

# Evaluating the Quality of Optimal Privacy in the Study Spaces of Libraries and its Impact on the Satisfaction Rates of Consulting Individuals (Case Study: Public Library of Qazvin)

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## Abstract

Privacy is one of the essential needs of the human being. And the balance between privacy and social interactions between individuals are influenced by the architectural elements enriched by cultural values of each society which would lead to a sense of satisfaction in environment as well. The scope of environmental psychology is on the relationship between human and the his/ her environments; we can refer to these factors and Indicators as impactful factors on evaluating the quality of spaces: the privacy, personal space, territories, and the congestion. Nowadays, regardless of the existence of number of libraries in the cities but the number of consulting individuals, especially those who enter the libraries to study have increased. The aim of this study is to evaluate the factor of privacy vt studying it as an impacting factor in designing the study spaces in libraries. The chosen research methodology in this research is a survey method and an inductive argument method is used to prove the research hypotheses. Data collection method is attributive (library) and as of a field research type. We will reach for some results at the end of the article to identify a number of some rates for the optimal privacy factor in the study spaces of libraries to increase the levels of satisfaction of individuals in the libraries.

**Keywords:** Architecture, Libraries, Privacy, Space Research, Satisfaction

## 1. Introduction

The fundamentals of detaching individuals is to isolating them from the others - or in other words to do surveillance on the borders between the relationship of individuals to reach for a desirable worldwide privacy, which more and less exists in all societies. It may be possible that some of the cultures have not considered the idea of privacy, but this can generally be due to their traditional definition of privacy which they consider as something solely related to the physical matters - and not a complex behavioral system with various different functions (Altman, 2002: 37-54). Developing social interactions between the individuals take place in the places. One of these places is libraries which is also the case of our study. Nowadays, libraries are the type of institutions who contribute to the developments in the fields of research and science by making available books for the individuals. To make a library as a desirable and popular place, it is essential for the library to be a calm and convenient place for the research and study in addition to the rich backbone in data resources. To reach for this goal, human should have a proper interaction with its peripheral environment. These peripheral surroundings here equals the architecture and the people who are present at the library. This type of communication fits into the scope of some certain field of

psychology. Privacy is one of the negotiating factors of this bond. From the hypotheses of this research we can refer to the impact of furniture type, their distance from each other and the location of people on the quality of privacy in the study halls.

## 2. Research presumptions

- Distance of the furniture from each other in the study spaces of libraries impacts the optimal privacy.
- Placement of people in different positions in the study spaces impacts the optimum privacy.

## 3. Theoretical background of the research

A number of studies are done regarding the evaluation of privacy in public spaces which we will point out to a number of them in the following lines:

In Ghahremanian et al. (2009) article, the privacy balance of the patients under tendance from the viewpoint of nurse and the patients, and the extends regard to the patients' privacy from the viewpoint of nurses and patients (Ghahremanian et al). In the year 2011, Pour Naderi et al have payed to a number of indicators like privacy, peacefulness and convenience, congestion, etc. in their article with the title of "Analysing the indicators of environmental psychology in designing the dormitories for

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the university students” (PourNaderi et al, 2011). In 2013, Mahmood Arjmand and Somayyeh Khani have payed to the concept of privacy in their article “Iranian home design in the past” (Arjmand and Khani, 2013). In 2008, Stephanie Robson [1] have studied rules/ regulations of the personal privacy in the stressful situations in an article titled “Scenes from a restaurant: Privacy regulation in stressful situations” it is an article on controlling the stress in different places in a restaurant (Robson, 2008). Following yo the introduced researches, this article tries to analyze the concept of privacy in the study space of public libraries.

#### **4. Research methodology:**

This research is a survey type and its research environment is the Imam Khomeini public library in Qazvin city. The statistical population includes the individuals who are present at the reading room of the library. The data collection method is by inscription of the behavior of the individuals during their stay in the reading room, and secondarily by filling the questionnaires by 80 of the individuals who were present at the study room. To analyze and study the data, SPSS software and the illustration of diagrams are utilized.

#### **4.1 Theoretical aspects of the research**

Concept of the term “privacy” is taken from the Latin word *Privates* meaning “deprive”. Need for privacy used to be one of the essential needs of the human being and any disorder in achieving it can lead to many issues (Ghahremanian et al. 2009: 38). “Privacy” is the process of surveillance on the borders between selfand the other. “Privacy” is the ability to control individuals or groups to have a visual, aural interaction and a dynamic sense together with others. *Amos Rapoport* has defined privacy as “the ability to control the social thoughts, right to choose and the possibility of ideal social interactions” (Lang, 2001:165).

Personal space is a system that we use to surveillance on the interpersonal relationships to reach for an ideal privacy (Altman, 2002: 65). Personal space has different functions. This space is a bubble shaped one which protects us from physical and mental harm. This space is also a fundamental system which we use it to adjust the amount of intimacy in our interactions with others (Mac Andrew, 2003: 174-175). Edward Hall categorizes the Personal space into four different types: intimate, personal, social and public distances; he has named them according to their distance. It is good to think of the point that the feeling of individuals on the given time plays a

decisive role on the type of using the distance (Hall, 2012: 136).

Role of the territories is to facilitate the social interactions and to stabilize the social systems and they are the providers of privacy. The primary territories like public spaces (house) can be easily specified, but the recognition of secondary territories like public, shared spaces are sometimes very complicated. territorial behavior is a system that is put forward to adjust the border between self and the others which can be spoken in the terms of personalization or tagging the subjected space or object (Lang, 2001). People experience a more feeling of security and control on the main, pivotal territories. Aggression to a primary territory - like a case of house burglary - is an extremely harsh emotional incident. Aggression to a public territory is not extremely annoying as we can see most of the individuals does not utter a defence against such aggressions (Mac Andrew, 2003: 205).

The concept of congestion and its related concept “social isolation” is the outcome of the individual defeature on achieving an ideal level of privacy. Congestion causes negative behavior because of its close link with “social pressures”. To figure out about the concept of congestion we should bring light to its different aspects and to consider it as a complex phenomenon. Congestion is an interpersonal process which also happens in the case of couples and small groups in which individuals have direct interactions with each other (Arjmand et al, 2012: 35). It is essential to separate between the notions of congestion and density. Density is an objective index regarding the number of people who are present in each unit of space; congestion points out to a subjective and psychological state which can lead to negative sensations/ feelings. While density is usually an important contributing factor to congestion, recognizing the congestion is affected by the other situational and geographical factors like architecture, requirements of duty, individual age and gender (Mac Andrew, 2015: 233).

#### **4.2 Findings of the research**

The research environment was set as the Imam Khomeini (IK) public library and the studied samples were 80 of the people who are in different ages and the minimum age of the participants is 7 years - equal to the age in which people learn to read and write, they come into the study room with different intentions and goals and this presence is totally random. In the mentioned library (IK), the study

and other magazines are located in another space. Gender of the participants is reduced to only female. The method of performing the research was by registering the behavior by the researcher along with the questionnaire that the participant would fill in the study space. Day of administering the research was one of the working days in between the days of a week - on a Monday - and the duration of the research was a full working day of the library (from 7:30 to 17:45). The study space of the library includes two spaces which are divided from each other with a stairway. It is true to say that it includes a story with a mezzanine. Entrance to the study hall is indicated with a red point in the photo no. 1. In this research, the

evaluation of optimal privacy is based on the distance of furniture pieces with each other or the lack of backing of seats and different types of them. Thus, lightening (natural or artificial light) is not the subject of study. In this part, two different types of arrangements are used for the furniture's. In the first space the furniture are arranged with a standard distance, as the least possible distance for them. In the second space, the furniture were arranged an increase in the distance of the furniture in comparison with the previous arrangement. It is a 50 centimeters increase on the width and 160 centimeters on the whole length Figure 1.

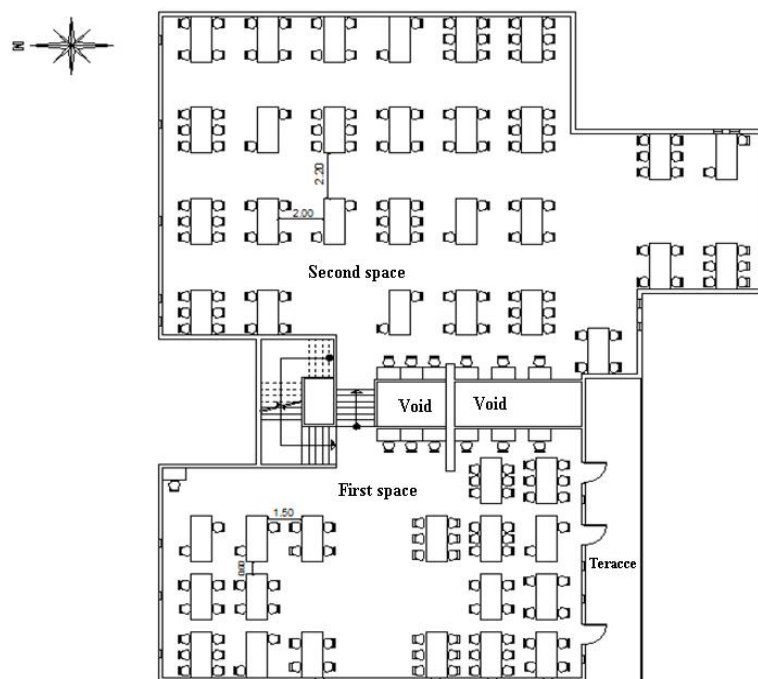


Fig. 1. Plan for the arrangement of the furniture in the first and second study space  
(Source: The authors).

Individuals were asked to take a look to the both study spaces on their arrival and then decide about their sitting place. The exact entrance/ exit time of the participants was inscribed. The tables in the first and second space are each arranged in four types. The first one is the arrangement when all of the tables are located on the corner (the condition with two hand support), the second form is when the tables are located on the corner and by the window (two seater hand support by the window), the third formation when all of the study tables are located by the wall (one seater support mode) and the fourth form when all of the tables are located by the window (one seater support by the window. The fifth form is that when all of the tables are located in the center of the library

(without a hand support). Participants would sit on one of these tables by their own will and then a questionnaire will be delivered to them to fill for the completion of data about the table that they were willing to seat on - and they are now sitting; or due to the occupation of the seat there was no option of choice for them, or about the fact that who are the library goers and the type of people whom they want to reach for the library with, or their group of ages and their aim for coming into the reading hall of a library or if they are satisfied with their sitting conditions or not were put forward. The size of existing tables in the reading hall and in the both spaces of it are categorized into the three different types of double, quadruplet, sixtuplet seater tables.

**5. Analysis**

The research methodology is in a way that the point is on the priority in the choice between the people, different tables on the study hall. The choice of tables which was in priority was measured and scaled. A consideration was made for the arrangement of the tables according to the sitting places of participants. The priority rate of demand for a table increases with the number of backing and hand supports. The tables inside the reading salon are arranged in two different forms in the terms of furniture distances with each other. The first form includes furniture with distances more than the standard measure. Figure no.2

represents the priority of the selection by the people who visits the library on two different situations. Here, between two different space in the study rooms which first includes the furniture arrangement with the standard distance and the last one has a more than standard distance, people prefer the second study space. The researcher have inscribed the behavior of the people in this situation.

The extracted statistics from registering the behavior of participant lead to a number of results which shows that 33 people out of the 80 participants have chosen the first space and 47 of them have chosen the second one.

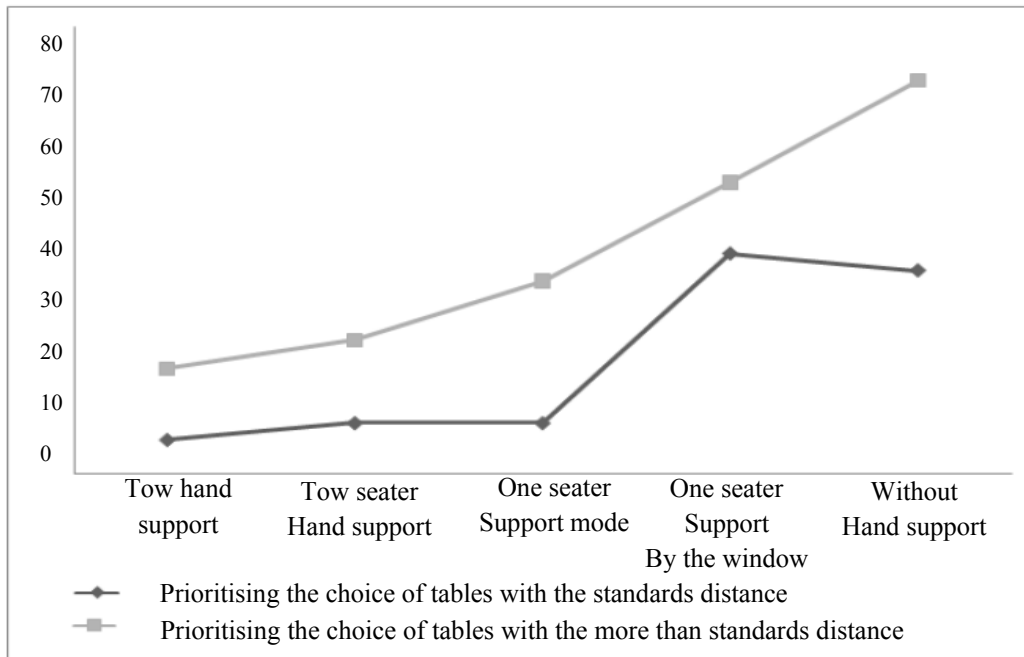


Fig. 2. Inscibing the behaviour of participants and to their distance from other ones (Source: The authors)

Figure No.3 reflects some brief information from the 33 participatos who are situated in the first space (arrangement of furniture with the standard distance from each other) and the 47 other participant who are in the second space (with arrangement of furniture with a more far distance from each other), as the statistical population these individuals filled the questionnaires. They write about their choice of tables that they tend to sit on in the library environment. In the first space most of the participant have chosen the two hand supports which have a frequency rate of 27.3%, they have given the priority to the two arm support seaters by the windows with the frequency rate of 24.2%. Then it comes to the priority for the single back support seaters with the frequency of 21.2%, finally some of the participants have chosen the

seaters without backings with the frequency rate of 1.12%. The statistics from the second space (with the placement of furniture in a more than standard distance) shows that most of the participants have chosen the tables with double back supports which are located by the window with a priority of 36.2%, then people have given their seating priority to the seats with single back supports which has a frequency of 23.4%, people have given their priorities to the tables with double seater backings which has a priority rate of 19.1%, they have then assess their choices to the tables with no back support which has the frequency rate of 12.8% and finally the number of tables with a single backing by the window which has the frequency of 5.8%.

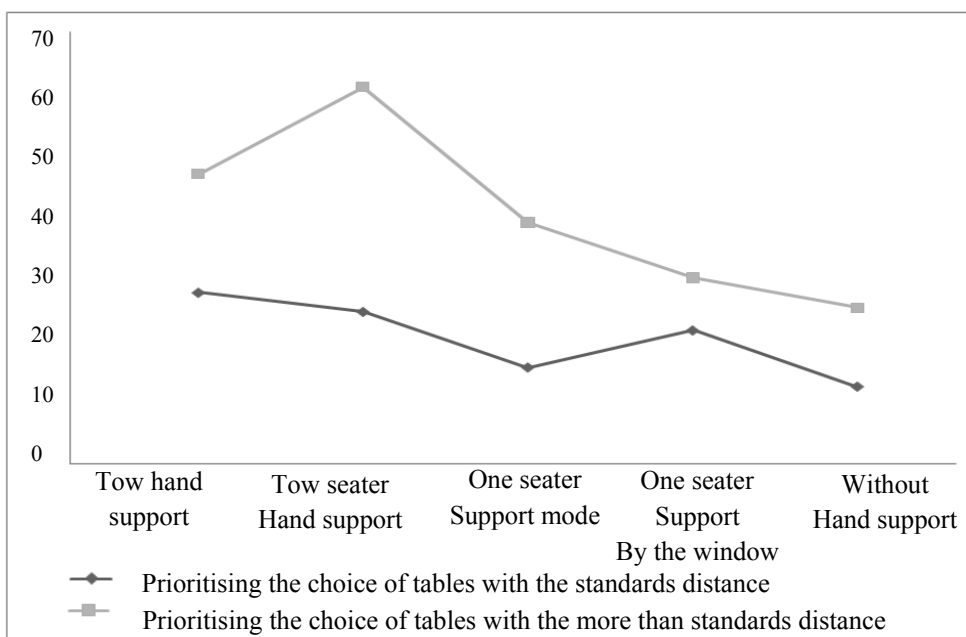


Fig. 3. Prioritizing the choice of tables by the participants according to their distances by the questionnaire (Source: The authors)

Table 1 includes data about the fact that with home they come to the study salon of the library to read books. The gathered data shows that the individuals are mostly come

to the library on their own which has the frequency rate of 60% among them.

Table 1

Quality of the people's recourse to the library (Source: The authors)

	Percentage of frequency	Frequency
Alone	60	48
Friends	40	32
Sum	100	80

Table 2 includes a bundle of data about the education level of the individuals who come to the library; most of them

are university students which have the frequency rate of 25.36%.

Table 2

Education of the participants (Source: The authors)

	Percentage of frequency	Frequency
Student	35	28
University student	25/36	29
None	75/28	23
Sum	100	80

Table number 3 provides some information about the age groups of the participants. Most of the participants are from the age group of 18-30 with a frequency percentage of 65%, the most dominant age group who were also present during the process of the research are between 16

and 18 with a frequency rate of 25%, the group with people in their 30th life cycle and more had a frequency of 5% and the next age group has the range of people between 13 and 15 year old lives with the frequency rate of 75.3% and the youngest age group in the environment

for the children between 7 and 12 has a 25.1% of frequency rate during the research.

Table 3  
Different age group of participants (Source: The authors)

	Frequency (percent)	Frequency
12-7	25/1	1
15-13	75/3	3
18-16	25	20
30-18	65	52
30 به بالا	5	4
<b>Total</b>	100	80

The Figure No.4. Reflects a number of data about the priority in choosing a table with single, double, quadruple and sextuple seaters by the consulting individuals in which people tend to choose the tables with 6 seats with the frequency rate of 57.6%, after this one which has the frequency rate of 21.2%. Then it comes to the number of people who chose double and single seater tables which

have the frequency of 1.12% and 1.9% respectively. In the second space, 18 of the individuals have chosen the 6 seater tables which has the frequency of 3.38%, people tend to chose the four seater tables after than with a frequency rate of 2.36%, finally it comes to the number of individuals who have chosen the double and single seater tables which have a rate of 12% and 8% respectively.

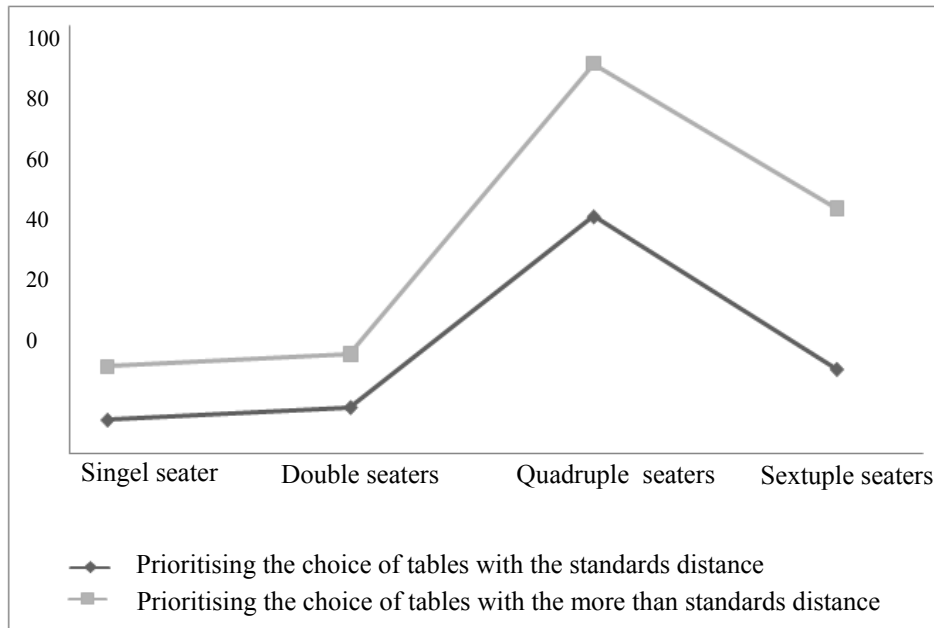


Fig.4. Inscription of the participants' behavior and prioritizing the choice of tables according to the number of seaters (Source: The authors)

At the end, amount of the individual satisfaction from the study hall of the library was included in a triple choice questions in the consultant questionnaires including "Yes", "Somehow" and "No". Figure No.5 shows the amount of the individuals' satisfaction. In the first space, the satisfaction rate of the individuals is 75.8% and the rest 18.2% were not satisfied with the space and the

arrangement of the furniture, 6.1% of the people have an average satisfaction with the space. In the second space the satisfaction rate of the individuals equals 72.3% and 14.9 of the individuals were not satisfied with the space and the arrangement of the furniture, and 12.8% of the people had an average satisfaction of the space.

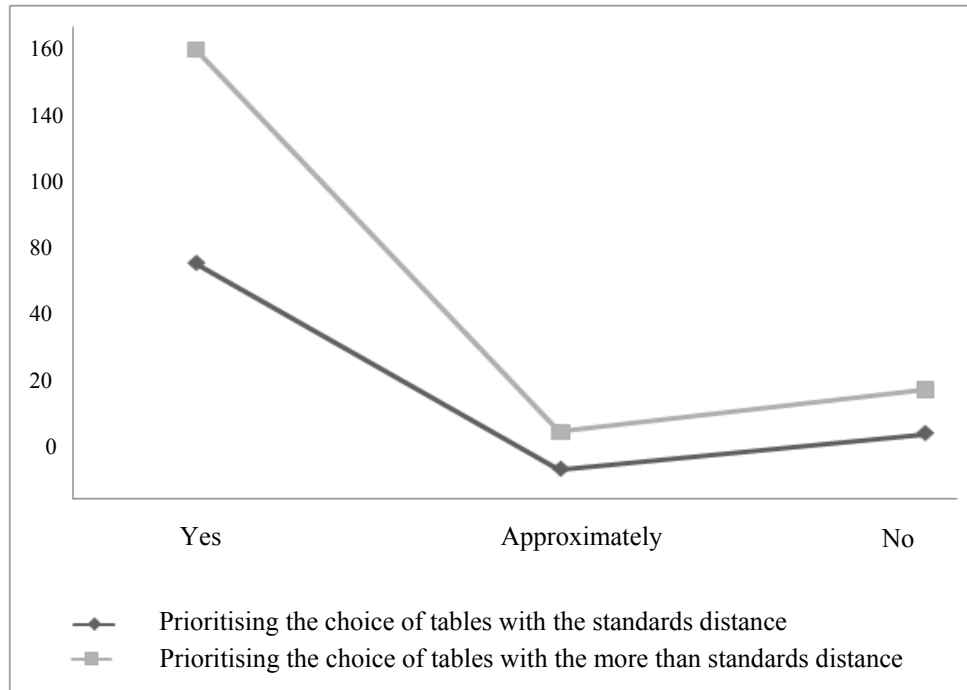


Fig. 5. Table regarding the satisfaction of individuals from the first and second space  
(Source: The authors).

## 6. Conclusions

The individuals who are studying in the reading hall of the library will find a place to control their behavior in order to control their focus and reduce the causes of distractions and to choose that certain locations in the hall they will search after architectural specifications which are physical, visual obstacles and acoustic obstacles. This research shows how this type of behavior is considered by individuals in order to adjust one's personal boundaries. The statistical reports for the recourse of individuals to the first two spaces (situation of furniture with a standard distance toward each other) and the second space (location of the furniture with a distance further than the standard) which was chose by more individuals as their seating places.

### Limitations and recommendations

There are a number of limitations existing in each and every research. One of the limitations of this research was the amount of analyzing the personal spaces in one of two genders, in case the female gender. This limitation was due to the limitation of men entrance to the library on the date of data collection. One of the other limitations was the lack of sufficient dressers and drawer chests for the consulting individuals to use and them out to use some of the seats for that purpose. Of other limitations we can refer to unequal number of seats with double hand support, two seat supports by the window, one backing, and one

backing hand support by the window and the ones without arm backing supports at all.

Findings of this primary research helps the library designers/ planners by guiding them in developing a type of physical environment in which the users of the study salon has a more sense of convenience and to help them control their own personal boundaries. The results of it are the creation of positive impacts a raise on the feeling of satisfaction in the mind of the individuals while reading a book in a public library. A mutual understating of the user's terms of usage from the environments can impact the growth of our capabilities on enhancing the public spaces.

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