PROBLEM STATEMENT
Every form of housing has an edge that separates public life from private. This edge can take on many forms. In residential housing, it can be as simple as the exterior wall or can include broader spatial zones such as the entire front yard. This edge serves several functions. It is the barrier to the outside world, but also the vehicle we use to let the outside world know who we are. There is extensive, classic literature on how the selection and decoration of our home environment is a strong means of non-verbal communication of expressing who we are (e.g., Cooper-Marcus, 1974; Carp, F.M. & Carp, A., 1982; Altman, 1980). This residential edge plays a key role in this human communication.

However, there are typically fewer opportunities for residents to use this edge in sheltered care environments for the elderly. These environments, which offer both housing and some form of supportive care, are often large, complex interior settings. Frequently, the architectural framework of these settings compresses this very necessary zone to only a doorway and a wall in the hallway. Compressing this edge denies residents an opportunity to use this zone as a means of non-verbal communication, which they have been accustomed to over their lifetimes.

Communication is an important because it plays a key role in social engagement which has long been a central theme in the literature on successful aging (Jacobs, 1975). While housing edges have traditionally served as a means of regulating social engagement with others, the role of the edge in sheltered care environments for the elderly has not been well explored. Moreover, these environments frequently have negative associations (Health Unit, 2001). A part of sheltered care settings’ negative imagery is due to the loss of a sense of identity and control for the elderly (Calkins, 1995; Goffman, 1961). This research posits that maintaining that control and identity for elders in sheltered care settings should start at the unit’s edge.

As increasing numbers of people move into sheltered care settings, we must understand what we can do to make these settings supportive and promote successful aging. Gaining a more sophisticated understanding of the power of the unit’s edge and its proper treatment fits within this paradigm. Today, designers and owners of supportive settings are making assumptions about the best treatment of the unit’s edge without research guidance. Accordingly, more descriptive and comparative information is needed on the different uses of the unit’s edge in these settings.

RESEARCH RESPONSE
Entryways are key aspects of the unit’s edge that have been manipulated by designers and traditionally have been somewhat under the residents’ control in many supportive settings. This exploratory study explores multiple aspects of the design and function of these entryways in two separate continuing care retirement communities (CCRCs). Specifically, the research compares the different doorway display treatments in both independent apartments and assisted living suites to understand what roles they serve in the communities. The five key research questions include:

1) How are the edges being used?
2) What influences the use of these edges?
3) What messages are the use of these edges communicating?
4) Does the use of these edges influence residents’ perceptions of the setting?
5) Does the use of these edges influence socialization?
RESEARCH METHODS
This study compares four different “settings” (the assisted living and independent apartments in each CCRC). Both retirement communities are accredited by the Continuing Care Accreditation Commission and provide multiple levels of care within interconnected buildings. One community was built in 1979, and the other was built in 1993. Both communities actively encourage resident personalization. Studying the four settings offered opportunities to compare how the use of the edge differs between levels of care, as well as within different architectural frameworks. To address the five research questions, both qualitative and quantitative methods were used in this exploratory study. The following types of data were collected:

Photographic Data: A total of 102 photographs were taken of resident unit entranceways in all four settings. These photographs were analyzed for:

- Number of Items Used.
- Size and Variety of Items Displayed (e.g. plants, photographs).
- Placement of Items, (e.g. shelves, floor).

Interviews: A total of nineteen indepth interviews were conducted to gain a more sophisticated understanding of the meaning behind specific personalized displays. The interviews were unscripted, but the key content questions covered during each interview included the following:

- Resident life history.
- What items did the resident choose to display and what is their significance?
- How does the resident feel about the use of this edge?

Each of the interviews was full text transcribed and analyzed for thematic content.

Apartment Survey: Sixty-two completed surveys were received from the residents living in the independent apartments in both CCRC’s. An assisted living survey was not possible at this time since resources were not available to administer the survey one to one to these more impaired residents. Questions in the apartment survey were both open-ended and closed-ended. The contents of the survey addressed:

- Why did the resident decide to personalize the area?
- What is the significance of the items on the display?
- Do these displays contribute to socialization?
- Do these displays contribute to a positive image of the facility?
- What do these displays communicate to others?

Closed-ended questions were analyzed using both descriptive and inferential statistics. Open-ended questions were analyzed for thematic content.

Participant Observation: Spending time in the four different settings helped to establish rapport, build trust and provided numerous opportunities for cross-checking data. While visiting both communities, informal interviews were also conducted with residents and staff about the use of the unit’s edge. These encounters often clarified issues, or provided more information to be followed up on in the indepth interviews.
KEY PHOTOGRAPHIC FINDINGS
Based upon the photographic data, the following findings were derived:

- Whenever space is provided for personalization, residents will use the space. Additionally, personalization will occur on all surfaces available whenever more space is provided.

- A larger spatial area does increase the amount of personalization and the variety of personalization in both the assisted living settings and the apartments settings. Moreover, when no space is provided there still is an inherent need in some residents to create some type of individualization. Doorways in Community One’s assisted living setting that primarily had hallway alcoves were still personalized.

- Deeper alcoves in the apartments are often treated like the foyers found in homes or apartments. Therefore, familiar front hall objects are often placed in these areas such as narrow tables, mirrors, coat trees and umbrella stands. Assisted living displays more frequently reflect decorative trends rather than practical items found in a foyer.

- The provision of a shelf does appear to increase the amount of personalization in assisted living settings. It can be assumed that this allows any resident to easily create a display with very little assistance. Whenever space is available and a shelf is not provided, residents will often provide their own horizontal surface in both apartments and assisted living.

- Keeping the floor area clear appears to be a motivator in reducing the amount of larger three-dimensional items in assisted living. For example, there were fewer large pieces of furniture in these displays.

- The number and variety of object categories in displays increased when more space was provided in the doorway alcoves. The most object variety was found in doorways with deep alcoves and a shelf. In assisted living settings (comparing doorways which were approximately the same size), the number of object categories and display variety increased when a built-in shelf was provided.

KEY FINDINGS FROM APARTMENT SURVEY
The following points represent the key findings from the apartment survey:

- The majority of the residents personalize their space. Primary motivators to personalize include sharing interests with others, welcoming visitors, making the building more attractive and storage opportunities. One key reason not to personalize is not having a dedicated space to do so.

- Most of the residents who responded to the survey independently selected the items to display on their own. A few residents had the assistance of relatives with this activity.

- When larger alcoves are provided, residents are more likely to select items based upon the need for storage as well as a reflection of self. Smaller alcoves tend to motivate residents to primarily select items for decorative purposes and self-expression.

- Larger alcoves tend to result in more items being used from a resident’s past home. Moreover,
these items are usually part of a resident’s past entry sequence. In a few cases, residents mentioned being able to recreate past lifestyle customs in displays such as flying the American flag on holidays.

- Residents are more likely to regularly change their displays when shelves are provided while larger alcoves tend to result in more static displays. Some residents made judgements on others’ displays based upon how frequently the displays changed. These judgments of others included whether these residents traveled regularly, were creative, were energetic, and were more aware or happier than others.

- A majority of the residents are able to learn something new about other residents based upon their displays. Residents are able to discern other peoples’ interests and hobbies from the displays.

- There is a statistically significant relationship between perceiving the displays to have a positive impact and knowing other people in the apartment building \( p < .05 \). Therefore, it can be inferred the displays assisted in this knowledge. Moreover, this relationship is stronger in Community One, which has more space for residents to personalize.

- The majority of the respondents indicated the displays have a positive impact on the living environment of their buildings. There was also a statistically significant relationship between the positive impact of the displays and being satisfied with the building design and décor \( p < .01 \). Therefore, the displays have played a positive role in building and décor satisfaction.

- The majority of the study’s respondents are older than the average ages found for each community and frequently have lived in the community for long periods of time. Due to these demographic differences, it is not possible to know whether their views are truly representative of their communities as a whole. However, the study respondents did provide a great deal of insightful information about how these communities operate and what the resident dynamics are like in each of the study settings. These data combined with informal interviewing and participant observation support the overall validity of the findings.

**KEY FINDINGS FROM THE BIO-SKETCHES**

The primary finding from the resident indepth interviews was that most of the items placed outside the door had significant meaning and were tied to a resident’s interests and past lifestyle. These interviews also provided key sources of information on how the doorways are used by individuals, as well as their attitudes about their displays. This information helped to answer some of the questions presented in the key research questions and discussion section of this report.
KEY RESEARCH QUESTIONS AND DISCUSSION

Several of the key themes that emerged from the study reflect accepted environment and behavior patterns found in the housing literature. Therefore as indicated below, it appears many residents are successfully replicating familiar patterns in their use of the unit's edge within sheltered care settings.

USE OF THE EDGES

Analyses of the multiple types of data collected resulted in a preliminary typology of edge uses:

TYPOLOGY OF USES

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<thead>
<tr>
<th>Utilitarian</th>
<th>Decorative</th>
<th>Communicative</th>
<th>Social</th>
</tr>
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<tbody>
<tr>
<td>Convenience</td>
<td>Hallway Improvement</td>
<td>Written Communication</td>
<td>Group Membership</td>
</tr>
<tr>
<td>Storage</td>
<td>Dynamic Project</td>
<td>Visual Communication</td>
<td>Camaraderie</td>
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<tr>
<td></td>
<td>Continuity</td>
<td>Self Expression</td>
<td>Similar Interests</td>
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<td>Individualization</td>
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- **Utilitarian uses** refer to the more basic needs that these doorway edges satisfy such as creating a convenience shelf or providing for the storage of transportation devices.

- **Decorative uses** include improving the hallway, setting one's doorway apart from others, and providing continuity with past décor and lifestyle patterns. Furthermore, some residents continually change the décor of their edges for variety, interest, and attention.

- **Communicative uses** include the facilitation of both written and visual messages between the unit’s occupant and the other retirement community residents and staff. The edge of the unit also proved to be a strong communicative means for self-expression.

- **Social uses** of the edge included establishing that the occupant belongs to the retirement community, learning about other residents’ interests, and using the edge as a means of expressing camaraderie among community members.

Influences on Edge Uses

The key influences on edge uses are architectural, administrative, peer review, care level and normalization.

- **Architectural influences** relate to spatial aspects and built-in features such as the presence of a shelf. Having a clearly defined space such as an alcove encourages more personalization in both levels of care. Larger alcoves without shelves offers more opportunity for variety in the apartment settings. In assisted living, providing a shelf and a deep alcove resulted in more personalization. Moreover, the community with the larger alcoves was found to have a strong significant relationship between knowing other people who live in the apartment building and feeling the displays have a positive impact (.562, p < .01).
• Administration influences include both requests and rules about edge usage established by administrative staff and the resident committees that oversee multiple aspects of residents' lives. Assisted living residents appear to be more influenced by administrative rules; while apartment resident are more influenced by resident committees.

• Peer review and peer pressure influenced the personalization of the edges. Residents are frequently motivated by others to create a display and may edit its content based upon their input.

• Care level also plays a role in the use of the displays and how they are constructed. Residents in assisted living appear to have more assistance from family members when creating a display. The majority of the apartment residents surveyed selected the items placed on display.

• Normalization refers to treating this area in senior housing as a traditional front door and using items, which are typically found in these residential spaces such as coat racks and mirrors.

Messages these Edges Convey
Apartment survey respondents clearly indicated that not only did they select items to reflect some aspect of self, but other residents also notice these messages. Interviews reinforced that many of the objects placed on display relate to some important aspect of the resident's life. Expressing individuality was prioritized; however, objects were also chosen that conveyed belonging to the socio-economic group that resides in the community.

Effect on the Perceptions of the Community
The majority of the study findings indicated these edge displays are perceived as positively contributing to the community. Furthermore, there was a statistically significant relationship found between believing the displays were positive and being satisfied with the décor of the apartment buildings for both settings (.324, p < .01). Negative aspects were mentioned with much less frequency and were primarily based on issues of clutter. However, the survey sample may be biased towards people in these communities who approved of the doorway displays.

Effect on Socialization
The use of the unit's edge does assist residents in finding out what common interests they shared. The edge is also used to help establish camaraderie (e.g., bestowing cards and flowers on the occupant's shelf at a birthday). Residents complimented the people who change their displays frequently. Furthermore, in the apartment settings there is a statistically significant relationship found between knowing other residents in the apartment building and thinking the displays were positive (.294, P < .01). Further research would need to be conducted to explore this issue in more depth, in different care levels in a single community, as well between communities.
CONCLUSIONS

The conclusions drawn from this exploratory study indicate that there are several benefits to manipulating the unit's edge that will be elaborated in the body of this monograph. In future research, more sophisticated sampling and comparisons between communities with varying degrees of personalization would help to draw stronger conclusions. Furthermore, more detailed comparative data needs to be elicited from assisted living residents, since the study did not have the resources to conduct a more detailed survey in these settings.

What the study did find was that retirement community residents were interested in and could articulately discuss multiple issues relating to this research topic. The insights that the residents who participated in this exploratory study provided were extremely valuable for designing future research to be conducted in a wider range of settings. Based upon the body of data collected to date and the study's initial conclusions, preliminary design guidelines were created for dwelling units' edges in retirement communities. These guidelines are structured to maximize personalization, resident satisfaction, communication, socialization and physiological needs.