

Original Article

## The Degree of Privacy Requirement for Residents' Activities in the Shophouse in Yogyakarta

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Residents of shophouse in Yogyakarta combine shop keeping with domestic activities which require different degree of privacy related to social interaction. Intensive observation and in-depth interviews were conducted with 30 residents to obtain their daily activities and to inquire how they feel invaded with such category of people as strangers, customers, servants/workers, friends, and family members visually and physically. The difference of privacy requirement between groups and individuals is examined by contrasting two communities in Chinese and Javanese settlements. There are selected 16 activities which are sorted out from low to high degree of privacy based on the accumulated response in each category of people. The result shows that 4 activities (serving guest, serving customers, displaying goods, and storing shop goods) require low privacy, 9 activities (waiting for customers, drying clothes, reading, lunch, washing clothes, breakfast, watching TV, dinner, and cooking meal) require moderate privacy, and 3 activities (praying, sleeping, and bathing) require high privacy. Further result shows that the physical and visual requirement are highly correlated or much higher in physical access than visual access for all activities for both groups but such activities as cooking meal, washing clothes, drying clothes, and serving guest for several residents require higher visual access.

**Keywords:** *Privacy Requirement, Residents' Activities, Shophouse*

### 1. Introduction

#### 1.1 Privacy and Activities

Privacy is unique in every individual and has different manifestation according to the related background that makes it interesting and helpful to understand the social situation and the potential personal conflict. In achieving a desired degree of privacy, an individual's interaction degree is one of the mechanisms. However, privacy may not be an individual case but linked to the sense of community (Wilson, et al, 1996) in achieving the basic idea defined by Rapoport (in Altman, 1975: 17) as the ability to control interaction, to have options, devices, and mechanisms to prevent unwanted interaction, and to achieve desired interaction. This may suggest that the need for privacy is reflected in the way an individual chooses to interact or not interact with people both as individual and as a group.

Privacy as one of the forms of the relationship between individuals and their environment is expressed through the performance of the activity or action, so

the privacy meaning can be derived mainly from the activities. Particularly when privacy is linked with the conflicting space when various activities are carried out in the same space, the actual need is depending on the meaning of the activities. In other words, activities may happen within the space but its meaning may not depend on the space. This supports the idea that activities are an important variable of human environment that can define the 'function' and 'meaning' (Rapoport, 2005: 41). Some studies of dwelling refer to certain space with certain activities which require privacy such as kitchen or bedroom or living room and the home as a whole (Oseland, 1993: 254) resulted in the privacy to be a function of the type of room and activities (Oseland 1993: 259). Other research on privacy such as privacy gradient (Alexander 1977: 610) is more focused on the relationship between the space and the person but lacking in observing the meaning of activity itself. Therefore, there is a need to study the actual activities performed by the targeted users to construct the real

meaning of different activities which may need different degree of privacy.

Much literature has stated that privacy is affected by sociological needs, psychological state, and individual differences and has different form according to its purposes. Regarding privacy need, the sociological need is fulfilled through the social interaction, and the psychological state is fulfilled through the perception of the three access of privacy: acoustic, visual, and physical, and the individual differences are reflected in the variance of activities and the different response from the group of community for each activity. Activity of the residents of shophouse is considered to be a unique condition depending on the way the residents respond to the social interactions. This study proposes that the daily activities elicit different privacy degree analyzed in the way the residents interact with people. This study aims at revealing the privacy degree of the residents through activities based on social interaction.

Privacy is broken down into visual and physical access. Visual privacy addresses the ability to limit other's view of oneself. Inherent in human behavior is the tendency to avoid situations in which one can be watched without being aware of who is watching. In shophouse where the residents deliberately open their house to the outsider, visual and physical accesses are important determinants in controlling privacy. Privacy is also about getting into someone else's house. Physical privacy in this study may include the situations in which one can get into or intrude during activity. However, visual access means the incoming of visual intrusion and physical access means the incoming of physical intrusion.

### 1.2 Shophouse in Yogyakarta

Formerly ethnic segregation as a consequence of political regulation during the colonialism period secluded Chinese from Javanese where they built their shophouses. Later, during the reign of new order era in 1965 until 1998 the segregation was more due to cultural repression, rather than physical, by prohibiting Chinese language and other cultural activities engaged in public. This caused the assimilation of Chinese to mainstream Javanese and resulted in a void of Chinese culture in many ways, spoken language, physical expression, and activities. However, inwardly there are differences in the shophouses. In regards to the current situation, where

many Javanese have built their houses with either altered function or a designated function as shop, there must have been a lot of changes in the spatial connectivity. In order to examine the effect of cultural differences, this paper is comparing Chinese and Javanese shophouse residents.

Chinese shophouse in Yogyakarta had some uniqueness through the above historical background. Basically, there are two types, row houses with arcades and without arcades which has become popular in Java by the Chinese immigrants who flooded in Indonesia during the colonialism period in the 16th century. In the course of time, there have been rapid changes in the interior of Chinese shophouse, yet slower change in the exterior (Angraini, 2007) (Pratiwo, 2010: 236). Many years later Javanese whose traditional architecture does not have a type of shophouse (Pratiwo, 2010: 243) developed a type of shophouse roughly from an ordinary or traditional house by adding the function to the existing space.

Two types of community are examined in this study. The first neighborhood consists of ordinary houses that are accommodating shop by giving up some front spaces within the house which were mostly built by Javanese. The second neighborhood consists of shophouse type that are familiarly used to describe the Southeast Asian

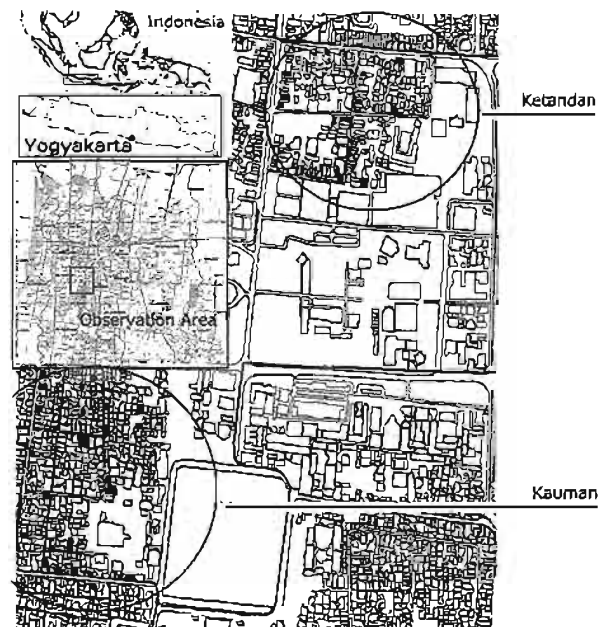


Fig. 1 Observation Site

type of low rise building to accommodate business on the ground floor which was popularized by Chinese. This study regards the two targets as shophouse community to stress on the difference of the sociocultural background of the residents. The important factor is the residents may have a high variety of choices of when to open the shop and how they manage the activities for business within their houses related to social interaction with strangers, customers, worker/servant, friends, or family members.

## 2. Method

### 2.1 Heuristic Approach

The notion of privacy defined by Western culture is not acknowledged among the residents of shophouse in Yogyakarta. Privacy for most residents is considered subconscious mind and less recognized than any other psychological need as part of human environmental quality. The issue of privacy is brought up through in-depth interviews combined with intensive direct observation to the real situation. The main data is the sets of questions designed to construct the idea of privacy reinforced by direct observation to the actual situation. This paper focuses on this questionnaire data to get the valid findings and uses multiple method of assessment to draw the result. Therefore this heuristic approach is chosen because of the fact that the residents of shophouse cannot understand privacy as a conscious idea.

The category of people that may involve in each activity will represent the different degree of residents' privacy requirement according to the hypothesis that each category possesses different order in social interaction. The interpersonal relationship between residents and each category of people may indicate different level of privacy when privacy is controlling the unwanted interaction against certain type of people in particular condition. The different distance in social relation between the residents and outsiders is the measurement of the level of privacy.

### 2.2 Observation and Interview

The 30 residents of shophouse were interviewed and observed in two separate communities, Chinese community in Ketandan and Javanese community in Kauman, twice in June-July 2011 and in December 2011-January 2012. As we conducted the interview,

at the same time we observed how the residents were interacting with us as strangers and a guest. Interview was thorough but casual to let the respondents feel relax while we explained and delivered the questions. The interviewer engaged in longer conversation if necessary to get the thorough answer and had to direct the conversation back to the question sheet while two assistants drew the layout of the house and took pictures of the situations.

In this interview, first we asked their daily activities during the ordinary weekdays when they work at their shops. Later, for each of the activity we asked two sets of question concerning visual and physical privacy against five categories of people who are interacting with the shop owners when they do their daily activities. Relationship with the shop owner for each category of people was predefined and explained to the shop owners in the interview as described below.

1. Strangers (S): those whose presence is without direct purpose to the shop owner, such as passers-by, visitors to the area (both Ketandan & Kauman are part of tourist-destination area), beggars, street musicians, market people, parking guards, street vendors, etc. They are not necessarily unfamiliar with the owner, but no particular/direct relation with the owner.
2. Customers (C): those whose presence is for business purpose and directly interacting with the shop owner, even though the owner may not necessarily know personally. This includes neighbor, friends, reseller & supplier.
3. Servants/workers (W): a person who work either for the shop or for the household matters, such as cleaning the house, washing clothes, cooking, etc. either staying or not with the shop owner.
4. Friends (F): those who are close or just acquaintance with the owner, and their visits are for other than business purposes as a mere guest, assuming that the presence of friends who visits the shop owners may be highly regarded.
5. Family members (Fa): they are either the member of the owner's nuclear family or extended family.

The questions are: (1) "Is it annoying if you were seen by [mention each category of people] while doing this activity [mention each of the residents' daily activity]?" and (2) "Is it annoying if you were physically

interrupted by [mention each category of people] while doing this activity [mention each category of people]?" When they said "no" to one of the five categories of people, that category will be omitted from the list. The positive answer is then recorded as the data. When they refer to none of these five categories of people, the answer would be oneself. Since this study assumed that if the residents would respond positive to the one of the category of people, the other categories having closer relationship with the shop owner would be considered positive. For example, in cooking meal if the residents do not feel annoyed by strangers, it implies that customers, servants/workers, friends, and family members would not be annoying as well. These sets of questions are summed up below.

1. What activity, where, and with whom do you do this with? (S, C, W, F, Fa)
2. Do you feel disturbed or annoyed while doing activity and:
  - <1> Seen by (S, C, W, F, Fa)?
  - <2> (S, C, W, F, Fa) Gets in/interrupts the activity?

### 2.3 Analysis

The first stage of analysis is sorting out the 16 activities from the total 34 identified based on what is mentioned through interview to focus on the most popular activities performed by the residents to be associated with their privacy requirement. The selected 16 activities are (1) serving guest, (2) serving customers, (3) dinner, (4) breakfast, (5) displaying goods, (6) storing shop goods, (7) lunch, (8) reading, (9) waiting for customers, (10) watching TV, (11) cooking meal, (12) drying clothes, (13) washing clothes, (14) praying, (15) sleeping, and (16) bathing. The other activities that were opted out are (17) waking up, (18) storing vehicle, (19) sitting with family, (20) washing dishes, (21) changing clothes, (22) talking on the phone, (23) preparing breakfast, (24) ironing, (25) taking a nap, (26) listening to the radio, (27) listening to music, (28) exercising, (29) preparing food to sell, (30) cooking to sell, (31) storing household goods, (32) studying, (33) desk working, (34) working with computer.

The second stage is sorting out the all the number of response for each activity in each group of communities according to the five categories of people, from strangers (as the lowest degree of privacy) up to oneself (as the highest degree of privacy), based on the general common

sense that strangers has the farthest social relation with the shop owner, but customers has closer relation followed by servants/workers, friends, and family members.

## 3. Result

### 3.1 Characteristic of the Respondents

#### 1) Chinese Cases

The 15 respondents in Ketandan consist of 7 males and 8 females with composition of age ranging from 20 to 70. They were generally from the first generation that moved into the region from different parts of Southern China and built and relied on their own resources. Later generations left these houses for other places with a better environment and more business prospects. Those born in the household (8 respondents) are quite even with those not born in the household (7 respondents). The nuclear family type is higher (11 households) than extended family (4 households). Those who have servants/workers are only few (6 households).

Particularly at the northern part of Beringharjo Market which once was known to be material and construction supplier is now revived again with a greater variety of small scale retail goods and services. The range of the business are (1) rice, (2) flours, (3) sundry & daily necessity, (4) cooking utensil, (5) false tooth, (6) fresh pork, (7) parking space, (8) electronic parts, (9) sewing clothes, (10) cooked food, (11) plastic pouch, and (12) meat grinding.

The Chinese shophouse were generally constructed as long and narrow shape. These shophouses have the shop at the whole front area and the dwelling spaces at the back. The visual access in the shop area is separated from the physical access that is the physical access is blocked from outside while allowing the visual access. The counter desk and other furniture are used as the blockage from the physical access (see fig.2).

#### 2) Javanese Cases

The 15 respondents in Kauman were composed of 4 males and 11 females whose ages ranging from 30-60. They were mostly born there (8 respondents) and moving from nearby area (3 respondents) who were interested in establishing business in this area. The nuclear family type is also higher (10 households) than extended family (5 households). Those who have servant/worker are also only few (2 households).

The range of the business are also quite various: (1) woman's clothing/accessories, (2) boy scout attribute, (3) sundry & daily necessity, (4) TV service, (5) gas tube distributor, (6) sewing service, (7) typing service, (8) softdrinks, (9) beauty salon, and (10) cooked food.

Shophouses that were built in Kauman were of very simple to more complex structures. Generally, they were built as detached houses, some with side entrances to the alleys encircling the house. The observed houses have ordinary house structures (10 buildings) and a renovated shophouse (5 buildings).

The Javanese shophouses are commonly a single detached house with spare room for shop which is often part of the guest room. Therefore, visual and physical access in Javanese shophouse often goes together (see fig. 3).

### 3.2 Description of the Activities

The residents' daily activities are varied from shopkeeping to domestic activities. The serving customer or serving guest activity is the same as welcoming visitor or guest. Some residents allow them to enter the house into deep area or serve them with food and drinks and eat together during lunch or dinner time. Even when the shop door is closed, there is a tendency to welcome and encourage customer to come at any time only when the owner is present. Javanese residents treated customers as guests because the guests mostly were customers, so serving customer is also serving guest, but Chinese residents almost meet their guests during opening hours in the shop area, not necessarily in the guest area. Most of the guests of the Chinese are family member.

Serving customer is strictly related to business, not to social content. Therefore, serving guest refers to social purpose. This separation is to make clear whether there is separation between those two activities, even though practically it may take place in the same space. The answer is specific in this research. For the purpose of serving guest, in Javanese cases, the owner provides a guest room to sit in (mainly social purpose) (fig. 3). This guest room is directly accessible visually & physically from the main entrance or shop area; also it is frequently used for serving customer. On the other hand, there is no guest room in Chinese cases which is purposively prepare to receive guest any time which is accessible both visually & physically from the shop entrance (fig. 2). If there is one, it is usually at the inner room (a family room) which means more private area.

The storing shop goods activity means storing goods after buying them from the bigger store or wholesaler agent. Some residents were occasionally out for a while during the open hours and let the other family members to shop keep. Some other residents managed to buy the supply other than the open hours but this is very flexible because there is no need to keep the opening hours fixed day to day.

The displaying shop goods activity is managing to put the supply goods on display in order for the customer to see and pick easily. Even though this activity is related closely to storing shop goods, it is different, and the residents do not put much space to display the shop goods even some residents do not deliberately put the goods on display but simply store them in the storage room and let the customers come in and pick themselves,

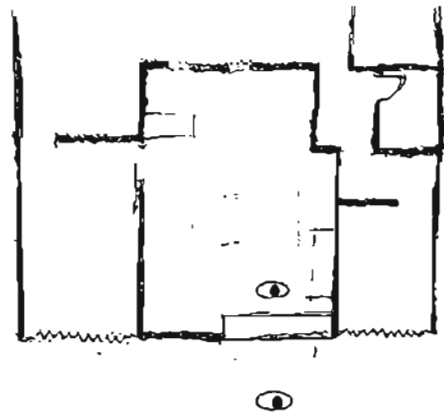


Fig. 2 Visual & Physical Access in Chinese Shophouse

so they don't spare space to put them for display.

The praying activity is mostly performed by the Javanese residents as a routine of a religious belief which requires them to do it five times a day either individually or in a group (with other family member). Chinese residents do not specify praying as a daily activity but few and always individual and mostly not a routine.

The bathing activity is related to the tropical climate which makes people sweat easily after activity, but it also can relate to traditional belief or religious belief that requires them to take a bath very early in the morning while everybody else is sleeping.

The sleeping activity at night is not necessarily in the specific room or on bed. Some residents were sleeping everywhere in the house during night time, not to mention at noon day sometimes some residents take a nap while waiting for customer which is opted out in this study.

### 3.3 The Visual and Physical Accesses

Each activity which requires high social interaction will require low privacy. According to the type of activity, the way the residents respond to possible visual and physical intrusion may be different from the expectation. This analysis will show which activity have lower or higher degree of privacy requirement according to each individual and group of community. The higher degree means the most concerned and most permissible degree. These five categories of people are associated with the degree of privacy. Each category of people may suggest the social distance, for example "stranger" may suggest the farthest distance of relationship with the resident that implies the lowest privacy degree.

#### 1) Visual Access

The privacy requirement for Chinese compared to Javanese are quite distinguished in visual access as expressed in the different composition of the category of people. The most apparent activity is serving customer. The composition of serving customer activity for Chinese shows much higher visual access for stranger than customer. As expected, serving customer for Javanese is similar with serving guest which allows lesser composition of stranger meaning that customer could be the guest for Javanese, while stranger is taken more seriously by Chinese as different from customer.

Out of the selected 16 activities for Chinese, serving customer, displaying goods, storing shop goods, serving guest, waiting for customer, and reading have much bigger composition of stranger and customer. This can be explained that those activities are related to shop keeping activities. Other activities which include stranger or customer are lunch, washing clothes, breakfast, cooking meal, and watching TV. Looking at the small number of response, it can related to the type of business (such as cooked food), but it must have been related to the physical condition of the house or room. The shop area may be connected with the inner room where the residents do their domestic activities. Other activities such as dinner, bathing, praying, and sleeping may be personal and individual which only include family member and oneself, even though there are few residents who think that dinner or bathing is visually accessible by servant/worker or friend. This may be related to the habitual condition of living together with the servant/worker or having a friend visited often. Drying clothes



Fig. 3 Visual & Physical Access in Javanese Shophouse

is exceptional); since several residents allow stranger to visual access, it may mean drying clothes could be outside of the house.

The 16 activities of Javanese showing that the composition is much considerable for visual access from customer than stranger for the activities that are related to shop keeping activities such as serving customer, displaying goods, storing shop goods, and reading, lunch, waiting for customer, and watching TV. Even for some activities such as dinner, breakfast, washing clothes, cooking meal, praying, and sleeping, few residents responded in allowing customer for visual access. This may be related to the long opening hours and that some residents combine the shop area visually with the guest room or living room and that the residents may do their domestic activities freely while shop keeping.

## 2) Physical Access

The privacy requirement for Chinese compared to Javanese are rather similar in physical access as expressed in the bigger composition of the category of people. The most apparent activity is serving guest. The composition of serving guest activity for Chinese shows much lesser visual access for stranger than customer. Customarily, serving guest will take up separate place than the shop area for Chinese and Javanese.

Out of the selected 16 activities for Chinese, serving guest, displaying goods, serving customer, storing shop goods, and waiting for customer have the bigger composition of stranger and customer. Reading is physically blocked from stranger, which may mean that reading requires separation in physical condition. This can be explained that reading activity may not always be related to shop keeping activities but personal. Other activities which may include customer but not stranger are lunch, cooking meal, breakfast, and watching TV. Looking at the small number of response, it can be related to the shop keeping activities or to the physical condition of the house or room. The shop area may be connected with the inner room where the residents do their domestic activities. Other activities such as dinner, bathing, praying, and sleeping again are personal and individual which only include family member and oneself, even though there are few residents who think that dinner or bathing is physically accessible by servant/worker or friend for the same reason as in visual access. Drying clothes and washing clothes are both physically

accessible to stranger and servant/worker and family member because several residents allow such category of people for physical access. Again, it may mean washing clothes and drying clothes could be outside of the house.

The 16 activities of Javanese showing that the composition of customer is much considerably higher for physical access from stranger and other categories as well for the activities that are related to shop keeping activities such as serving customer, displaying goods, and storing shop goods, including serving guest. Other activities such as reading, lunch, waiting for customer, watching TV, and cooking meal may be related to both shop keeping and domestic activities that the residents allow customers for physical access. Even for some activities such as dinner, breakfast, washing clothes, drying clothes, washing clothes, and praying, few residents responded in allowing customer for physical access. This may be related to again the long opening hours and the combining of shop area with guest room or living room. This is what is different from Chinese group.

## 3.4 Relationship between Visual and Physical Access

### 1) Correlation between Visual and Physical Access

The following figures (fig. 6 & 7) explain the distribution of the kind of activities (accumulated number of responds in the brackets) to examine the tendency of allowing visual & physical accessibility to different category of people. In general, the majority of activities have the tendency to be equal for both physical and visual accessibility and higher physical accessibility in Chinese and Javanese.

The diagram of the Chinese group (fig. 6) shows that the physical and visual access for most of all 16 activities is highly correlated. This may mean that requirement for physical and visual accesses are generally the same for most activities. The diagram also shows that if it is not equally the same, it tends to be higher in physical access than visual access. However, there are exceptions, cooking meal, washing clothes, and drying clothes for few residents require higher visual access than physical access. Two residents who respond differently have their drying clothes and washing clothes activities in the open space in the inner yard. Those residents whose cooking meal activity requires higher visual access do not show any special characteristic of their kitchens or relation to the type of business. This is may be personal reason.

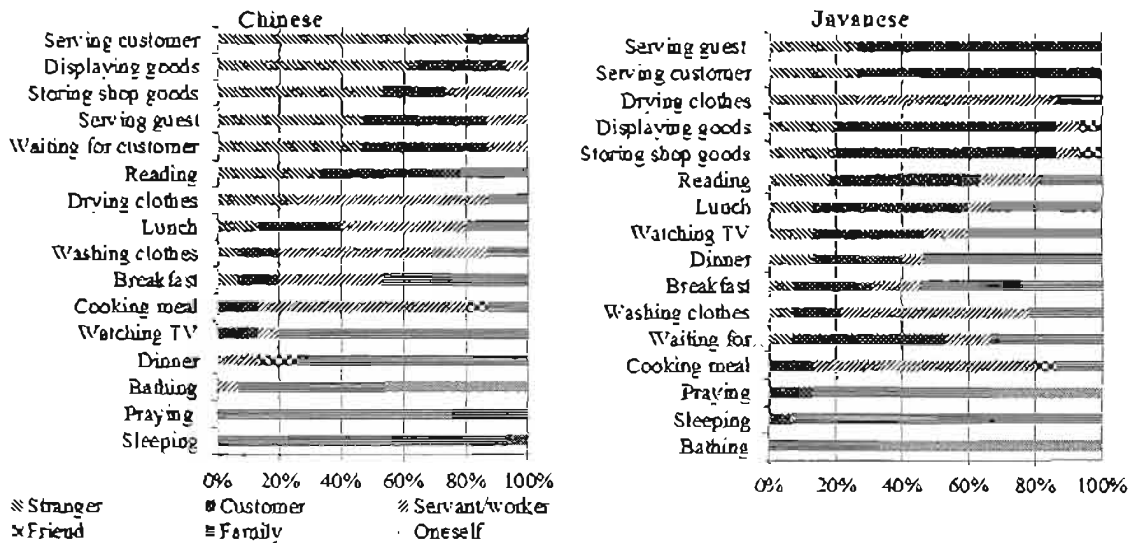


Fig. 4 Visual Access of Chinese and Javanese

The Javanese group shows that the physical and visual access for most of all activities according to the majority of residents is also highly correlated and that some other activities have the tendency to be higher in physical access than visual access (see fig. 7). However, there are also exceptions which are similar to that of Chinese added serving guest. Cooking meal, washing clothes, drying clothes, and serving guest for several residents require higher visual access than physical access. The number of residents who responds differently is greater than that of Chinese. There are 9 residents with various conditions of houses. Interestingly, those who answer cooking meal, washing clothes, and drying clothes, have their kitchens or washing rooms next to each other or directly accessible from the outside through side doors. One resident who answers serving guest has the shop combined with the guest room. This may be relevant with their increased awareness of the possibility of visual access from the outside.

#### 2) Grouping of Activities based on Physical and Visual Access

The further result of the analysis shows the order of the 16 activities which are different in physical access from visual access. The differences are much greater expressed when both Chinese and Javanese residents' responses are combined together with total number of respondents for each activity reaching 30 (see fig. 8). This order of activities which is different in physical access and visual access, however, can be grouped into

three levels of privacy which is low, moderate, and high (see table 1). The grouping is following the composition of the number of response for each category of people in each activity. The low privacy requirement activities are serving guest, serving customer, displaying goods, storing shop goods, and waiting for customer. The moderate privacy requirement activities are dinner, breakfast, lunch, washing clothes, drying clothes, reading, cooking meal, and watching TV. The high privacy requirement activities are praying, bathing, and sleeping.

#### 3.5 Social Interaction

Some residents tend to ignore the category of those who do not usually involve in their daily activities. Those who do not have "servants/workers" tend to ignore it. Even though during the interview they were to imagine how the presence of servants/workers would affect them when doing activities.

The role of "friend" is likely to be underestimated as well. Their relation with the shop owner is assumed to be guest, so it was expected in "serving guest" to be more important than "strangers" or "customers". "Friend" may be rarely involved in daily activities even though a friend who is not stranger or customer can be their neighbor. For example in Javanese case, they have regular prayer gathering or social gathering from neighboring houses in the community. In this case, the role of neighbor may be more important than the role of friend, even though neighbor can be customer. From the relationship between



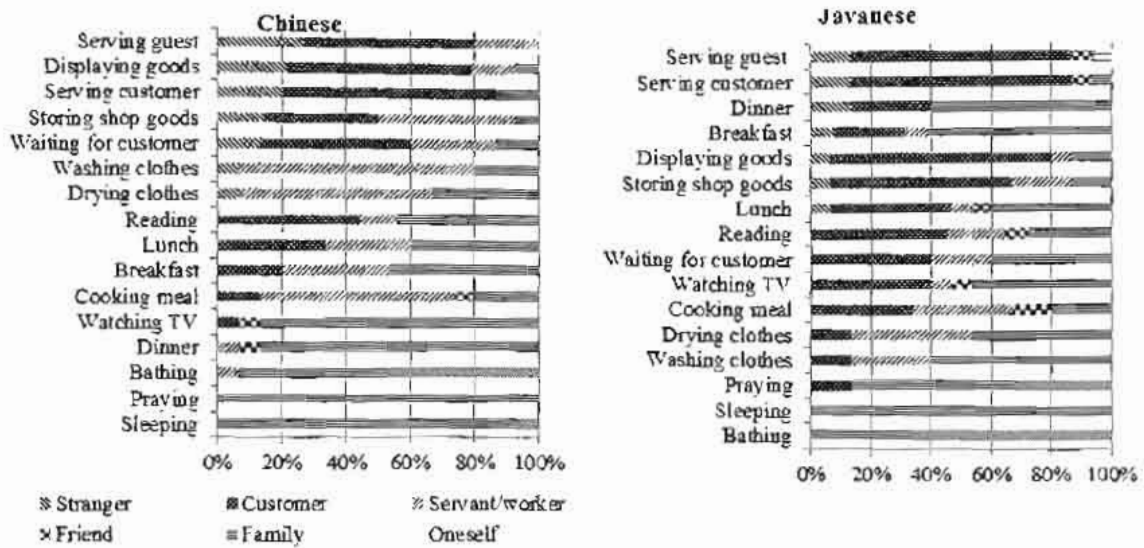


Fig. 5 Physical Access of Chinese and Javanese

Visual Access	Oneself					Bathing (7) Sleeping (1) Praying (1)
	Family		Cooking meal (1) Washing clothes (1)			Reading (1) Lunch (3) Praying (5) Breakfast (7) Bathing (7) Dinner (11) Watching TV (12) Sleeping (14) Cooking meal (1) Washing clothes (1) Drying clothes (1)
	Friend		Cooking meal (1)	Dinner (1)	Dinner (1)	
	Servant/ worker	Drying clothes (1)	Cooking meal (1)	Storing goods (4) Lunch (4) Breakfast (5) Drying clothes (5) Cooking meal (6) Washing clothes (8)	Cooking meal (1)	Drying clothes (3)
	Customer		Serving customer (3) Reading (3) Lunch (3) Waiting customer (4) Displaying goods (4) Serving guest (3) Breakfast (2) Watching TV (1) Cooking meal (1)	Waiting customer (2) Cooking meal (1) Washing clothes (2) Serving guest (1)	Watching TV (1)	Reading (1) Lunch (1)
	Stranger	Storing goods (2) Waiting customer (2) Washing clothes (1) Serving customer (3) Display goods (3) Serving guest (4)	Reading (1) Lunch (2) Breakfast (1) Storing goods (3) Waiting customer (3) Serving guest (3) Displaying goods (4) Serving customer (7)	Storing goods (2) Reading (1) Display goods (1) Drying clothes (4)		Serving customer (2) Storing goods (1) Reading (1) Waiting customer (2) Display goods (1)
	Stranger	Customer	Servant/worker	Friend	Family	Oneself

Physical Access

Fig. 6 Kind of Activities Visually & Physically Accessible to Different Category of People (Chinese)

visual and physical access, the social role of "friend" is not clearly stated and distinguished by most of residents in most of activities. During the interview, only one resident did answer "friend" in cooking meal, displaying goods, and storing shop goods. Many respondents in reality depend on the wider business network, not just a local business; therefore they may consider "friend/acquaintance" as "customer" that is business relation.

In the result, we can understand that the role of "stranger" and "customer" for Chinese respondents are considerably playing different role. In serving customer and serving guest, the presence of stranger is distinct from customer (see Fig. 4 & 5) through quite different proportion. Unlike Chinese, Javanese respond to customer as equal to guests. In serving customer and guest, Javanese tend to perceive them similarly.

Other interesting result is that more activities are highly considering the role of "family". For example, bathing is allowing "family" rather than "oneself". It may mean bathing is seen by or together with family member is fine. It is likely that the visual access is more concerned about "family" and "oneself" since at some activities such as bathing, praying, sleeping, breakfast, dinner, some residents prefer to restrict the visual intrusion from "friend", "servant/worker", "customer", and "stranger". However, in watching TV, waiting for customer, having lunch, and reading, degree of "customer" is considerably as important as "family" besides "stranger" and "servant/worker". It is most probably because they are related activities between shop-keeping and living. As expected, washing clothes, cooking meal, and drying clothes are permitting "servant/

Visual Access	Oneself						Praying (5) Bathing (10)	
	Family		Serving guest (1) Cooking meal (1)	Cooking meal (1) Washing clothes (3)			Serving guest (3) Waiting customer (5) Lunch (5) Bathing (5) Watching TV (6) Breakfast (7) Dinner (8) Sleeping (14) Praying (8) Reading (2) Drying clothes (2) Washing clothes (1)	
	Friend			Cooking meal (1)	Serving guest (1) Cooking meal (1)		Storing goods (1) Display goods (1)	
	Servant/worker		Cooking meal (4) Drying clothes (1) Washing clothes (1)	Drying clothes (4) Serving guest (3) Cooking meal (3)	Cooking meal (1)		Drying clothes (4) Washing clothes (6)	
	Customer		Reading (3) Breakfast (3) Watching TV (4) Dinner (4) Lunch (5) Waiting customer (6) Serving guest (6) Storing goods (7) Serving customer (9) Displaying goods (9)	Storing goods (2) Waiting customer (1) Cooking meal (1)	Serving customer (1) Reading (1) Lunch (1) Watching TV (1)		Serving customer (1) Storing goods (1) Display goods (1) Waiting customer (1) Reading (1) Lunch (1) Cooking meal (1) Washing clothes (1) Sleeping (1)	
	Stranger	Serving customer (2) Storing goods (1) Display goods (1) Lunch (1) Breakfast (1) Dinner (2) Serving guest (1)	Serving customer (2) Storing goods (2) Display goods (2) Waiting customer (1) Reading (2) Lunch (1) Watching TV (2) Drying clothes (1)		Drying clothes (2)			Drying clothes (1) Washing clothes (1)
		Stranger	Customer	Servant/worker	Friend	Family	Oneself	

Physical Access

Fig. 7 Kind of Activities Visually & Physically Accessible to Different Category of People (Javanese)

worker" which means not for other types of people to see.

The majority of residents were considering serving customer, storing shop goods, and displaying goods as preferred to be restricted to "customer" even though few do not mind "stranger". It also imply that their doing the business for not just anyone, any stranger or passer-by, but having customer is different from just letting anyone or any passer-by to see the activities. In other words, there is a sense of exclusiveness for those who chose "customer" and it was the work of social network to gain customer, rather than fully opening the house and inviting anyone to see and interact with the owner.

Relationship with the category such as family and friend apparently do not affect Javanese of their perception of privacy as much as Chinese while living in a house which accommodating business. As consequence, both groups accommodate their activities in similar way. However, Javanese people is renowned for their highly social life it's almost impossible to distinguish and separate it from private life. Yet, it does not mean that Javanese people may need less privacy in doing their daily activities. In other words, even though Javanese people value interaction with people highly important, their requirement of privacy is agreeable with common sense. Therefore the approach to the

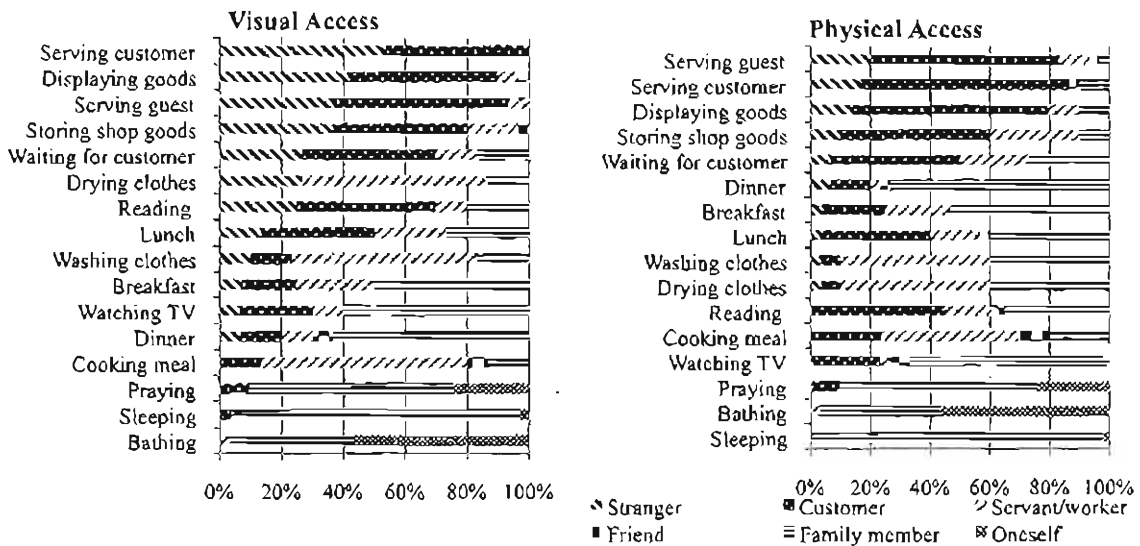


Fig. 8 Visual and Physical Access (Chinese & Javanese)

Table 1 Grouping of Activities (Chinese & Javanese)

Order	Visual Access	Physical Access	Group
1	Serving customer	Serving guest	Low privacy
2	Displaying goods	Serving customer	
3	Serving guest	Displaying goods	
4	Storing shop goods	Storing shop goods	
5	Waiting for customer	Waiting for customer	
6	Drying clothes	Dinner	Moderate privacy
7	Reading	Breakfast	
8	Lunch	Lunch	
9	Washing clothes	Washing clothes	
10	Breakfast	Drying clothes	
11	Watching TV	Reading	
12	Dinner	Cooking meal	High privacy
13	Cooking meal	Watching TV	
14	Praying	Praying	
15	Sleeping	Bathing	
16	Bathing	Sleeping	

understanding of privacy is not necessarily reflected in their perception of social interaction. An open interview about their choice of interacting with people while doing activities is basically various among individuals, but as a group, they are showing similar tendency.

Considerably, at some point "family" have important role in physical access. Some key activities such as serving customer even restricted to only family member may enter. Of course, majority even having breakfast allow customer to physically intrude into space when they are doing activities. Apparently, "customer" or "family" may determine and be distinguished quite clearly in physical interaction. At the degree of "customer" all activities except bathing and sleeping, "customer" may physically enter the space according to various respondents. It is not necessarily the same respondents answer the whole activities like that, but it shows somehow some tolerance for customer who could be neighbor or friend. Nonetheless, a considerable number of residents also chose "servant/worker" meaning to permit them to intervene physically during activities rather than "customer" or "stranger".

#### 4. Conclusions

The result in this study indicate the apparent discernment in social interaction based on the category of people as also mentioned in intimacy gradient (Alexander, 1977) that each category of people as outsider carries a different sense of privacy toward the residents as insiders even with the family members. Each category may also carry different degree of how far he/she can intrude into the house which is quite distinguished visual from physical access.

Some important points can be inferred from the analysis are the high correlation between visual and physical access. However, even though the majority of residents may perceive their interpersonal relationship based on mutual understanding and common sense; there are individuals who show different response. They are those whose requirement of physical access higher than visual access for 3 domestic activities: cooking meal, washing clothes, and drying clothes for both Chinese and Javanese residents, and serving guest for one Javanese resident. It is likely that that several residents who put more concerned in visual than physical privacy have related to other influential factors such as the physical

condition of their houses rather than personal factor apart from the gender, age, and the category of people who works/lives together in the house.

Further result shows the grouping of activities based on the degree of social interaction into low, moderate, and high privacy for both Chinese and Javanese residents. There are 4 activities which require low privacy: serving guest, serving customer, displaying goods, and storing shop goods. There are 9 activities which require moderate privacy: waiting for customer, drying clothes, reading, lunch, washing clothes, breakfast, watching TV, dinner, and cooking meal. There are 3 activities which require high privacy: praying, sleeping, and bathing.

We can understand that the most required privacy is that related to personal activities, while the least required privacy is related to shop-keeping activities. The moderate degree between personal and shop keeping contain many domestic activities which varied individually which depend on the other factors such as physical environment or individual preference, etc. In other words, the need for individual privacy may be flexible and varied highly in terms of social interaction.

#### References

- Alexander, C., Ishikawa, S., & Silverstein, M., et.al. (1977) *A Pattern Language*. New York: Oxford University Press.
- Altman, I. (1975) *The Environment and Social Behavior*. Monterey, CA: Brooks/Cole.
- Anggraini, L. D. (2007) *The Type of Chinese Shophouse in Ketandan Yogyakarta: Based on Form-function* (Unpublished Master Thesis). Gadjah Mada University, Yogyakarta, Indonesia. (in Indonesian.)
- Anggraini, L. D & Ohno, R. (2011) A Strategy of Two Different Cultures for Dealing with Housing Issues of Shop Houses in Yogyakarta City. *IAPS International Network Symposium*. Daegu, South Korea.
- Anggraini, L. D. (2011) Spatial Arrangement in Chinese and Javanese Shop House in Yogyakarta City. *ASEAN Conference on Environment-Behaviour Studies (AcE-Bs)*. Bandung, Indonesia.
- Ahrentzen, S. B. (1990, November) Managing Conflict by Managing Boundaries: How Professional Homeworkers Cope with Multiple Roles at Home. *Environment and Behavior*, 22(6), 723-752.

- Dewi, A. & Antariksa, S. S. (2005, July) The Effect of Trading Activities on Interior Pattern of Shophouse Building in Chinese District in Malang City. *Dimensi Teknik Arsitektur*, 33(1), 17-26. (in Indonesian.)
- Habraken, N.J. (1998) *The Structure of the Ordinary: Form and Control in the Built Environment*. USA: Graphic Composition, Inc.
- Mejina, R. (2011) House & Laundry: Strategy of Privacy in Spaces for Living and Working. *Journal of Theory and Design of Architecture*, 5(1). [www.arsitektur.net](http://www.arsitektur.net). (in Indonesian)
- Oseland, N. & Donald, I. (1993) The Evaluation of Space in Homes: A Facet Study. *Journal of Environmental Psychology*, 13, 251-261.
- Rapoport, A. (1982) *The Meaning of the Built Environment: A Nonverbal Communication Approach*. Tucson, United States of America: The University of Arizona Press.
- Rapoport, A. (2005) *Culture, Architecture, and Design*. Chicago, Illinois, USA: Locke Science Publishing Company, Inc.
- Wilson, G. & Baldassare, M. (1996, January) Overall "Sense of Community" in A Suburban Region: The Effects of Localism, Privacy, and Urbanization. *Environment and Behavior*, 28(1), 27-43.