear measurement based on the ground tiles of the parks. Fifty women using the parks were randomly selected in order to fill the questionnaires. The selected women were healthy, extrovert, normal to high income average level individuals. The purpose of the questionnaire was to understand their inter-personal distances against strangers (men and women) with similar or different cultures. Questions were categorized into three parts. The first part of the questionnaire contains general questions. The second part contains the estimation of inter-personal women's distances against strangers (men and women) with similar or different cultures, while sitting in the park. The last part of the questionnaire measures the optimum distance of women against strangers (men and women) with similar or different cultures with stop-distance method.

3. Results

After gathering data through the questionnaire, stop-distance, and site observation methods, these data were analyzed through independent sample test and chi squared test, on the following variables: *culture* and *personal space*. The method used to examine the effect of culture on inter-personal women's distances against strangers (men and women) with similar or different cultures.

3.1. Differences between optimal distances between park benches

In order to make a comparison, between Kurdish and Northern (Mazani) women, the average distance between park benches was examined using the independent sample test. The average distance for Kurdish women is about 7 meters (Mean = 7.07, Standard Deviation = 1.60) while the average distance for

Northern (Mazani) women is about 6 meters ($M = 6.07$, $S.D = 1.60$). The results indicate that the significant level of Levin's Test is lower than 0.05 ($Sig = 0.00$), so that the null hypothesis of equal variances is rejected and $T = 2.54$ is reported. On the other hand, the difference between the two group's average is significant ($T = 2.54$; $d.f. = 98$; $P = 0.01$) therefore, the assumption of no relation is rejected and the alternative assumption is accepted. We can then conclude that the average distance between Kurdish and Northern (Mazani) women is significantly different.

3.2. The differences between inter-personal distances while sitting on park benches

In order to examine inter-personal distance, the interviewed were asked to specify their distance from strangers in different or similar cultures (men and women). These data were collated (along with other site observations) and then analysed through an Independent Samples Test.

3.2.1. Differences of inter-personal distance against local and non-local women

The results indicate that the average inter-personal distance between local and other local women is similar for both Kurdish ($M = 0.93$, $S.D = 1.47$) and Northern (Mazani) ($M = 0.93$, $S.D = 0.74$) women. Therefore, the difference of the averages between Kurdish and Northern (Mazani) women is not significant ($T = -0.014$; $d.f. = 98$; $P = 0.98$) – and so the null hypothesis is accepted. However, the Kurdish women's average inter-personal distance against non-Kurdish women ($M = 1.21$, $S.D = 1.19$) is significantly higher than the Northern (Mazani) women's inter-personal distance against non-Northern (Mazani) women ($M = 0.75$, $S.D = 0.28$). Also, the difference between the inter-personal average of Kurdish and Northern (Mazani) women is significant ($T = 2.36$; $d.f. = 98$; $P = 0.02$) - and so the null hypothesis is rejected and the alternative hypothesis is accepted. The average inter-personal distance against non-local women is, therefore, quite different between Kurdish and Northern (Mazani) women.

3.2.2. Differences between inter-personal distance against local and non-local men

The results indicate that the average inter-personal distance of Kurdish women ($M = 7.19$, $S.D = 8.12$) against local Kurdish men is higher than the average inter-personal distance of Northern (Mazani) women ($M = 4.46$, $S.D = 3.32$) against local Northern (Mazani) men. The average inter-personal distance difference between Kurdish and Northern (Mazani) women against their local men is quite significant ($T = 1.98$; $d.f. = 98$; $P = 0.05$) - and so null hypothesis is rejected and the alternative hypothesis is accepted. Therefore, the average inter-personal distance against their own local men is significantly different between Kurdish and Northern (Mazani) women. This distance was also dissimilar against non-local men. Kurdish women showed more distance ($M = 9.88$, $S.D = 8.05$) against non-local men, in comparison with Northern (Mazani) women ($M = 6.82$, $S.D = 5.32$). As a result, the average inter-personal distance difference of Kurdish and Northern (Mazani) women against non-local men shows significance ($T = 2.02$; $d.f. = 98$; $P = 0.04$) so, the null hypothesis is rejected and the alternative hypothesis is accepted. The average inter-personal distance against non-local men is different between Kurdish and Northern (Mazani) women.

3.3. The differences between inter-personal distances while walking and undertaking physical activities in the park

Research shows that personal space is smaller whilst walking than sitting (Bell et al., 1996). By using the "stop-distance" method in this part of research, women walking and practicing physical activities in

parks were asked to specify the distance in which they could easily relate with others and which any closer distance would make them feel uncomfortable. The results were again analysed by the Independent Samples Test.

3.3.1. *Inter-personal distance differences against local and non-local women while walking and undertaking physical activities in parks*

The results indicate that the average inter-personal distance of Kurdish women ($M = 0.54$, $S.D = 0.14$) against other local women is almost similar to the inter-personal distance of Northern (Mazani) women ($M = 0.52$, $S.D = 0.16$) against other local women while walking and undertaking physical activity in the park. However, this distance is smaller than the distance while sitting on a bench in the park. Therefore, the difference between the inter-personal average of Kurdish and Northern (Mazani) women against other local women is not significant ($T = 0.54$, $d.f. = 98$, $P = 0.58$) - and so the null hypothesis is not rejected. However, the average inter-personal distance of Kurdish women against non-local women ($M = 0.68$, $S.D = 0.27$) is more than the average inter-personal distance of Northern (Mazani) women ($M = 0.52$, $S.D = 0.16$) against non-local women. This distance is, again, less than their inter-personal distance whilst sitting on the park benches. Therefore, the difference between the average inter-personal distance of Kurdish and Northern (Mazani) women against non-local women is significant ($T = 3.25$, $d.f. = 98$, $P = 0.02$) so, the null hypothesis is rejected and the alternative hypothesis is accepted. As a result, the average inter-personal distance against non-local women is quite different between Kurdish and Northern (Mazani) women.

3.3.2. *Differences between inter-personal distances against local and non-local men while walking and undertaking physical activities in the park*

The results indicate that the average inter-personal distance of Kurdish women against local men ($M = 0.95$, $S.D = 0.29$) is more than the average inter-personal distance of Northern (Mazani) women ($M = 0.72$, $S.D = 0.25$) against their local men while walking and undertaking physical activities in parks. Hence, the difference between the average inter-personal distance of Kurdish and Northern (Mazani) women against non-local men is significant ($T = 3.85$, $d.f. = 98$, $P = 0.00$) so, the null hypothesis is rejected and the alternative hypothesis is accepted. Therefore, the average inter-personal distance against local men is different between Kurdish and Northern (Mazani) women while walking and undertaking physical activity in parks. This distance difference was also dissimilar against non-local men. Kurdish women require more distance ($M = 1.06$, $S.D = 0.31$) against non-local men in comparison to Northern (Mazani) women ($M = 0.91$, $S.D = 0.31$). Hence, the difference between the average inter-personal distance of Kurdish and Northern (Mazani) women against non-local men is significant ($T = 2.13$, $d.f. = 98$, $P = 0.03$) therefore, the null hypothesis is rejected and the alternative hypothesis is accepted. So, the average inter-personal distance against non-local men is different between Kurdish and Northern (Mazani) women while walking and undertaking physical activities in parks. While sitting on park benches, the average inter-personal distance of Kurdish and Northern (Mazani) women against local and non-local men are smaller than when they are walking and or undertaking physical activity in parks.

3.4. *Differences in reaction to the imposition against personal space*

In order to compare Kurdish and Northern (Mazani) women's reactions against external imposition on their personal space, and the status of response to strangers, the samples were divided into three categories: *face-to-face*, *behind* and *next*. By approaching individual (in the sample) from any of these

directions, the reactions against such imposition were recorded. The Chi Squared test was used in order to study the relationship between culture and any reaction against imposing on personal space. The results show $\chi^2(2, N = 100) = 2.38, P > 0.05$ and so there is no significant relationship between differences in culture and reactions against outside imposition therefore, the two groups of Kurdish and Northern (Mazani) women will become more anxious and nervous by any imposition on personal space by strangers (especially from behind than from the front).

4. Conclusions

This research focused on Edward Hall's seminal studies based on the effects of cultures and sub-cultures on the utilization of space. The results of this research well illustrate that there are similarities and differences in the use of space and inter-personal spatial differences between two ethnic sub-culture Iranian groupings - Kurdish and Northern (Mazani) women. According to Hall's studies, interaction between people takes place in four inter-personal spaces and distances: *intimate*, *personal*, *social* and *public*. He claimed that intimate distances (of 0-46 cm) are for close interactions; personal distances (of 49-122 cm) are for friendly discussions; social distances (of 122-366 cm) are for more formal interactions; while public distances (of 366-762 cm) are for communication with unfamiliar people who we have no willingness to interact with them.

According to the research's derived results, Kurdish and Northern (Mazani) women prefer *personal* distances in relationships with other women (both local and non-local) and *public* distances in relationships with men (both local and non-local).

The comparison between inter-personal space differences of Kurdish and Northern (Mazani) women within different sexual groups indicates that they have a similar inter-personal distance against local women, but Kurdish women require more distance against non-local women than Northern (Mazani) women do. Both Kurdish and Northern (Mazani) women require more space with respect to men than women; nevertheless, the results indicate that Kurdish women require more space vis-à-vis men (both local and non-local).

Kurdish women require more distance against non-local (men and women) when both walking and sitting. However, Northern (Mazani) women have less distance against non-local women and the same distance against local women. Nonetheless, the distance with respect to non-local men is more than that of local men.

On the other hand, the research also accepts Bell's studies (1996): inter-personal space while walking and standing is less than inter-personal space while sitting. According to the results, both groups of women (Kurdish and Northern (Mazani)) have less inter-personal space while standing and walking rather than sitting on a park bench. However, the comparison between the dimensions of inter-personal space of Kurdish and Northern (Mazani) women show that Kurdish women require more inter-personal space while walking and sitting than Northern (Mazani) women do.

Finally, due to numerous sub-cultures in Iran and a shortage of studies on these sub-cultures, and in order to create a quality environment, urban designers must perceive the characteristics of any of these sub-cultures and create urban environments based on them.

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