A Study on Living Spaces and the Daily Interaction and Communication Model of Middle Aged Urban Families in the Philippines

Fortunato B. de la Peña Jr.* Dr. Ching Yang**

*Graduate student, National Yunlin University of Science and Technology, Department of Industrial Design. 123 University Road, Section 3, Douliou, Yunlin 64002, Taiwan R.O.C. fbdelapena@yahoo.com
**Professor, National Yunlin University of Science and Technology, Department of Industrial Design. 123 University Road, Section 3, Douliou, Yunlin 64002, Taiwan R.O.C. yangj@yuntech.edu.tw

Abstract: This paper focuses on the analysis of daily lifestyle patterns and routines of middle aged families in the Philippines. The research also studied how families utilize their living spaces according to their lifestyle. Three middle aged families living in the suburbs of metro manila were studied. Field interviews were conducted to record their weekday and weekend lifestyle schedule and basic data. Environment behavior observation was also utilized to gather data and analyze their living spaces. The results showed that during weekday families spend their free time inside their bedrooms, while the dining area got the highest level of interaction and communication. During weekends, the families spend almost half of the entire day outside the house. The study revealed factors in determining the length and type of interaction among family members: the impact of maturity and how it affects the type and quality of interaction and communication between family members as well as occupational differences, and religion. Relationships among family members are fostered and are evident in their living spaces. Scenario design was based on family routines and behavior to come up with key points in the design of interactive communication platforms and concept designs that could serve as future reference in the design of future interactive communication products.

Keywords: Environment Behavior, family interaction and communication, scenario design.

1. Introduction

1.1 Motivation and background

The influx of new technologies resulted in the rise of new industries and new work opportunities. In relation to this, advances in information technology in the Philippines have gained more importance from a personal, human vantage point because more laymen and non-technical people are getting connected and find it very useful to meet their
personal needs and interests. This increasing demand poses many challenges in terms of healthy communication and interaction within the family. Shared pastime has fairly decreased as it is replaced by solitary endeavors of each member. Managing family interaction is tough under this busy schedule and even more as children get older. Middle age families have more mature members and are more likely to experience this situation. Family is at the core of the Filipino society. It is quite evident as most of the time spent in the house happens in ubiquitous areas such as the dining room which also serves as the center of communication of the house. Filipinos fondness for communication technology is quite high, the nation is even considered as the texting capital of the world [10]. It is of good interest to research on how a culture centered on close family ties, cope with the challenges and benefits of modern technology.

1.2 Purpose of the study
The study aims to investigate the lifestyle pattern among members of middle aged families in the Philippines. It focuses on their interactive and communicative behaviors within their homes and how they utilize their living spaces according to their lifestyle needs. The analyzed data will be used to conceptualize a scenario design in able to visualize and create concept designs that answer communication problems and needs.

1.3 Research method
The study was conducted using several methods that include interviews, literature reviews and environment observation methods by John Zeisel. Interviews were made on three middle aged families living in the suburbs of Manila, three families with similar number of children and age range were chosen. Environment behavior observation was used to detail their living spaces as well as recording their behavior toward objects and their living space. The analyses were summed, common activities were drawn from the analyses and through scenario design, typical scenes were conceptualized to simulate the situation of family interaction and communication in the family.

1.4 Scope and limitations
The study was limited to the three families that were interviewed, and investigated using environment behavior techniques. The analyses that were derived from the study, including the concepts that were developed, were based on the lifestyles of three middle aged families living in the suburbs of Manila, thus the study was made based on Philippine context.

2. Review of related literature
2.1 Filipino middle age families
The study will focus on middle age families in the Philippines whose heads of the family are between 40 to 64 years old. As of the statistics published by its government, the Philippines has a total population of 90,457,200 people. In 2009, the average household has 5 members. The population of adults, between the ages 40 to 64 years old totaled 13,663,663 million in 2008 [11]. During the middle stages of the family, the frequency and content of their
interactions change. Increasing autonomy inevitably alters patterns of self disclosure, commonly shared experiences, and perceptions of privacy and responsibilities, to the extent that there is a generation gap [8].

2.2 The Filipino house
The modern houses came from the traditional Philippine house, or “bahay kubo”, a ubiquitous concept of dwelling that transforms a living room by day, into a sleeping area by night. The modern houses, are 1 or 2 stories high constructed with concrete, brick or wooden slats with an iron roof, typically it has two to three bedrooms and sometimes an area that combines the living and the dining room. Middle to upper middle class homes usually has provisions for house helpers. The style can be traced from the varied influences developed from the pre-colonial Malay influences, Spanish, American and the contemporary [4].

2.2 Communication and interaction
At its most basic definition, communication is any act wherein one person gives or receives from another person information about the person’s needs, problems, knowledge, or affective states [1]. Peoples behavior are influenced by three broad and essential acts; 1. Physiological needs such as eating and sleeping 2. Restrictive or regulated activity, which bound actions such as work and school, 3. Autonomous behavior, such as rest and leisure activities [2]. Interaction happens when reciprocal events that require at least two objects and two actions. Interactions occur when these objects and events mutually influence one another [7]. In families, the primary purpose of interaction is to preserve and strengthen family relationships, whenever possible.

2.3 Conceptual Design of Interactive Communication Device for Families with Three Generations
Yi Liang Liu conceptualized a device called the “Guardian elf” an intimate housekeeper or helper with functions of message transmission, multi-media player, speech recognition, and security monitor system. It also has the capability of integrating and controlling digital appliances at home. The research is expecting that the high technology products would become more accessible in the future, and that these would aid in family communication and interaction [3].

2.5 Environment Behavior Observation and Field interviews
Field interviews aid researchers in the systematic acquisition of data while keeping the subject focused on the objective of the interview. This technique is used in combination with environment behavior observation techniques, to investigate and explore the family member’s living routines, interactive communication, and the status of their living spaces. Understanding environment behavior means that we answer questions such as who does what with whom in what kind of relationship, and socio-cultural context, and the physical setting [9].

2.6 Scenario design
Scenario design or planning is an important tool in simulating known circumstances, and unexpectedly important situations and problems that exist in some small form in the present day. Developing a persona moving through a scenario helps bridge the contexts of development and use. On a simpler level, the storyboard is ideal for instructions and illustrating simple interaction [6]. When made years in advanced the preempted problems or weaknesses can be avoided or their impacts reduced effectively [5].

3. Case investigation and analysis

Interviews and investigations were done during the months of January and February 2009 in Manila, Philippines. The first step was to gather basic data; family appellation, age, and occupation. Details of which are shown in Table 2. The second part involves recording the respondent’s daily and weekend life activities. In the last part, the use of their living spaces was observed, as well as communication equipment, details of which are shown in Figure 3.

Table 3. Profiles of each family member

<table>
<thead>
<tr>
<th>Case 1. De la Pena Family: Quezon City, Metro Manila</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Father b. 58 yrs old c. Professor</td>
</tr>
<tr>
<td>a. Mother b. 56 yrs old c. Housewife</td>
</tr>
<tr>
<td>a. Eldest daughter b. 29 yrs old c. Doctor</td>
</tr>
<tr>
<td>a. Eldest son b. 27 yrs old c. Veterinarian</td>
</tr>
<tr>
<td>a. 2nd son b. 25 yrs old c. Graduate student</td>
</tr>
<tr>
<td>a. 3rd son b. 23 yrs old c. Painter/layout artist</td>
</tr>
<tr>
<td>a. Youngest b. 19 yrs old c. College student</td>
</tr>
<tr>
<td>Cousin 18 yrs old High school student</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case 2. Macapinlac Family, Quezon City, Metro Manila</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Father b. 59 yrs old c. Farm owner</td>
</tr>
<tr>
<td>a. Mother b. 54 yrs old c. Housewife</td>
</tr>
<tr>
<td>a. Eldest daughter b. 24 yrs old c. Nurse</td>
</tr>
<tr>
<td>a. 2nd daughter b. 22 yrs old c. Assistant analyst</td>
</tr>
<tr>
<td>a. Son b. 20 yrs old c. College student</td>
</tr>
<tr>
<td>a. 3rd daughter b. 19 yrs old c. College student</td>
</tr>
<tr>
<td>a. Youngest b. 14 yrs old c. High school student</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Case 3. Escoto Family: Antipolo City</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Father b. 56 yrs old c. Professor</td>
</tr>
<tr>
<td>a. Mother b. 54 yrs old c. Professor</td>
</tr>
<tr>
<td>a. Eldest daughter b. 29 yrs old c. Preschool teacher</td>
</tr>
<tr>
<td>a. Eldest son b. 26 yrs old c. Designer/ unemployed</td>
</tr>
<tr>
<td>a. 2nd eldest daughter b. 24 yrs old c. College student</td>
</tr>
<tr>
<td>a. 2nd eldest son b. 20 yrs old c. College student</td>
</tr>
<tr>
<td>a. Youngest son b. 12 yrs old c. elementary</td>
</tr>
</tbody>
</table>

3.1 Subject of interview and investigation

Case 1: Dela Pena family. The family has seven members; the father is the primary axis of the family. He is a university professor who teaches every weekend and at the same time, works in a government office on weekdays. The mother manages the house. The eldest daughter is studying abroad. Eldest son is a veterinarian, who goes home only on weekends. The second eldest son is a graduate student studying abroad. The third son is a painter and a layout artist. The youngest son goes to college. They have a nephew who is a graduating high school student.

Case 2: Macapinlac family. The father is the primary axis of the family. He owns an egg farm which he goes to once a week. The mother, who recently battled cancer, stays at home. The eldest daughter is a nurse. The second daughter works at a bank. The only son is a college student. The third daughter is also a college student, while the youngest daughter is in high school.

Case 3: Escoto family. Both the father and the mother serve as the central axis of this family. The father and mother are both professors at the same university. The eldest daughter is a preschool teacher. The eldest son recently quit his job. The second eldest daughter is in college at the same university as her parents’. The second son studies at a nearby college, and the youngest is an elementary student.

3.2 Living spaces, interaction areas and communication devices

Color values were assigned on each area of the house, which indicate its use and relationship with the dweller. Communication devices were also included, and the details of which were shown in Figure 1, 2 and 3. Descriptions are as follows:

Case 1: The house is located in the northern suburbs of Metro Manila, its lot area is 246 m², it is a bungalow type, has 4 bedrooms, 3 bathrooms, a dining and living area, and a one car garage. The communication devices are two
telephones, a message pad, 3 laptops, and a wireless router. Other devices are, notes posted on refrigerators and a television. Every family member has their own mobile phone except for the mother.

Case 2: The house is located in the northern suburbs of Metro Manila, its lot area is 400 m\(^2\), it is a 2 storey house that has 4 bedrooms, 1 maid’s room, 6 bathrooms, dining room, a kitchen with dining table, family room, and a garage. The communication devices include one telephone, a fax machine, two desktop computers, a wireless router, and 2 laptops. Each family member has their own mobile phone. Other devices are notes and bills posted on refrigerator doors.

Case 3: The house is located in the eastern suburbs on Metro Manila, its lot area is 200 m\(^2\), and the house has been remodeled 5 years ago. It has 3 bedrooms, 1 maid’s room, 2 bathrooms, a dining area and living area in a common place, and 3 car garage. Communication devices include a telephone, a message board, four desktop computers, and one laptop. Other devices are notes posted on the refrigerator door, and the TV. Each family member has their own mobile phone.

4. Results and discussion
4.1 Communication and Interaction timeline

In this part, each of the family member’s daily and weekend routines from morning till night were recorded and plotted on a simple timeline which starts from 4:00 AM until 1:00 AM. Symbols were used to indicate the number of participants involved in every activity and to categorize each activity into the type of act it belongs to. Color values were assigned in accordance to the colors shown in the house plans, to indicate the where the activity took place. This weekday and weekend lifestyle pattern analysis is shown in Figure 4 and 5.

![Figure 4. Weekday activity analysis](image)

![Figure 5. Weekend activity analysis](image)

4.1.1 Family weekday analysis

As seen from the timeline, Philippine households usually start their day between 5:00 AM to 6:00 AM. The table also shows that children are usually accompanied by a parent when they go out for school or work. Families also have the
habit of waiting for the family to be complete and have dinner between 7:00 PM to 8:00 PM. This activity then is followed by watching TV. As shown on the table, their day ends by taking a shower and going to sleep at 10:00 PM. Amongst the three cases, case 2 and case 3 observe the most similar pattern, while case 1 has an irregular pattern and occupies more space in the timeline.

4.1.1 Family weekend analysis
Families exhibited shorter waking hours as they occupied less space in the timeline. They devote their weekends for rest and recreation. It displayed that parents follow their habitual waking hours even on weekends. There is a 2 hour difference from the waking hours of parents and children in case 1. As seen on the timeline, 9:00 is the waking time for children. The families display group bonding activities due to their religion as shown by their usual trips to the church as a group. Leisure activities are also done with other members. As on weekdays, cases 2 and 3 showed similar a pattern while the members in case 1 had longer waking hours compared to their weekday pattern.

4.2 Living spaces analysis
In the study, the spaces of the house were divided in three types of spaces, the private space, common socialization area, and task-oriented space. These appear on the floor plan of each house, details are as follows.
1. Private spaces - During weekdays more mature family members spend the majority of their time inside their rooms, usually while waiting for lunch and dinner. On weekends, members spend more time in their private spaces, in lieu of the time spent outside during weekdays. In the three cases, the bedrooms are located in one area and the entrance to each bedroom is either opposite or beside each other which create easy access from one room to the other.

2. Common socialization areas - During weekdays and weekends, the dining area gets the highest level of use. Communication devices; telephones, message boards, notes on the refrigerator are within reach on this area. It is interesting to note that a television is always present near or in the space. The living room is beside the dining area, the two spaces are tangent to one another. This setup forms a ubiquitous environment for people inside the two different spaces. The living room is the next stop for family members who want to continue watching TV after meals, which what happens most of the time during weekdays and weekends.

3. Task oriented spaces - Kitchen, garage, and the laundry area are places where basic household tasks are accomplished. In case 1, members frequently use this area to cook and wash the dishes. In the other cases however, they have house helpers to accomplish this task and they don’t go to this area much often.

4.3 Interactive communication problems and needs analysis
1. Act of need: The study found out that parents still look out for their adult offspring. As an example, parents of still take their children to school and work and bring them home. In this kind of situation, proper coordination and
knowing the whereabouts of each other is very important. In all of the three cases, eating meals generates the highest level of interaction and communication. Dinner time during weekdays and lunch time during weekends displayed the highest participation from all members. This is a good platform for the family to fix arguments and miscommunication.

2. Restrictive activities: The weekdays are occupied with restricting activities such as work and school. Even at home, most members carry on with studying or taking a rest from a hard day's work. The study shows that families at this age show less communication and physical interaction during daytime caused by the said activities.

3. Activities of freewill: Rest and leisure, as seen from the timeline, every member has parallel activities on weekdays, the only time that they get together is during dinner time, and watching TV at night. Even though eating is considered as an act of need, in the case of the three families, it is a time for interaction, for they wait for the family to be complete, and also time for leisure, as eating dinner is usually accompanied by watching TV. In weekends, the families go to the mall or go to their relative's house or spend their free time by themselves, watching DVDs, surfing the internet, listening to music, or going outside.

5. Scenario Design
5.1 Live interaction within the house and group communication

**Scenario A:** (refer to Figure 6) 6 PM Mother was not feeling well. Youngest son volunteered to cook dinner. He used the kitchen communicator to interact with her mother, it began to project her mother's image in the refrigerator door while his mother uses a room unit to interact with her son. It was almost 7:00 PM mother sent a group message to the family saying that dinner will be late. Elder brother was doing a group project on his friend's house nearby so he immediately went home and helped his little brother to cook. When father and sisters arrived, the food is ready.

**Scenario B:** (refer to Figure 7) Weekend, brother went to practice basketball early. Brother left a message at the main screen and mother saw this while cooking breakfast. Mother and younger sister were preparing to go to the mall. Since no one was going to be left in the house so mother decided to call her son. But her son didn’t hear the communicator because he was playing. Mother used the main screen to locate brother. They drove by the gym and gave the house keys to brother.
5.2 Person to person interactive communication, and coordination.

Scenario C. (refer to Figure 8) Little brother is doing his homework. He took a snapshot of the problem and sent it to his brother. Elder brother helped him answer more. Little brother went to bed. Big brother was worried so he decided to send the images to his mother who was watching TV. Mother found out one mistake. In the morning mother told little brother to correct his homework.

Scenario D. (refer to Figure 9) Elder sister needed to work overtime. She told her parents that she will go home by 10 PM. Father and mother slept before 10PM. Meanwhile, at the hospital, more patients came in and elder sister had no time to tell inform her family about her situation. At 12 AM she was able to leave. But the train station was already closed. She checked if her parents or brother were still awake. The communicator showed people who are sleeping. It showed that her brother is not yet home. Her brother was about to go home from a party, he went to the hospital to pick up her sister.

6. Concept for future interaction and communication products

The first one is the platform to bridge parallel lifestyle, the concept seen on figure 10 and scenario A is based on this. Members of middle age Filipino families have a lot of autonomy and control of their own time. There is a need for real time long distance family communication platforms that will help establish a steady link and continuous exchange of communication between members. The second one is handheld multimedia sharing, this is seen from the concept on figure 11 and scenario C and D. Experiencing and sharing multimedia such as video, voice, and pictures between family members aid in fostering better relationships among members. The last one, is instant family member status report, families in the study showed the need for constant coordination between members. Users can benefit from this in the event of emergencies as presented on scenario D.

7. Conclusion

The study revealed the impact of maturity and how it affects the type and quality of interaction and communication between family members. In middle age families, less attention are given to children, while parents focus on work or other things. While this is true in certain aspects, the parents in the study still showed protective behavior toward
their young, clearly seen specifically on how they make sure of the safety of their children every time they commute to and from the house. Occupational differences and religion are also factors in determining the length and type of interaction and communication. Members who work have less opportunity to interact with other members, and devote their free time to solitary resting. This is also true with students, as they are left to study by themselves. In addition, families make it a point to do religious activities together. Relationships among family members are fostered and are evident on their living spaces. The dining area surpasses the living room, in terms of providing face to face interaction and communication among family members. The presence of communication devices such as telephones, message boards, notes on the refrigerator as well as a television within the radius of the dining table signifies that it is the communication and leisure center of the Filipino home. This is also evident on how they make it a point to wait for the family to be complete before starting the meal. The study was able to use the scenario design based on middle age family routines, behavior, and strategic locations in the house to conceptualize interactive communication platforms that can take in the form of handheld devices and home units that use real time communication to bridge parallel lifestyle, facilitate the exchange of multimedia content, and finally, give instant feedback for queries about the status of family members.

References


