

Missing Main Street

*Reconnecting Older Adults With Dementia
to the Fabric of Authentic Living*



**PERKINS —
EASTMAN**

Jennifer Sodo
Max Winters

Cover image: by Hector Lopez on Unsplash
Cover design: Wendy Soto

Copyright © 2019 by Perkins Eastman. All rights reserved
Written by Jennifer Sodo and Max Winters

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act.

Limit of Liability/Disclaimer of Warranty: While the authors have used their best efforts in preparing this book, they make no representations or warranties with the respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the copyright holder nor the author shall be liable for damages arising herefrom.

Table of Contents

7

INTRODUCTION

13

FULLNESS OF SELF

Literature Review

Pattern 1: Cultural/Lifestyle Groups

Pattern 2: Individual Choice

Pattern 3: Decentralized Resources and Decisions

31

PLACE & SPACE

Literature Review

Pattern 4: Multiple Scales

Pattern 5: Organization of the Public Realm

Pattern 6: Multi-Sensory Engagement with Nature

Pattern 7: Blurring Front and Back of House

Pattern 8: Ownership of Space

61

AUTHENTIC LIVING

Literature Review

Pattern 9: Normalcy

Pattern 10: Authenticity

Pattern 11: Risk Attitude

79

CONCLUSION

Introduction





The senior living industry rarely experiences a crossover hit, which has made the public interest surrounding Hogeweyk dementia village as unusual as it is far-reaching. 'The Dutch Village Where Everyone Has Dementia' was a concept so intriguing that it popped up in traditional news outlets like *The New York Times* as frequently as it did in clickbait hubs like Gizmodo. The headlines above and others like them have been appearing across the media spectrum since Hogeweyk dementia village (de Hogeweyk in Dutch) opened its doors in Weesp, Netherlands in 2009. The breadth of interest in the topic is surprising and is seemingly perennial in nature. Constructed villages and main streets are not new to North American senior living, but a handful of pioneers are now attempting to imitate the perceived formula of Hogeweyk with their own 'dementia villages.'

Many of these constructed villages, existing and proposed, rely on the idea of *nostalgia* and its purported benefits for older adults living with dementia. To varying degrees, these environments attempt to replicate images and experiences from the past (usually the 1940s-1950s) in order to

trigger memories for the people who inhabit them. Facades depict barber shops, corner stores, and restaurants, while golf course greens are dyed into carpets and clouds are painted onto ceiling tiles. This theatrical approach has drawn comparisons to the premise of the 1998 film *The Truman Show* in which the whole world voyeuristically watches the artificially constructed life of a man from birth through adulthood, and has even led to some questioning the role of authenticity in dementia environments.

Unfortunately, many interpretations of the dementia village concept in North America seem to have lost something in translation and have mistakenly latched onto the nostalgic aspects of Hogeweyk while ignoring the philosophical foundation that makes it successful. At its core, Hogeweyk works because of its total commitment to the vision of normalcy for older adults with dementia.

What follows is our attempt to identify, explain, and suggest applications for the ideas that make Hogeweyk a successful model for providing housing and care for older adults living with dementia. Ultimately, we believe there are three

fundamental concepts that underpin the foundations of this dementia village model. From those concepts, we further developed eleven patterns to inform the design and operation of dementia environments.

In the following sections, we've included a brief overview of existing research related to each of the three main concepts, drawing primarily from the fields of architecture, philosophy, gerontology, and sociology. This research, combined with our observations of Hogeweyk, led us to identifying the patterns that follow. For each pattern, we provide a brief

description, observations from Hogeweyk, and interpretations of those patterns within the context of North American senior housing.

We believe that these patterns can be applied to any existing or future dementia environment, not just a 'dementia village' as the concept is currently understood and perpetuated. Consequently, we think these ideas have the ability to change the way we think about providing housing and care for older adults living with dementia and to reconnect them to the fabric of authentic living that all of us enjoy as human beings.

Fullness of Self



Pattern 1:
Cultural/Lifestyle
Groupings



Pattern 2:
Individual
Choice



Pattern 3:
Decentralized
Resources
and Decisions

Place & Space



Pattern 4:
Multiple Scales



Pattern 5:
Organization of the
Public Realm



Pattern 6:
Multi-Sensory
Engagement
with Nature



Pattern 7:
Blurring Front and
Back of House



Pattern 8:
Ownership
of Space

Authentic Living



Pattern 9:
Normalcy



Pattern 10:
Authenticity



Pattern 11:
Risk Attitude



1 The theater courtyard



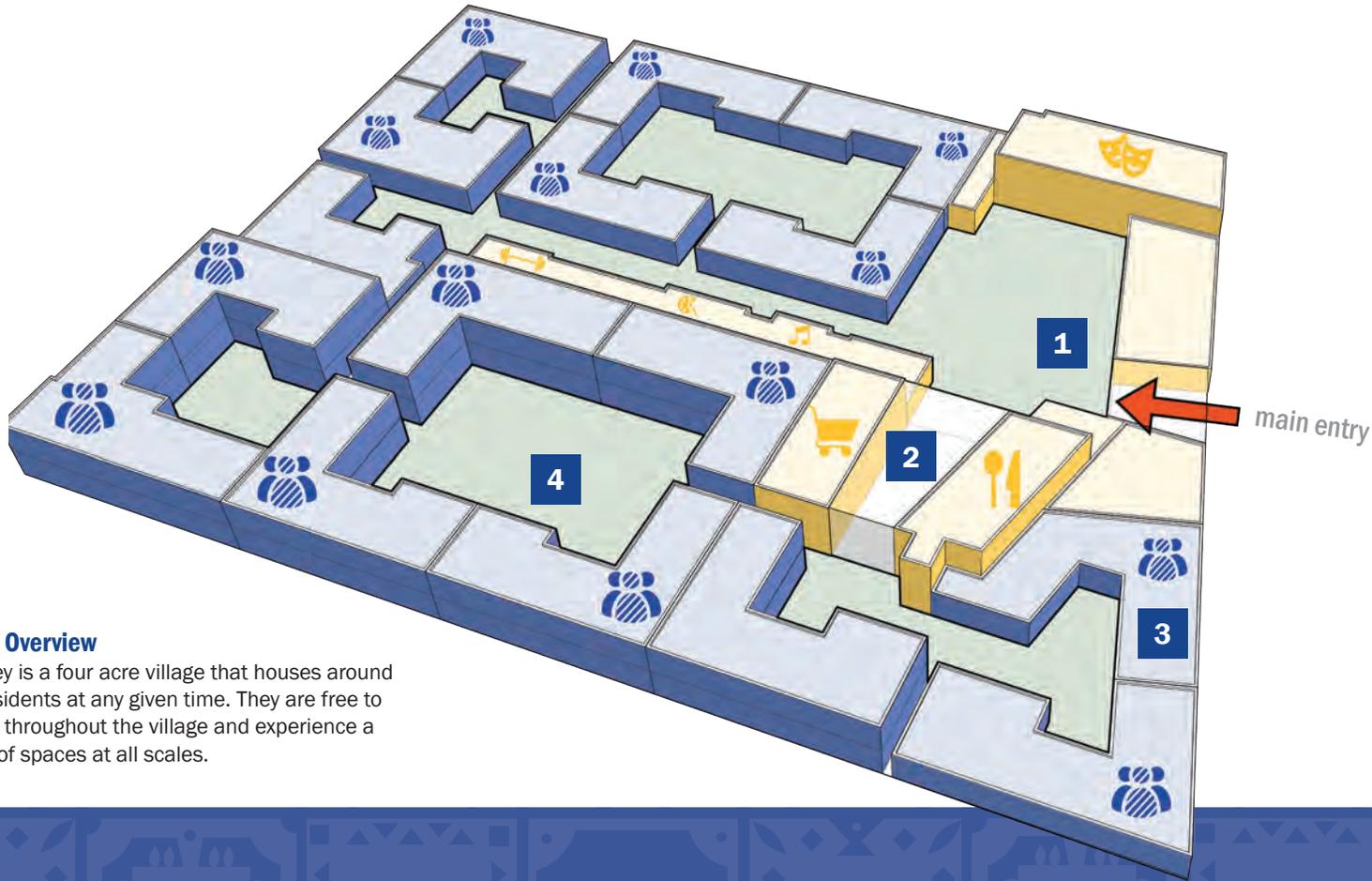
2 The atrium



3 A household interior



4 The urban courtyard



A Brief Overview

Hogewey is a four acre village that houses around 150 residents at any given time. They are free to wander throughout the village and experience a variety of spaces at all scales.



23 households of 6-7 people per household



indoor public spaces shared by all residents



outdoor public spaces shared by all residents



indoor/outdoor spaces shared by all residents

Hogewey Dementia Village



Fullness of Self

LITERATURE REVIEW

PATTERN 1: CULTURAL/LIFESTYLE GROUPING

PATTERN 2: INDIVIDUAL CHOICE

PATTERN 3: DECENTRALIZED DECISIONS
AND RESOURCES



1. Self 1, personal identity
2. Self 2, narrative self
3. Self 3, social self



Concept of Self

Expressing and understanding 'self' is a topic that appears in discussions of dementia care environments, but the concept of self is not so easy to define. Developed by psychologist Rom Harre, one definition of 'self' often cited by dementia researchers describes the idea of Self(s) 1, 2, and 3:

Self 1 represents personal identity, or an individual's continuity of point-of-view within the world of time and space; individuals express Self 1 simply through the use of first person pronouns such as 'I' or 'me.'

Self 2 is constructed from an individual's life history, the mental and physical attributes that define him and his beliefs about these attributes.

Self 3 is constituted by the social constructs of self that the person wishes to project to his peers and exists only in relationship to others (Harre qtd in Westius 1260-61).

Self 1 is the core of what makes an individual understand his personhood, and this persists beyond mild, and even more advanced, dementia. Individuals still see themselves as subjects within a physical and psychological state of being in the universe. Many with Alzheimer's disease and other forms of dementia continue to use the pronouns 'I' and 'me,' indicating that they still understand themselves in relation to space and time (Westius 1260). On the other hand, Self 2 is susceptible to cognitive decline in that it

relies on autobiographical memory. While Self 2 does not depend directly on others, it involves one's beliefs about the physical and mental attributes that define him, and those beliefs have been shaped by a person's interactions and surroundings. Because it depends on an understanding of relationships with others, Self 3 may be seen as the most vulnerable to the progression of dementia in older adults. As an individual's interactions with his familiar (and unfamiliar) social circle decline, so too does his outward construct of self.

This definition highlights three important ideas crucial to an understanding of persons with dementia in the context of care environments: that the self is constructed both internally and externally, it responds to relationships with others (historically or in the present), and it relies on an understanding of space and time. With this in mind, dementia care communities have a responsibility to provide the physical and social environments for individuals to maintain their sense of self to the greatest extent possible. The care environment cannot always be an individual's personal home, but it can meet many of the same needs as the home in defining a sense of self.

The Relationship Between Self and Home

When visiting their loved ones in dementia care environments, one of the most dreaded statements for friends and family members to hear is 'I want to go home!' But for those living with dementia, this



Home can be a physical space, or it can simply represent a sense of security.

verbal longing for home is not always a literal request, but sometimes a cry for reaffirmation of a sense of 'self' – a sense of self previously supported by the feelings of safety, control, and love wrapped up in the memory of home. Psychological research has demonstrated that emotionally significant concepts remain in the brain much longer, even among those with cognitive decline or impairment (Frank 177). As such, it is difficult to separate physical constructs and emotional spheres when considering the meaning of home. Additionally, home may take on different meaning and significance when considered at different scales – the individual home, the neighborhood home, the regional home – but all can be considered relative to a psychological attachment to place.

Home for any individual represents a delicate balance between the need for safety and security and the higher-order functions of stimulation and exploration, and this balance changes and evolves as an individual ages. First, observational data shows that elders tend to physically centralize within the home, particularly around their most favorite places. This phenomenon occurs with both healthy and impaired individuals, and the selected spaces often offer comfort, proximity to frequently used items or spaces, and views outside. Second, to avoid institutionalization and maintain autonomy, the relationship between self and home must change to compensate for the reduced physical or mental capacity – either through behavioral adaptation of self or physical change in the home (Oswald 25). In both instances,

the home acquires new meaning as an individual ages, even if the immediate physical setting remains constant.

Beyond the single family home, individuals develop place attachment to larger scale places – neighborhoods, cities, regions, and countries. The dynamic interplay between the individual residence and the physical places outside of it become critical to an individual's emotional relationship to place. This relationship, both unconscious and conscious, exists in an ever-changing societal environment. As individuals become more attached to their home environment, they are more likely to identify with similar surroundings later in life (Manzo qtd in Lien 154). The physical environments may be man-made – a neighborhood or an entire city – or natural, perhaps an impactful landscape.



Notions of self and home are central to the lives of older adults living with dementia. These two concepts are inextricably linked, and the words describing them are often used interchangeably. With this in mind, how can care environments acknowledge the fullness of self for those living with dementia?

Cultural/Lifestyle Groupings



What Is It?

Grouping like-minded seniors with similar cultures, histories, interests, and daily schedules, in order to help alleviate the stress of moving from an individual home to a senior community

At Hogewey

Traditional senior living communities group residents based on their ailment, whether cognitive or physical. This strategy is an institutional vestige that can compound the stress experienced by seniors when moving into a new environment. Instead, Hogewey began grouping people within lifestyle groups, creating households of six to seven residents who share a cultural past, in order to create the most normal environment possible for living. Before moving into Hogewey, a future resident (or her adult children or responsible party) will take a 144-question survey to determine her most ideal lifestyle group. Instead of one centralized waiting list for the community, Hogewey maintains four separate waiting lists for each of its lifestyle groups. While this means individuals in certain lifestyle groups may have to wait longer to join the community than others, it ensures that residents are assigned to the household in which they will be most comfortable. Hogewey initially identified seven lifestyle groups: cosmopolitan/urban, formal, traditional Dutch, cultural arts, Indonesian, Christian, and homemakers. After nearly 10 years of operation, the last three of these lifestyle groups have become defunct and were combined with the first four groups. While lifestyle groups do not fundamentally

affect the physical layout of the household, they do influence its styling through selections in furniture, finishes, and accessories.

More importantly, the lifestyle groups inform the daily activities and social environment of each household, with meals being a prime example. A household within the traditional Dutch lifestyle group may decide to allocate its money to early but light breakfasts, minimal lunches, and hearty, sociable dinners. The menu for these dinners may rarely deviate from the same four to five staple recipes. Residents may pray together before sharing food, and all the dishes are served family-style. Elsewhere on campus, a household within the cosmopolitan lifestyle group may plan for light to modest meals throughout the week while saving up the resources for two or three nicer dinners per week including wine pairings. Those dinner experiences may mimic a restaurant atmosphere: staff may serve plated food to the residents, the menu may be more exotic and eclectic, and perhaps light music plays in the background.

Interpreting the Pattern

To an American learning of Hogewey for the first time, the concept of lifestyle groups may sound foreign. Social categorization of any kind can tend



LIFESTYLE GROUPS inform the daily activities and social environment of each household

toward the farcical or even harmful representation of a certain group's lifestyle. What makes Hogewey's approach work is its ability to imbue the specific values of the residents in the daily lifestyle of the household. Daily activities, programming, eating, and even the physical environment can then be representative of the residents in smaller, more specific groups rather than attempting to appeal to all 150 residents as a single, homogeneous class of people. Still, lifestyle groups work at the household level, not the individual level. While individuals take entry surveys to identify their best fit, the lifestyle groups identify common backgrounds rather than individual personalities. The specificity of a lifestyle group is enough that it joins people together with shared values and habits, but is general enough that it welcomes a wide variety of people.

aspects of Self 2 and 3 that tend to fall away as a resident's dementia progresses. By definition, lifestyle groups reconstruct Self 3: they create social constructs and relationships with other residents and staff that mimic those from a resident's background. Self 2, the autobiographical self, is supported through the repetition of habits and patterns of daily life specific to a certain culture. While residents with dementia continue to struggle with self understanding and expression, lifestyle groups with responsive physical and social contexts lend a sense of dignity to their daily lives despite their cognitive changes.

In an American culture preoccupied by division – political, racial, religious, gender – lifestyle groups have the opportunity to celebrate shared values. They should create supportive environments that help residents explore their world in a safe, familiar environment.

When reflecting on the idea of Self 1, 2, and 3, lifestyle groups can enhance those



1. Meals are an easy way to reflect a shared cultural background
2. Daily rituals can be maintained and shared in a new environment
3. Decorations around the household can be curated for - and by - residents



TAKEAWAYS

- Designer:** How can the design for a senior community respond to the culturally specific needs of various subgroups while maintaining a coherent message?
- Policy shaper:** How can regulations offer alternative ways to meet the same criteria, depending on the needs of residents as individuals?
- Operator:** How do you determine the identities of your future residents and plan for their specific needs?

Individual Choice



What Is It?

Leaving decision-making power in the hands of the older adults living with dementia, and putting the onus back on caregivers to figure out how to say 'yes' to their choices

At Hogewey

The staff is taught to say 'yes' whenever possible to residents, believing that it fosters resident well-being and reduces the frequency of agitation for both residents and staff. This is in contrast to philosophies of care that train staff members in an inflexible set of 'best practices' against residents who don't always want the 'best practice.' One example would be that of the personal diet. At Hogewey, households independently budget for their residents to provide care catered to individuals and small groups as opposed to a one-size-fits-all approach. More traditional care environments may have structured menus based around a particular nutritional strategy. In this approach, if a dementia resident asks for fish sticks every night of the week the staff must say 'no' in order to adhere to the nutritional meal plan. At Hogewey, the household worker would know about the particular menu preferences of the household resident, and would always have fish sticks on hand so as to be able to say 'yes' to that resident (and perhaps find a creative way to incorporate his request into a more traditionally balanced nutritional strategy).

A more general example of how the 'yes' culture of individual choice plays out at Hogewey is in the relatively few limits

on wandering and informal engagement around the community. In many traditional communities, resident wandering is limited to a fairly small interior area or clearly defined, circuitous path. At Hogewey, residents are free to wander the entire four-acre campus during the day. Consequently, many of them end up in different places around the community, including in other households. (An infrequent secondary way of placing residents in appropriate households is to determine if they continually wander there and express interest in remaining.) There are roaming staff, in addition to the household staff coming and going around the campus, who are trained to engage residents who seem to be lost and help them get where they are going. This level of physical freedom for older adults with dementia is extremely rare but has grown out of a core value to say 'yes' to the residents as often, and in as many ways, as possible.

This approach has challenged existing care practices and even regulations in the Netherlands to achieve what Hogewey believes to be the best solutions for their residents. This is in part because many regulations are necessarily general: written around what one 'must' or 'cannot' do, as opposed to covering every possibility of what could be done. A 'yes' culture finds itself in contrast to



MANY REGULATIONS ARE NECESSARILY GENERAL; written around what one 'must' or 'cannot' do

1



2



3

1. Spontaneity is an important aspect of individual choice
2. Mobility is a choice that even people with cognitive decline can make
3. Careful staffing and attention minimizes risk and empowers residents and staff

many regulations because it focuses on people's desires as individuals, which opens up a much wider array of possibilities. Hogewey continues to challenge the status quo when they think it will create a better life for their residents.

Interpreting the Pattern

While seemingly simple, impressing the true implications of this pattern on a community can be difficult. Many communities 'talk the talk' of a person-centered 'yes' culture but will still stop a resident from trying to go outside on a summer day because it's 'too hot out there.' Many residents are capable of determining for themselves that it's 'too hot out there' if presented with the opportunity to experience it for themselves. The difference between the two may seem small, but when applied across the entirety of someone's daily routine, it can mean the difference between feelings of ownership and 'at-home-ness' and feelings of hopelessness.

It can also mean the difference for a resident's affirmation of self, in this case by validating their ability to make his own choices, which is a key factor in the individual construction of a sense of 'home.'

Interpreting the example of nearly unlimited wandering can be a bit more challenging, especially within the confines of an existing community. An important aspect of this pattern is the commitment and involvement of staff who are moving around the campus and their training to spot wandering and redirect it. The other key factor that enables this pattern is the physical density of Hogewey as a community. Specific areas of communities could be designated as dementia-friendly zones where wandering is allowed, and additional staffing and support can be available in these areas. Some dementia communities have false 'bus stops' to try to capture potential elopers, but what if those were real shuttle stops that connected dementia-friendly zones within a campus or community?



TAKEAWAYS

- Designer:** How can you encourage individual expression in an environment that must meet the needs of a large variety of people?
- Policy shaper:** What would an outline of new regulations look like if the goal is to say 'yes' instead of 'no'?
- Operator:** Do you 'walk the walk' of prioritizing individual choice for residents by finding ways to say 'yes'?

Decentralized Resources and Decisions



What Is It?

Empowering frontline staff to be active participants in caregiving, which gives them a sense of purpose and a heightened ability to care for residents as individuals with a specific set of desires

At Hogewey

Hogewey anecdotally reports fewer incidents of challenging behavior than most nursing homes in the Netherlands, which its founders attribute in part to their bottom-up staffing model. The community receives the same government funding as other care homes but chooses to spend it differently to serve its vision. Hogewey divides its funding among the 23 households, and the staff of each household decides how that money will be spent each month based on the culture and needs of the household residents. For example, one household may choose to spend equally on dinner throughout the week, while another may choose to prepare simple weeknight dinners so it can splurge on elaborate dinners on the weekend. The unique staffing model at Hogewey enables the allocation of more funds directly to the households as opposed to the overhead operations. During the day, from 7 a.m. to 10:30 p.m., two or three staff members attend to each household, interacting with residents, cleaning, doing laundry, and cooking. At night, staffing decreases dramatically: resident bedroom wings are locked, and a fixed night team of three to four staff oversees the entire community of 150 residents. Resident rooms are acoustically monitored from a central location; when any abnormality is detected on

the monitors, staff is dispatched to the appropriate room to check on the resident.

Implementation of care tasks like physical therapy or nutritional support also looks different at Hogewey due to its decentralized utilization of resources. If a resident falls and breaks a hip, she will travel off site to a hospital but will return to Hogewey for rehabilitation. Upon returning, the resident and one of the household workers will meet with the licensed physical therapist to develop a rehabilitation regimen. Instead of returning to the physical therapist for each and every session, the therapist will teach the household worker how to enact and monitor the regimen and schedule more periodic check-ins. This approach lowers the number of licensed therapists needed for the community while empowering the household workers, growing their skill sets, and offering them more upward mobility in their careers. Partly through ideas like this, Hogewey reports it spends only about half of its government-allotted medical budget each year.

Interpreting the Pattern

This is one of several patterns at Hogewey that shares similar DNA with the Green House® project in the United States. Aside from resident quality of life, staff empowerment is one of the key goals of



1



2



3

1. Universal workers have the opportunity to create stronger connections with residents
2. Empowering residents to wander the community enhances mobility and reduces the need for traditional physical therapy
3. Each household can customize the use of its food budget

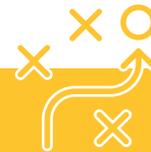
the Green House® approach, which is in stark contrast to the regimented approach to frontline staff in institutional nursing or healthcare settings. By allowing universal

workers take on a wider variety of tasks and CULTIVATE A PERSONAL CONNECTION WITH THE RESIDENTS

workers to take on a wider variety of tasks and cultivate a continual, personal connection with the residents, staff have reported a stronger connection and dedication to the work, and operators have reported a decrease in turnover of these staff. The combination of thoughtful space planning and evolving technology may further push the opportunities to re-think the staffing models of senior communities. As the use of wearable and in-room

sensors grows, can more communities consider lowering their overnight staffing and focus more of their staff and budget to the waking hours? Will advances in robotics allow staff to delegate mundane tasks to robots while saving their energy for thoughtful decision-making and more rewarding interactions?

As countries like Japan turn to technology to address a lack of available caregivers, these once far-fetched possibilities seem more evident than ever. Recruitment and retention of a skilled workforce is a huge problem facing the senior living industry in the United States. Many frontline caregiving jobs are low-paying, difficult, and provide little personal empowerment or sense of purpose. A decentralized approach to resources and decision-making has the potential to change the course for these positions in a way that could attract a more dedicated and driven group of team members, resulting in a better, more personalized care experience for the residents.



TAKEAWAYS

- Designer:** How does the organization of a dementia environment (at all scales) advance or hinder decentralized decision-making?
- Policy shaper:** How can regulations encourage care decisions to be made by staff members who experience the day-to-day life of dementia residents?
- Operator:** Are the people who best know your residents truly empowered to be primary decision makers about all aspects of care?



Place & Space

LITERATURE REVIEW

PATTERN 4: MULTIPLE SCALES

PATTERN 5: ORGANIZATION OF THE PUBLIC REALM

PATTERN 6: MULTI-SENSORY ENGAGEMENT
WITH NATURE

PATTERN 7: BLURRING FRONT AND BACK OF HOUSE

PATTERN 8: OWNERSHIP OF SPACE



Experiencing Space

The built environment is perceived emotionally before it is understood consciously or intellectually. Meaning from a place is derived from all senses, and certain characteristics of spaces can affect body movement and posture (Mallgrave 28, Pallasmaa 7). It is a nearly universal experience to enter a space, natural or manmade, that engenders a sense of beauty, fear, or awe – and not be able to fully articulate in speech or in writing why that space has affected you so deeply. Spatial experience is highly emotional and often triggers subconscious responses. Emotion and central values, not just narrative memory, are key in an individual's sense of identity (Westius 1260), so it follows that highly emotional places may help form a large part of an individual's sense of self.

Physical settings also affect the human brain, which then directs and changes an individual's behavior relative to the world. It can be easily understood that the built environment can affect a person's physical health through the regulation of light and air, the use of healthy materials, or the encouragement of physical activity. However, the neurological impact spaces can have on the human psyche may be less obvious. Art historian David Freedberg and neuroscientist Vittorio

Gallese argue that “the experience of art and architecture [operates] through the precognitive activation of embodied mirror mechanisms involved with the simulation of actions, emotions, and corporeal sensations” (Mallgrave 36). This and similar scientific studies explain why observing a twisted column makes us feel tense, or why we tend to hunch down in enclosed spaces. The experience of a space is closely tied to the human experiences of identity, empathy, and unconscious projections (Pallasmaa 11).

Experiencing Place

The effects spaces have on us are layered with geographical, cultural, and historical significance, and places - whether buildings, neighborhoods, towns, or entire landscapes - can take firm root in our minds and hearts. Architectural theorists and psychologists have studied for centuries how and why certain places are more meaningful to us than others. Patterns and archetypes are two of the most accessible means by which they have shared the mystery of what makes places easily understood and emotionally significant. Following are summaries of three notable texts that help identify why the architecture of Hogewey feels comfortable to residents, staff, and visitors regardless of their varying cognitive abilities.

Image of the City by Kevin Lynch

In his cornerstone 1960 work, Lynch studies the physical environment of cities (rather than the social environment), deriving a group of five distinctive organizing elements that naturally occur in their development. The five identifiable physical forms of cities are:

1. **Paths:** channels along which the observer customarily, occasionally, or potentially moves
2. **Edges:** the linear elements not used or considered as paths by the observer
3. **Districts:** medium to large sections of the city, conceived of as having two-dimensional extents, which are recognizable as having some common, identifying character
4. **Nodes:** points, the strategic spots in a city into which an observer can enter, and which are the intensive

foci to and from which he is traveling. Nodes are typically relative to paths or districts, and represent a crossing or convergence

5. **Landmarks:** another type of point-reference, but in this case the observer does not enter within them, they are external; they are usually a rather simply defined physical object: building, sign, store or mountain (Lynch 36-48)

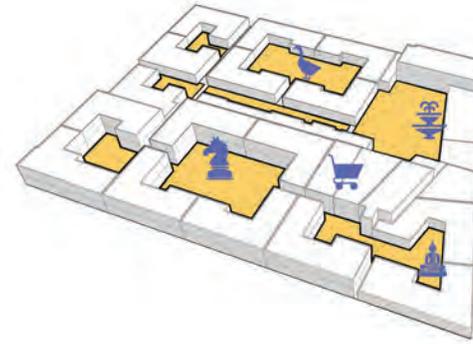
Understanding place through edge, paths, and nodes was critical to the mobility – and therefore survival – of our ancestors, and is consequently fundamental to human perception of environments (Lynch 124-126). Today, these characteristics are a means for designers to encourage and support purposeful movement through spaces, especially for those who may be continually re-experiencing the same physical space with diminished cognitive ability, as in the case of older adults with dementia.

1. The pond and kiosk at Hogewey are recognizable landmarks. 2. The wider paths of Hogewey are lined with public amenities. 3. Nodes such as a garden shed occur at intersections



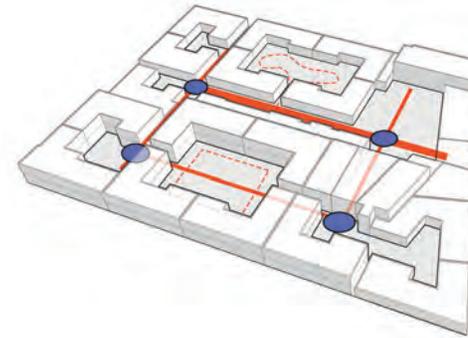
THE ORGANIZING ELEMENTS OF HOGEWAY

The organizing elements identified in *Image of the City* are foundational to the legibility of the built environment, regardless of cognitive ability. Hogewey cleverly employs these tools at multiple scales of living to create an environment that engages residents in a meaningful and authentic way.



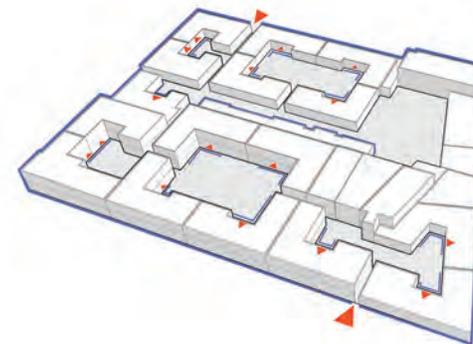
Districts and Landmarks

The household module tessellates to form larger districts. These districts often take on the character of the lifestyle groups within those households (urban, rural, etc.). Landmarks announce the districts and assist in wayfinding.



Paths and Nodes

'Main street' forms the primary path through the village, with secondary paths running perpendicular. Nodes are formed at intersections of these paths and are often marked by interactive moments, like the gardening shed.



Edges and Boundaries

The buildings themselves form a secure perimeter around the village constituting the hardest edge in the village. Household porches announce the implied boundary between the private space of the household and the public space of the village.

Archetypes

The concept of archetype as defined by psychiatrist Carl Jung involves inherited memories, “derived from aeons of common experiences that are now present in the collective unconscious of all individuals” (Brill 62). Archetypes are not a conscious manifestation and cannot be directly seen or known; rather, they appear in real phenomena in the world incompletely or imperfectly. People perceive space less through physical contact with the elements of space and more through the way it is felt through our bodies’ perceptions of its properties: its rhythms, edges, size, mass, completeness, and directions (Brill 65). Architecturally speaking, these perceptions can be understood through

Paths, edges, districts, nodes, and landmarks are archetypal elements that all humans utilize in their experiences of spaces and places. However, the interpretation of these elements varies from culture to culture and person to person.

characteristics like dark and light, loud and soft, rough and smooth, hard and soft, cold and hot, heavy and light, here and there, and inside and out (Harries).

Origins of Architectural Pleasure by Grant Hildebrand

Although ancestral survival instincts may not be as relevant today as they were in the time of hunter-gatherers, humans’ shared origins and instincts may identify features of a built environment that are inherently preferred by the greatest number of users. Architectural theorist Grant Hildebrand suggests that “given the slow rate of genetic modification, it is likely that we are still innately drawn to settings whose characteristics hold some survival advantage, even though that

survival advantage may no longer have any practical value for us” (Hildebrand 263). These instincts suggest favorable characteristics of spaces rather than specific design strategies, allowing for their universal adaptation. Hildebrand presents five conditions of survival-based design characteristics that are likely to create more widely satisfying spaces:

- **Prospect and refuge:** these two characteristics must be considered together; at a primal level, high, open, and bright spaces of prospect allowed humans to survey for food and water, while low, enclosed, and dark spaces of refuge provided a place to retreat when threats arose.
- **Enticement:** the partial view or understanding of a distant space;

Spaces that provide shelter and retreat (refuge) combined with the ability to see and experience the world beyond (prospect) tap into our intrinsic human needs tied to our evolutionary and survival-based instincts.

the promise of more information and relative safety encourages movement into a new space, often brighter than the last.

- **Peril:** the paradoxical pairing of pleasure and fear. Humans seek assurance that they can handle danger by actually experiencing it, causing a pleasurable response.
- **Complex order:** humans derive innate satisfaction from ordering and distinguishing information. Hildebrand clarifies that order alone is monotonous, and complexity alone is chaos; only when the two combine do humans perceive greatest satisfaction.



The Inward Garden by Julie Moir Messervy

More universally felt than built archetypes, landscape archetypes are inherently powerful because they are easily understood and were imprinted over a vast expanse of time during the history of man. Contrary to the condition of built archetypes, landscapes and their archetype are often the same and are thus more easily understood and emotionally felt (Brill 66-67).

Landscape architect Julie Moir Messervy outlines seven distinct landscape archetypes in her work The Inward Garden that shape the developmental process of spatial exploration that all people experience, often at a very early age. These archetypes link our feelings, memories, and associations to a particular spatial form:

1. The sea: The feeling of withinness; imparts feelings of being blanketed or immersed
2. The cave: Inside to outside; conveys a sense of home out to the neighborhood around it
3. The harbor: Enclosure with a view; offers a protected view onto the world, while remaining anchored within the landscape
4. The promontory: On the edge; maintains a balance of thrill and security
5. The island: The feeling of awayness; independence and separation from

the world, while maintaining an unobstructed view in all directions

6. The mountain: Ascending upward; solitude and remote, a place away from the rest of the world
7. The sky: Beyondness; transcending the surroundings with lightness and airiness (Messervy 28-35)

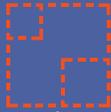
Even without the descriptions, the connotations of these landscape archetypes can be immediately felt. The simple mention of these landscapes evokes emotions which have been imprinted on us individually and throughout the history of humanity. The feelings and memories linked with these landscapes can be accessed through built form as designers borrow the same spatial cues.

Designers are charged with creating engaging environments that act as vessels for people to live, work and play. Over time, those spaces fill with individual experiences and take on new meaning. How can an environment speak to each inhabitant both specifically as an individual and intrinsically as a human being?



Experiences of the natural world provide important archetypes that describe how human beings intrinsically experience the spaces around them. Standing on a promontory or mountain feels exhilarating, whereas sitting in a harbor engenders a feeling of protection and enclosure.

Multiple Scales



What Is It?

Considering the experience of older adults beyond the scale of a single building, allowing them to engage the world around them without artificial limits

At Hogewey

Household models for dementia care were born out of the realization that the social dynamics of a smaller group were more manageable for older adults with cognitive decline. This paradigm shift further argued that while it was important for residents to have private space they could call their own (like a bedroom or suite), it was also important for residents to have a small amount of *public* space over which they shared ownership with a small group of people. One of the most revolutionary things about Hogewey is that this concept is taken one step further and applied to the scales of the neighborhood and an entire community. Because residents are allowed to wander within their unit, household, neighborhood, and community, they are allowed to experience the environmental and social benefits – and challenges – that come along with each. While it may be overwhelming for some to experience an entire community, it may equally as overwhelming for others to *only* experience a small bedroom, a living room, and a dining room.

Allowing residents to choose a wider variety of environmental and social experiences may have a direct impact on their ability to experience at-home-ness. Based on the framework of Self 1, 2, 3, one can see the parallels between

the multiple scales and the multiple selves. Self 1, acknowledgment of self and personhood, is manifested at the smallest scale of the bedroom, where residents nurture their individuality and personhood. Self 2, the narrative self, is shared with and grows among the household residents in the common spaces, which reflects their cultural-lifestyle group. Self 3, the socially constructed persona, is fostered through the grouping of households and the wider community through planned activities and spontaneous interactions. There is no research to suggest that an environmental arrangement like this actually prevents the degradation of any of the three selves. Rather, this environmental diversity is critical in the understanding of ‘home’ for older adults with cognitive impairment because it provides a stage for each of the selves to be nurtured.

Interpreting the Pattern

Advancements in household models for dementia have been centered on how to improve the traditional, institutional ‘box’ of resident units and common areas, ultimately resulting in some exceptional ‘boxes.’ Understanding the multiple scales pattern of Hogewey challenges this approach, exposing that there is a vast swath of experiences outside of that box that has not been considered. While the



1



2

1. Living spaces in the bedroom are decorated by residents to reflect their individual personality
2. Living rooms are big enough to allow household gatherings and reflect the cultural lifestyle of the group
3. The community has ample outdoor scales of living space for residents to explore

3



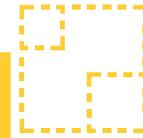
first two scales of bedroom and household have been given extensive consideration, there has been little advancement in connecting them to the remaining scales of neighborhood and community.

Attempting to address the larger scales of connectivity for those with cognitive impairment are the Dementia Friendly Communities and Dementia Friendly America initiatives. Both are focused on normalizing dementia in our existing communities, allowing older adults with cognitive impairment to remain in their

homes longer, and delaying a move to a more institutional setting. These movements may succeed in connecting older adults aging-in-community with mild to moderate cognitive impairment to the cities, towns, and neighborhoods around them. However, there seems to be little focus on making connections between the wider community and older adults with moderate to severe dementia who reside in specialized care environments.

Hogewey posits the first few links in the chain, but there is still much work to be done in connecting standalone dementia communities with the neighborhoods around them, or even with other levels of care within a life plan community. How does one create distinct spaces for specific populations, while allowing controlled connections in others - balancing safety with freedom? The lines between secured and unsecured spaces may begin to blur, and staffing and technology must work together to complement this shift.

allowing residents to choose a **WIDER VARIETY OF ENVIRONMENTAL AND SOCIAL EXPERIENCES** will affect their ability to experience at-home-ness



TAKEAWAYS

- Designer:** Dementia environments should be designed to engage residents in multiple scales of interaction, rather than limiting to one or two of those scales.
- Policy shaper:** A great deal of new legislative work is necessary to encourage communities to allow resident engagement at the scales beyond the building.
- Operator:** Maximizing resident freedom and engagement with the broader world around them is an essential part of normalcy and individual choice.

Organization of the Public Realm



What Is It?

Employing principles from city and town planning to assist with wayfinding and encourage engaged wandering among residents

At Hogewey

The terminology used to describe the physical layout of Hogewey is similar to that used to describe any village or town, and that is no accident. The clear organization and hierarchy at Hogewey is important to aid in wayfinding and help visually and physically guide residents in their wandering. Clear spatial organization and good wayfinding reduce stress and confusion which could otherwise discourage residents from leaving their households. Even if the residents are not able to intellectually understand their surroundings and truly find their way home, the public spaces and paths are comfortable because their organization and scale mimic that of a town. Hogewey has a large population compared to other dementia communities, and without clear organization and a comfortable human scale, it would be very difficult to organize a population of that size.

Each of the five recognizable elements of towns and cities defined in Kevin Lynch's Image of the City can be easily identified at Hogewey - edge, path, node, district and landmark. The community has clear edges due to the nature of its population; the physical edges here create an undeniably secure environment. The widest path in the community creates a clear axis along which many public functions are located,

and smaller, narrower paths branching off of this space lead to households and courtyards beyond. Many of these paths are activated at nodes between courtyards with plantings, seating groups, or garden sheds to further create distinct, small-scale areas for residents to rest as they wander. The larger courtyards define districts, and while the material palette of the buildings is relatively homogeneous through all areas of Hogewey, the courtyards are recognizably different. Residents can choose if they want to meander through a textural garden, sit on a bench in an urban plaza, or gather around the bubbling fountain outside the theater. Finally, the atrium and its adjacent supermarket and restaurant constitute a major landmark within Hogewey. While the atrium does not have a physically commanding presence from the outside, upon entering the two-story space and open plan, it becomes clear that this is a special place. Through these recognizable elements, Hogewey becomes a logical place for anyone to navigate.

Interpreting the Pattern

Designing environments for older adults often revolves around the scale and number of the resident rooms and households. Based on the number of residents, the size and types of public spaces can be ascertained. The scale of



CLEAR SPATIAL ORGANIZATION and good wayfinding reduce stress

1



2



3

1. Main boulevards are wide with ample street furniture and wayfinding
2. Minor paths are narrower but still have organizing elements like plantings and openings
3. Major landmarks and nodes allow for community gatherings large and small

Hogewey is such that households can be designed in the manner of a town with legible districts, landmarks, and paths. But most dementia communities are smaller than that, either standalone or part of larger community with multiple levels of care. The challenge for designers then is how to provide a clear organization of the public realm at any scale. Each community must also carefully consider what its edges are, and how that edge condition - whether adjacent to other senior care or the wider community itself - defines the all-important balance between security and freedom. Is the edge continuous and impenetrable, or is it open at points to connect to an actual town or city?

Throughout the history of man, understanding place has been vital to being able to traverse it. This mobility often equated with survival, and while the stakes are not as high in contemporary senior communities as they were in

ancient times, understanding a place contributes to comfort and safety that's so important in achieving 'at-home-ness.'

Dementia residents are known for their wandering, and they will wander wherever they are allowed. Logical and comfortable spatial organization especially within the public realm will support safe wandering. Most dementia communities endeavor to create circuitous circulation so that residents are not constantly reaching dead ends and experiencing confusion and anxiety, but within that circuitry, there should be variety of scale and character of space for the residents to rest or explore engaging activities. Locating major public spaces such as dining, living, and outdoor spaces along the wandering paths will also help to create landmarks for residents and check-points with staff.



TAKEAWAYS

- Designer:** The various parts and pieces of the public realm should be distinct both in organization and in style, so that communities are intuitively understood by residents, staff, and visitors.
- Policy shaper:** Develop regulations that allow for flexibility within prescriptive environmental characteristics to favor logical organization of spaces over precise measurements and adjacencies.
- Operator:** Use the design of the community to your favor, encouraging residents to leave their households and engage with others in public spaces.

Multi-Sensory Engagement with Nature



What Is It?

Providing authentic, multi-sensory natural stimuli throughout communities and prioritizing true natural elements over artificial representations of nature

At Hogewey

At Hogewey, it's nearly impossible to avoid going outdoors. The organization of Hogewey facilitates frequent and close engagement with nature. The households are self-contained in that residents don't need to leave for their necessities, but access to all of the public spaces for activity and health require venturing outside and through one or more courtyards or public streetscapes. Residents have free access to nature during the daylight hours, and wandering outdoors is encouraged through many physical cues and aspects of the community design. The large courtyards have distinct characteristics, and the avenues between the courtyards have engaging storefronts and points of interest to attract residents to not only wander but explore. And of course, ample seating along the pathways offers opportunity for rest.

Being directly engaged in an outdoor setting as opposed to simply having a view outside for the majority of the day is highly beneficial to dementia residents. Hogewey has found that they have almost no incidences of sundowning partly because residents are so in tune with circadian rhythms. Almost as importantly, the outdoor areas facilitate multi-sensory engagement, encouraging wandering

and instilling an atmosphere of calm. Courtyards are filled with plants of various textures, many of which sway gently with the wind; a water feature in the theater courtyard fills the space with the soft splashing of fountains; and the warmth of the sun is interrupted as residents pass under elevated walkways and alongside rows of street trees.

Interpreting the Pattern

Technology has advanced to the point where communities can replicate many of the benefits of nature in a safe, controlled indoor environment. Lighting control systems change light color temperatures throughout the day to mimic the subtle changes in sunlight from blue to amber. Faux skylights, backlit panels designed originally for MRI rooms, can be used in spaces that don't have any natural light or views. While these solutions do stimulate residents, they do not measure up to the benefits of interacting with authentic elements of nature (Kahn 39). Authentic, natural experiences of nature present opportunities to engage multiple senses simultaneously, and many of them cost less than the artificial solutions - but that assumes the community is planned properly from the outset.

Many traditional dementia communities provide outdoor space to residents, but it's often on the perimeter of communities



1



2



3

1. One courtyard features a pond with a bubbling fountain
2. Another courtyard is urban in scale and appearance with small seating groups
3. Other courtyards are lushly planted with many textures of plants that sway in the wind

AT HOGWEY, it's nearly impossible to avoid going outdoors

or unable to be accessed without staff. Concerns abound when discussing free reign of outdoor space – what if a resident falls? What if they get sunburnt? What if they eat an unsafe plant? Many of these concerns interconnect with the idea of promoting normalcy: if we design normal environments and provide adequate training and staffing to address the fringe cases, these concerns seem considerably more manageable. Simply allowing residents to freely access the outdoors empowers them and allows them to experience nature on their own terms.

While Hogewey is located in a rather temperate climate and Northern Europeans in general have a greater acceptance of thermal extremes than

Americans, that doesn't mean that their policies can't be adapted for American communities. Residents should be afforded the choice and a certain level of independence to go outside even if the conditions aren't absolutely ideal. Even in the case of inclement weather, there are middle ground solutions to balance experience of nature and safety of residents. Primary, direct routes between households and public spaces could be outdoors, but secondary – longer, circuitous – routes could act as connection in times of bad weather. Indoor spaces can also be designed to better incorporate natural elements – atria, sun rooms, and living and dining spaces adjacent to patios abound in many communities, but their effectiveness can be increased with the use of operable windows, smart lighting controls, and careful design of natural elements in the space to engage more senses than just vision.



TAKEAWAYS

- Designer:** Create opportunities for multi-sensory engagement with nature through combinations of indoor and outdoor spaces, prioritizing authentic interactions over simulated experiences.
- Policy shaper:** Incentivize occupiable outdoor space, landscaping, and access to daylight in regulations that govern the physical environments for older adults with cognitive impairment.
- Operator:** Find as many ways as possible to say 'yes' to residents who choose to make outdoor and natural experiences a part of their everyday life.

Blurring Front and Back of House



What Is It?

Incorporating back of house functions into shared front of house spaces, decentralizing and deinstitutionalizing in order to democratize space and create a residential environment

At Hogewey

Hogewey is called a village, and while some of its workings are housed in 'back of house' areas, the majority of the functions that would typically be separated out in senior communities are seamlessly blended into public amenity spaces. Within the household, examples of this include the nurse station and kitchen. Each household has a small staff workroom, but most of the data entry and tracking relative to resident health and behavior is done through a nurse station housed in an armoire in the dining room. This theatrical variation on the open nurse station in many American communities takes up significantly less space and results in a residential manifestation of an institutional concept. The household kitchen also blurs the front and back of house, as it is where all resident meals are prepared and is open directly onto the dining room and living room of the house. Physically cooking all meals in the households continues the idea of normalcy – food doesn't just appear from a central kitchen to be reheated in the household; rather, the sights and smells of cooking fill the household well before the meal is served.

On a larger scale, the supermarket is the greatest example of this pattern. The supermarket functions as you would

imagine in a small village: anything needed for daily living is available for purchase by the household. But instead of selling snacks or trinkets merely as a novelty, this supermarket actually acts as the central storage for the entire community. Households buy all of their supplies here such as gloves, cleaning supplies, and incontinence products. Instead of hiding those items in a locked room, they are available for purchase out in the public realm. Items do not magically appear in a household; rather, they are budgeted for and purchased by staff for resident use and consumption.

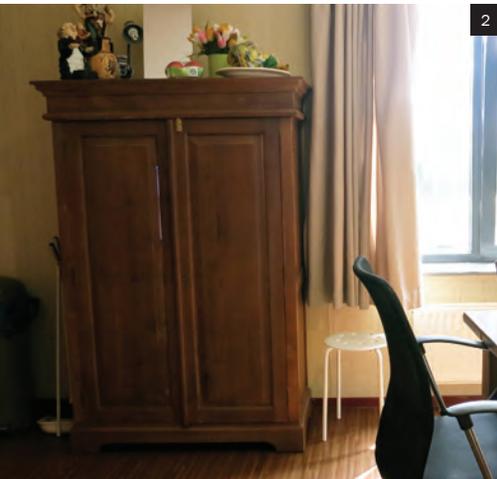
Interpreting the Pattern

Blurring the front and back of house in the household is not a new concept to the American senior living community given the rise of the Green House® movement, but it isn't something that came quietly into the industry. The use of a kitchen as the nurse's station echoes its traditional role as the center of household activity, but its use as a functioning kitchen presented many concerns that designers and operators had to fight to include. As the model has evolved, technology has made the open kitchen considerably more agreeable to regulators through lockable kitchen equipment which reduces risk of resident harm and more sophisticated fire protection systems that intervene in

A HOME IS NOT a curated, pristine experience



1



2



3

1. Staff cook full meals in the household kitchen, filling the space with smells of cooking
2. An armoire off the kitchen and dining room holds the nurse station computer
3. The community supermarket stocks wine and incontinence supplies side by side

the event of an incident. Making the case for a Hogewey-like supermarket in some American communities may be a hard sell now, but evolving technologies may help facilitate inclusion of such spaces for dementia communities as it did for open kitchens. Designers and operators should continue to push for logical combinations of spaces that provide the best service for residents and increase the face time of staff with residents.

Another challenge to blurring the front and back of house relates to the scale of communities. Many large senior communities with multiple levels of care are supported by a maze of back of house spaces hidden away from the residents. This amusement park-like approach hides away the back of house operations while presenting a pristine front to residents and visitors. While appropriate for a hospitality environment (where the goal is to not have to think about the 'back of house' stuff), there is something lost in translation in the context of a residential dementia environment. A home is not a

curated, pristine experience; 'front and back of house' constantly blur when you leave dinner's ingredients out on the counter or the recycling begins to pile up by the back door. These 'back of house' objects and phenomena are part of normal life for most American adults, and setting up a senior living environment to only be the 'front of house' is directly at odds with that expectation of home.

Furthermore, this blurring of front and back of house allows for organic social engagement. At Hogewey, residents don't have to go to the supermarket, but it becomes a way for residents to get out of the household, interact with staff, and have chance encounters at the store or in transit. From an operating perspective, blending support spaces into amenity spaces also presents opportunities for efficient use of space – as functions are combined, circulation is reduced, and several smaller rooms could be combined into one larger space.



TAKEAWAYS

- Designer:** Look for opportunities to design support functions into the common spaces, looking to logical solutions and evolving technologies.
- Policy shaper:** Allow for flexible approaches to support spaces that can be blended, resulting in a more normal, seamless experience for staff and residents.
- Operator:** Emphasize procedures that encourage staff to spend more time working among the residents instead of apart from them.

Ownership of Space



What Is It?

Instilling pride and creating a shared purpose by providing semi-public and semi-private spaces residents can call their own, which serve as a bridge between private and public spaces

At Hogewey

The organization of the physical environment at Hogewey demonstrates many levels of spatial ownership beyond the basic ideas of public and private. Residents occupy private bedrooms but share a bathroom with two to three residents as they would in a single family house. Residents share their common kitchen, living room, and dining room, all of which are decorated and operated according to their lifestyle group to impart a sense of shared ownership of and identity with these spaces. Each household has a front door with a doorbell, clearly instilling a sense of ownership to the household. Anyone entering the household is visually reminded that the dementia residents deserve the dignity of visitors asking to enter, rather than assuming they may cross the threshold into the residents' shared living space.

The porches and patios off of each household help bridge the space between the private households and the public spaces. These porches are partially sheltered with privacy plantings that form a green wall, making it clear to other residents and staff walking by that someone else lives there and occupies that space. Visitors and staff can freely access the porches and in

some areas may sit outside (should they be invited), but it is clear to them that the porches belong to the households. In some households, distinctive statues, lawn ornaments, and furniture project a character of the household out to the passersby, mimicking the front porches of any typical neighborhood. Just as within the households, the porches are not intended to be pristine, manicured spaces; they are meant to reflect the personalities of the people who live there. Any spaces beyond those porches belong equally to the community, not to any individual or household. This distinction becomes important when locating common spaces such as activity or multi-purpose rooms; some communities have started including these rooms directly within or adjacent to a household, but it's not normal to have a multi-purpose room in a house. Therefore, the act of leaving one's household, passing through the interstitial space of the porch, and going to these spaces reinforces a pattern of authentic living.

Interpreting the Pattern

The organization of households with their semi-private porches and patios should echo the spatial organization of many standalone houses and apartment buildings. The interstitial space between the private house and the public garden is



1



2



3

- 1. Porches provide a vital interstitial space between the household and public space
- 2. Resident-driven customization of spaces is a key tenet to instilling a feeling of ownership
- 3. Residents and staff must use a doorbell to enter another household

providing **INTERSTITIAL SPACES** allows the safe experience of ownership over the surrounding spaces

an occupiable middle ground. Visitors can approach and occupy the space, but can only enter the household with permission.

The concept of prospect and refuge explains this phenomenon well: as a resident leaves his household, he has a safe space that is still his own to observe the world around him before venturing out into it. Older adults, and especially women, tend to seek greater levels of refuge than the average population, so this subtle protection provides more comfort to many older adults living with dementia than may meet the eye. The physical design of these porches also matters: porches or balconies partially enclosed or backed up by two or three walls inherently feel more protected than those that project straight out

from the edge of a building. Those with dementia often experience anxiety and confusion, and providing comfortable interstitial spaces allows residents to safely experience ownership over the surrounding spaces. Residents who may be timid when venturing outside have the opportunity to make a decision to go outside or stay inside based on what they observe from the safety of their 'own' space.

This public-facing porch also gives residents the opportunity to craft the vision of how they are perceived by their neighbors, empowering their development of Self 3, or constructed self. Decoration of the porches at Hogewey is a larger-scale corollary to the practice of including memory boxes or shelves in dementia communities (though resident rooms in most households are often situated along short corridors, not facing public spaces). At Hogewey, the adjacency of these larger scale memory boxes to the public courtyards where other residents wander is an opportunity to present a combined sense of self for the household, linked by their lifestyle group.



TAKEAWAYS

- Designer:** Pay close attention when designing interstitial spaces – give purpose and protection to the spaces between private households and public areas.
- Policy shaper:** Consider regulations that shift the control and ownership over space away from staff, and toward residents.
- Operator:** Encourage residents to modify, occupy, or otherwise engage with a shared space that they can claim as their own.



Authentic Living

LITERATURE REVIEW

PATTERN 9: NORMALCY

PATTERN 10: AUTHENTICITY

PATTERN 11: RISK ATTITUDE



Two Types of Nostalgia

When debating current versions of the dementia village concept, it is difficult to extricate the premise of ‘nostalgia’ from the conversation. Prevailing wisdom purports that nostalgic environments are soothing for older adults living with dementia and may offer them the opportunity to relive a bygone era. While reminiscence therapy possesses empirically proven benefits for the cognitively impaired, a conceptual distinction must be drawn between reminiscence based on scientific evidence and nostalgia based on general sentiment. One approach from a field outside of gerontology is outlined by artist and critic Svetlana Boym in her essay ‘Nostalgia and Its Discontents.’ Her taxonomy makes a distinction between two types of nostalgia: reflective nostalgia and restorative nostalgia (13). Reflective nostalgia is more similar in use to the senior care word ‘reminiscence.’ Restorative nostalgia, on the other hand, is something different altogether.

Restorative nostalgia, according to Boym, is the attempt to conquer the past by reclaiming it and, often, rewriting it. It is the declaration of how much better it was in the ‘good old days,’ despite the days in question not being so good after all when examined with any amount of factual rigor. This ideological tool has found many

uses throughout recent history, especially in political and commercial rhetoric. A common tool of the advertising industry is the use of words and images to evoke an idealized past with which a product can be associated (Havlena and Holak 325). Since the past being evoked is subjective and wholly constructed, the feelings evoked by this rhetoric cross ethnic and cultural boundaries, a result that is ideal for advertising. As these constructed histories infect our collective imagination, however, truth and detail are traded for comfort and sentiment. Restorative nostalgia preys on the psyche by distorting reality in order to deliver a sanitized, inoffensive experience.

Instead of trying to conquer the past, **reflective nostalgia** (or reminiscence) accepts it with all of its complexities, offenses, and contradictions. Less concise, but more accurate, these shattered fragments – rather than a monolithic, unassailable narrative – are more compatible with the disjointed thought processes of a person with dementia. Furthermore, the emotions of reflective nostalgia are specific and personal, rather than universal, which makes them more likely to be preserved in the face of cognitive decline (Frank 177). Reflective nostalgia is healthy and normal, and has the ability to empower the personhood and individuality of older adults with dementia.



Restorative nostalgia temporalizes space like at a theme park (left), but reflective nostalgia spatializes time like at a memorial (right).

The Environmental Implications of Nostalgia

Environments and their design present an especially subtle application of this taxonomy. In Boym's writing, she distinguishes between the two types of nostalgia in the following way: restorative nostalgia spatializes time, while reflective nostalgia temporalizes space. While convoluted in the abstract, examples prove helpful in understanding this distinction. Beginning with restorative nostalgia, reconstructed main streets at amusement parks provide an accessible case. These attractions take a restorative nostalgia approach to the past (a generic, sanitized, turn of the twentieth century American main street) and spatialize time by creating discrete physical regions

that don the architectural guise of that previous era. One has the freedom to enter or leave these regions, but once entered, the 'past' is imposed on the person experiencing the space.

For reflective nostalgia, an archetypal example would be that of a memorial. It temporalizes space by inviting a resurgence of memories from or associated with a particular time or event, but requires the participation of the individual to achieve that emotional journey. A memorial to the veterans of World War II does not purport to be the snow-covered forests at Bastogne, but it creates a space where the individual is encouraged to access that time in a quiet, personal moment.

When considering the comparison between amusement parks and memorials, this distinction can perhaps be dismissed as intellectual trivia. When applied to environments for supporting older adults who are struggling to grasp whatever fragments of reality are available to them on a given day, the question becomes far more immediate and far more human. In living with dementia, the physical environment is just as important to their construction of self as the social environment (Davis 186). As expressed by architect and theorist Juhani Pallasmaa:

"Settings alter our brain, and our brain (or neural entity) changes our behavior and the world. It is now known that the architecture of each person's brain is unique, and its uniqueness stems partly from the places he/she has experienced" (Pallasmaa 10).

If the physical and even the neurological environment is a personal experience, and older adults with dementia are capable of (and entitled to) personhood, the homogenized environments of restorative nostalgia have no place in the highest

aspirations of designing environments that are friendly and supportive to these people.

While it's difficult to claim any dementia community is a perfectly authentic reflection of home, built solutions that rely too heavily on nostalgia fundamentally fail to acknowledge the fullness of self that older adults with dementia experience.

How can a contemporary environment offer opportunities for legitimate reminiscence while avoiding the pitfalls of restorative nostalgia? How can we foster environments that, like the residents who live there, are not bounded by a linear perception of time while maintaining a strong sense of authenticity and normalcy?

Normalcy



What Is It?

Prioritizing the conditions of everyday life that defined who a resident was before she transitioned to a care environment as opposed to the efficiencies and predictabilities of an institutional model

At Hogewey

Normalcy is at the core of nearly every decision made about the operations and the environment of Hogewey. The community was originally conceived from the idea that the priorities of an institutional setting were at odds with the quality of life for those who lived there. This idea influenced many of the core aspects of the operations at Hogewey, including the universal worker approach, the staffing ratios, and the programming. Additionally, this commitment to normalcy shaped the physical environment through the size and configuration of the households, the way the households are used as a module to create larger public spaces, the character and arrangement of common and amenity spaces, and especially the decision to allow wandering at the level of the neighborhood and campus instead of the household.

At Hogewey, normalcy is the starting point for decision making, not a secondary consideration. Many communities around the world set regulations and constraints as the starting point for making decisions about care, and then try to adjust to 'normal' as possible within those constraints. At Hogewey, the process is reversed; normalcy is the limitation, and rules and regulations can be solved for creatively within that constraint. Part of

the reason for this approach may be the general attitude about aging that can be found throughout Dutch culture: living better trumps living longer. Many of the typical rules and regulations associated with senior housing and care are perceived to prolong life through health and safety, but they ignore the quality of that life they are prolonging.

Interpreting the Pattern

Hogewey's origins have a similar chronology to those of the Green House® and small house movements in the United States, which espouse many of the same principles regarding normalcy. However, there are several differences in the two approaches due to the fact that small house models have historically focused on skilled nursing care and physical impairment, while Hogewey is focused on cognitive impairment. One of the biggest differences concerns movement; due to the limited mobility of residents in a skilled nursing small house, the ability to move independently outside of the household is not considered. Therefore, outdoor spaces, the public realm, and the physical or virtual relationship between households are not emphasized. The distinction between serving those with a physical impairment versus those with a cognitive impairment creates another important difference between nursing



1



2



3

- 1. Household rooms scaled for 6 or 7 people reflect single family homes
- 2. Residents continue to engage in activities of daily living
- 3. Identifying and supporting whatever constitutes 'normal' for residents is crucial to authentic living

small houses and Hogewey: the role of residents in actively participating in and making decisions about their home and their care. Resident-led decision making is a central tenet to Green Houses®, but that idea becomes a little bit more complex in a cognitive care setting; as a result, the cultural and lifestyle groupings approach becomes helpful for dementia environments.

AT HOGWEY, NORMALCY IS THE a starting point for decision making, not a secondary consideration

The future of the pattern of normalcy is in applying some of these principles to the broader communities where older adults already live, work, and thrive. Initiatives like Dementia Friendly Communities from Alzheimer's Disease

International and Dementia Friendly America are enacting change at the broader policy level. However, the success of such initiatives will depend greatly on the ability of existing care providers to understand their role in enacting changes and blending their communities with the neighborhoods, towns, and cities around them to create normal environments for older cognitively impaired adults.

Intersecting this pattern with the cultural/lifestyle groupings pattern also points to another important factor in interpreting the pattern of normalcy: normal life is culturally specific and cannot be replicated indiscriminately from one place to another. Building a dementia village in the state of Texas and designing a product that replicates the household, the food menu, and the activities in a traditional Dutch style doesn't make much sense. When interpreting the pattern of normalcy, the question one needs to ask is: 'who am I trying to serve, and what does normal mean for them?'



TAKEAWAYS

- Designer:** What organizational and aesthetic cues can be taken from the public and private realms to enhance the normalcy of care environments?
- Policy shaper:** Which regulations are out of sync with creating normal environments for older adults?
- Operator:** Which policies and procedures in your organization prioritize staff convenience and control over normalcy for your residents?

Authenticity



What Is It?

Understanding the difference between a genuine experience that appeals to us intrinsically as human beings as opposed to a simulated experience that appeals to us as a 'lowest common denominator'

At Hogewey

In terms of Hogewey's built environment, it is important to understand how the scale and arrangement of households promote an authentic experience of living in a home. The choice of six to seven residents per household reflects (more or less) the size of a Dutch family, which also allows the household common spaces of living room, dining room, and porch to reflect that scale. Each household is decorated and furnished to echo the lifestyle group living in the house. This allows for a level of customization and personalization to the physical environment based on the specific people living there and aims to ease the transition between home and a care environment. Finally, the households are stacked on top of one another, their facades articulated such that their shapes and materials mimic the built environment of Amsterdam and the surrounding area, further contributing to the authenticity of the environment.

At Hogewey, residents are allowed to wander between the households outside, exposed to the elements of nature, regardless of the time of year. Going outside is, in fact, required if you want to get to any of the campus-level common and amenity spaces. While the climate around Amsterdam is slightly more temperate than many in the

United States, they still experience four seasons, heat and cold, rain and snow. Besides the obvious benefit of exercise, this engagement with nature connects residents with their natural circadian rhythm and with the reality of the world around them. The benefits of older adults with cognitive impairment engaging with nature are well documented, and they can't be imitated for full effect.

A final (and often misunderstood) example of how authenticity informs the environment of Hogewey is that of the supermarket. In much of its coverage in the news, Hogewey's supermarket appears to be a simulated activity center that allows the residents to pretend to go shopping. In reality, the supermarket is a functioning retail space where residents and household workers shop for groceries and other necessities for their household. In addition, the supermarket also acts as 'back of house' storage for the medical and care functions performed in the households; on the shelves along with soup cans and cereal boxes are rubber gloves and incontinence products. This approach lends an authenticity to the supermarket as a part of the community, normalizes some of the more medical functions required by a care community, and cuts down on back of house space in the households.



environments that are sanitized of **PERSONAL AND CULTURAL MEANING** suppress the personhood of those who live in them

1



1. The community supermarket is a real store where staff and residents buy food and supplies for the household
2. Streetfront doors are adorned with mailboxes, flower pots, and trash cans
3. Small scale outdoor areas showcase the entry to each household

2

3



Interpreting the Pattern

Authenticity may be the pattern manifested at Hogewey that is the least understood by the casual observer. Unfortunately, it also seems to be the pattern that is being misinterpreted at the fastest rate. The distinction between restorative and reflective nostalgia and how they are manifested in both environmental design and staffing decisions becomes an extremely important matter. There is a fine line for designers to walk between false, generic facades and creating a nurturing, reflective environment to empower the personal histories and reminiscences of residents.

Some dementia care providers in North America attempt to appeal to the personal histories of their residents by choosing cultural touchstones based on loose chronology: in 2019, that means 1950's nostalgia including malt shops, barber poles, and Buick Roadmasters. Because all residents are being considered as a homogeneous group, these references

are necessarily vague enough to resonate with the widest group of people. This approach most closely mirrors the restorative nostalgia of the amusement park main street: it attempts to conquer the past by reclaiming it and rewriting it (Boym 15). Most dementia residents in 2019 are not coming from towns where anyone drives a Buick Roadmaster to the malt shop, so this approach accomplishes very little in smoothing the transition between home and a care environment.

Interpreting this pattern should involve a passionate empathy for the people who live in the care environments of today and tomorrow. Knowledge of their diverse cultures and histories should be cultivated and applied to the design of environments for older adults with cognitive impairment. Design of physical spaces intended to act as a resident's home should reinforce sense of self through authenticity and specificity. If we design and operate environments for vulnerable populations that are sanitized of personal and cultural meaning, we suppress the personhood of those who live in them.



TAKEAWAYS

- Designer:** Dementia environments need to be authentic in their presentation of nature, materials, spatial organization, and cultural context.
- Policy shaper:** Nostalgia in dementia environments raises important ethical questions that need to be examined, researched, and discussed.
- Operator:** Though it presents a variety of new challenges, authenticity is imperative to empowering the personhood of older adults with cognitive impairment.

Risk Attitude



What Is It?

Allowing residents to live a fulfilled life, which includes a certain amount of risk, enacting creative interventions only when absolutely necessary

At Hogewey

The most telling philosophy of Hogewey surrounding risk is their mantra 'don't shoot the bear until you see it' – i.e., don't solve a problem that hasn't happened yet. Following that logic, the community did not design permanent architectural solutions around problems that are only real for 1% of residents. For example, the second floor walkways have only 3'-6" high guardrails, not a typical 6'-0" fence as is seen in many American dementia communities. Additionally, a shallow pond and fountain with no safeguards is at the center of a major public space. Hogewey argues that these conditions are not presenting any risks to residents that are not present for people in their own homes or neighborhoods. They have no reported cases of anyone trying to climb over a second story guardrail, and they've only had one incident of a resident climbing into the pond for attention, which was quickly resolved by nearby staff.

The community does have families sign a risk waiver when they choose to move a resident to Hogewey; the waiver acknowledges that trading a small amount of risk posed by a 'normal' environment is greatly outweighed by the improved quality of life for their loved one. This runs parallel to a broader belief about aging that is found in many Dutch

communities: that the goal of aging should be to live better, not necessarily longer. The staff at the original care home on site assumed residents shouldn't go outside unless strictly monitored, but residents today are free to walk about, which has numerous health benefits (besides empowering their ability to make decisions). Not only does this reduce incidences of sundowning, but in a community of 150 residents, at most 10 are reported to need traditional physical therapy every week. Care workers report that typically no more than 2-3 people in the village at a time are in their beds during the day.

Interpreting the Pattern

Risk is a fundamental part of being human. Experiencing risk pairs fear with pleasure; humans seek risk to prove to themselves they can handle danger, which pleases them. However, all risk must be complemented by safety and comfort. Metaphorically speaking, humans want both the thrill of walking to the edge of a cliff and the assurance of retreat to the safety of a cave. We crave variety of experience – the higher the risk, the higher the reward. Living in a litigious society, the concept of embracing a risk attitude in a highly-regulated physical environment for a population whose behavior can be unpredictable may seem



1. Elevated walkway guardrails at Hogewey are at a standard height, rather than 6'-0" fences
2. Focusing on quality of life over length of life is a necessary shift in dementia culture
3. Ability to wander freely is fundamental saying 'yes' to resident choices, regardless of perceived risk

far-fetched. But without thoughtfully considered allowance of risk, progress slows. Accepting a risk attitude should not be seen as a flippant disregard for health

ALLOWING FOR RISK is a mechanism for creating normal conditions

and safety, but rather as a measured willingness to bend or challenge the rules with the goal of achieving better conditions. Often when design teams seek waivers from building or health departments, they come prepared with research and testing to substantiate their approach that calls for challenging the rules. Without a risk attitude, many innovations in design would not exist today, and research into how the built form can better support quality of life would stagnate.

When designing spaces for seniors, allowing for risk is a mechanism for creating normal conditions. Designers

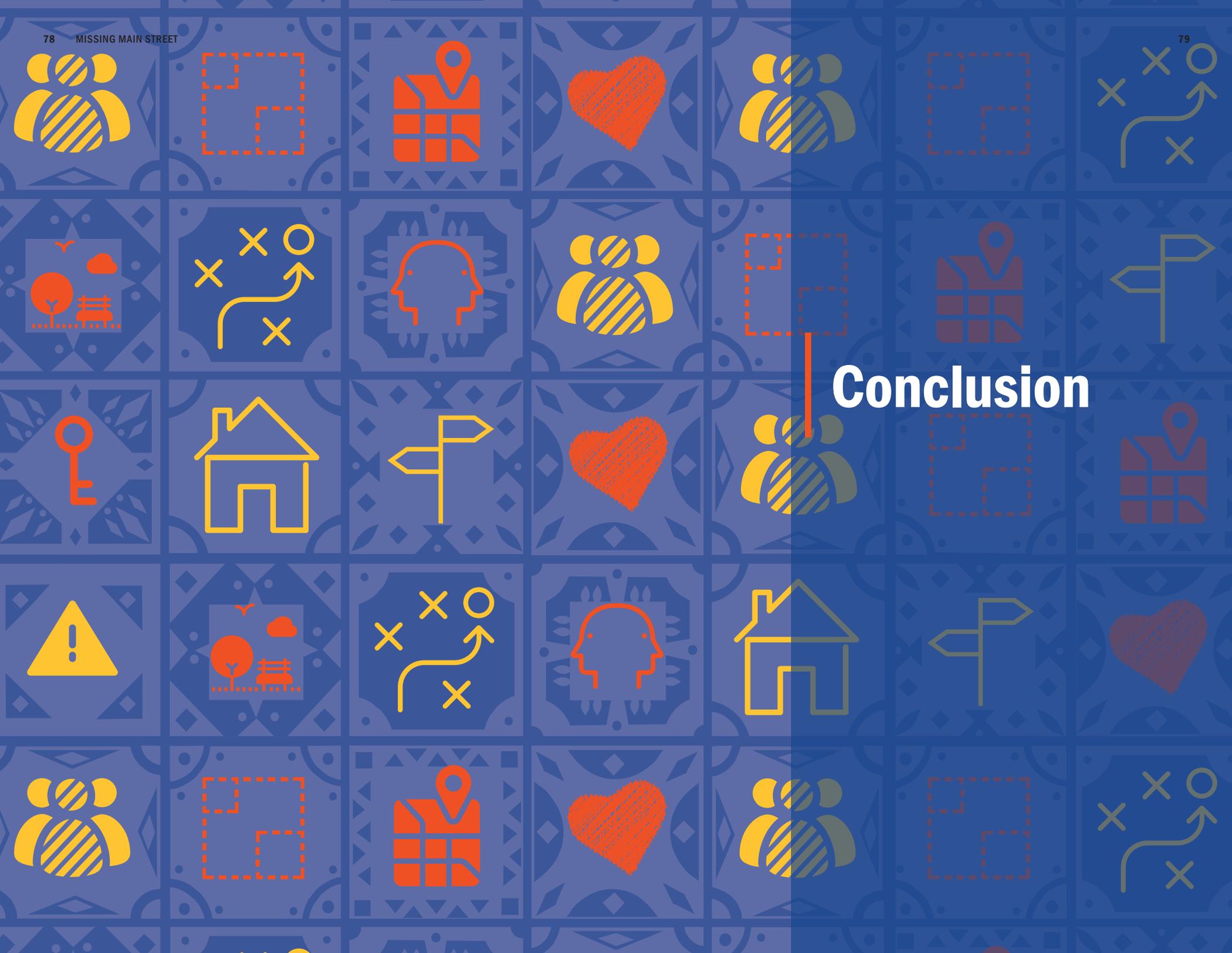
and operators must consider how residents moving from their own home will experience their space and perceive their shifting freedom to interact with it. Why should an environment in which residents have increased supervision present more barriers to fully accessing the spaces around them? Removing the ability for seniors to see or access spaces around them may in fact prove more agitating than lowering the barriers.

American culture is slowly evolving to accept the idea of aging well rather than just living longer. This shift in attitude allows for the creation of communities that truly feel home-like, and it promotes a 'yes culture' to best serve residents. While the movement is growing on the operations side, regulations have prevented bolder approaches to senior community design. Designers and policy shapers have a significant role to play in this evolution, but perhaps the greatest change will come from consumers. As adult children look for communities for their parents, what is an acceptable balance between safety, wellness, and freedom?



TAKEAWAYS

- Designer:** How can the physical environment allow older adults to experience the autonomy associated with risk, without compromising their safety?
- Policy shaper:** If the goal of regulations is to defend resident quality of life, does trying to protect them from any and all risk achieve that goal?
- Operator:** What is actually a risk that must be mitigated for everyone versus a perceived risk that can be handled operationally for individuals?



Conclusion

When we think of dementia, many of us think first of symptoms: forgetfulness, anxiety, and sometimes aggression. It is when we consider loved ones in our personal lives that we remember that people with dementia are just people: people with histories, relationships, thoughts, feelings, and desires, even if they are unable to experience or express them in the same way they once did. If we acknowledge these people as individuals, rather than as a collective based on their shared symptoms, then we are forced to conclude that there is no one solution that makes sense for every person: one size does not fit all.

Less than thirty years ago in the United States, many communities were still using physical or pharmaceutical restraints to address the symptoms of dementia by ‘tying up’ more than 500,000 older adults on a daily basis. The Untie the Elderly program from the Kendal Corporation, a not-for-profit provider of housing services, led to a 1989 congressional symposium of the same name which resulted in legislation that reduced the use of physical restraints across the country

DESIGNS SHOULD BE PROACTIVE
about enhancing the experience of the human person, not simply reactive in caring for an individual’s symptoms.

by almost 100% (Colburn). Shortly after, the first dementia-specific environments emerged, which focused on a residential approach, rather than an institutional one. Prototypes like Woodside Place

in Oakmont, PA and Copper Ridge in Sykesville, MD, pioneered the idea that homelike settings had real, measurable benefits for older adults living with dementia.

These prototypes were contemporaries to a the first inklings of a groundbreaking idea across an ocean, at a care home in the Netherlands. Innovators at Hogewey posited that there must be another way to care for older adults living with dementia that doesn’t involve institutionalization. Several renovations to the existing care home at Hogewey were based on the emerging ‘household’ model, providing feedback through basic trial and error. The ultimate conclusion was that the existing physical environment limited their ability to provide an excellent quality of life for their dementia residents. Thus, the idea of a dementia village was born, and in 1999 the re-constructed Hogewey dementia village began operation.

For all its success, even Hogewey fails to remedy a fundamental deficiency of dementia environments: older adults living with dementia are segregated

from the rest of society and kept apart in a particular building or ‘wing.’ The dementia village concept is revolutionary because it provides a ‘missing link’ that

demonstrates how fundamental the connection is between multiple scales of living and expressions of self and authenticity. However, when asked what they’d do differently if they built Hogewey again, its operators don’t hesitate to respond that they would have a stronger connection with the surrounding community (van Hal personal interview). While some work has been done globally to make our cities and communities more ‘dementia friendly’, no one has yet succeeded in providing a place where people with dementia are ‘just people’ by knitting together the dementia village and the surrounding community.

Defining the appropriate size and scope of a dementia community becomes a starting point for this question of connectivity. Operators must carefully consider how to balance safety and security of residents while allowing them to connect with places and experiences that are real and meaningful. Just as the Untie the Elderly movement recognized the dignity of older adults in dementia care, so too must the new generation of dementia communities acknowledge the full-person needs of their residents. Designs should be proactive about enhancing the experience of the human person, not simply reactive in caring for an individual’s symptoms. Some parts of the senior care industry are starting to accept the concept of not just living longer, but living well - but this must include people living with dementia.

Change of this magnitude is not simple. Conceptualizing a new model of care or

rethinking the best practices of an existing one is not easy. Consequently, we won’t and can’t propose a prescriptive model that proposes a one-size-fits-all solution. We have, however, left you with a series of eleven patterns that can be combined, altered, and re-imagined depending on your existing situation and your vision for the future. Not all of the patterns make sense in all contexts, and they will manifest themselves differently in different situations. But, after studying the Hogewey dementia village as a concept, and comparing it to existing research and best practices, we feel that these patterns provide a road map to a goal that is well worth pursuing: better quality of life for older adults living with dementia.

We hope to someday live in a world with physical places that support the fullness of self and normalcy for older adults living with dementia. We hope that these places will reconnect those older adults to the fabric of the communities where all of us live, work, and play. And we hope that the research, thinking, and application we’ve offered here provide a small step toward that goal.

The patterns presented in this document are intended to be a conversation starter, not a final solution, for advancing the design and operation of communities serving older adults living with dementia. Below is a summary of those patterns, which build on observations of the Hogewey dementia village and research texts on fullness of self, place & space, and authentic living.



Cultural/ Lifestyle Groupings

Grouping like-minded seniors with similar cultures, histories, interests and daily schedules, in order to help alleviate the stress of moving from an individual home to a senior community



Individual Choice

Leaving decision-making power in the hands of the older adults living with dementia, and putting the onus back on caregivers to figure out how to say 'yes' to their choices



Decentralized Resources and Decisions

Empowering frontline staff to be active participants in caregiving, which gives them a sense of purpose and a heightened ability to care for residents as individuals with a specific set of desires



Multiple Scales

Considering the experience of older adults beyond the scale of a single building, allowing them to engage the world around them without artificial limits



Organization of the Public Realm

Employing principles from city and town planning to assist with wayfinding and encourage engaged wandering among residents



Multi-Sensory Engagement with Nature

Providing authentic, multi-sensory natural stimuli throughout communities and prioritizing true natural elements over artificial representations of nature



Blurring Front and Back of House

Incorporating back of house functions into shared front of house spaces, decentralizing and deinstitutionalizing in order to democratize space and create a residential environment



Ownership of Space

Instilling pride and creating a shared purpose by providing semi-public and semi-private spaces residents can call their own, which serve as a bridge between private and public spaces



Normalcy

Prioritizing the conditions of everyday life that defined who a resident was before she transitioned to a care environment as opposed to the efficiencies and predictabilities of an institutional model



Authenticity

Understanding the difference between a genuine experience that appeals to us intrinsically as human beings as opposed to a simulated experience that appeals to us as a 'lowest common denominator'



Risk Attitude

Allowing residents to live a fulfilled life, which includes a certain amount of risk, enacting creative interventions only when absolutely necessary

WORKS CITED

Boym, Svetlana. "Nostalgia and Its Discontents." *The Hedgehog Review*, 2007, pp. 7-18.

Brill, Mike, "Archetypes as a 'Natural Language' for Place Making," in *Ordering Space: Types in Architecture and Design*, ed. Karen A. Franck and Lynda H. Schneekloth. New York: Van Nostrand Reinhold, 1994.

Colburn, Don. "Untying the Elderly." *The Washington Post*, 12 Feb. 1991.

Davis, Sandra, et al. "Guiding design of dementia friendly environments in residential care settings." *Dementia*, 2009, pp. 185-203.

Frank, Jacquelyn, "Semiotic Use of the Word 'Home' Among People with Alzheimer's Disease: A Plea for Selfhood?" in *Home and Identity in Late Life*, ed. Graham D. Rowles and Habib Chaudhury. New York: Springer Publishing Company, 2005.

Harries, Karsten. *The Ethical Function of Architecture*. Cambridge, MA, MIT Press, 1997.

Havlena, William J. and Susan L. Holak. "'The Good Old Days:' Observations On Nostalgia and Its Role In Consumer Behavior." *Advances in Consumer Research*, 1991, pp. 323-329.

Hildebrand, Grant. *Origins of Architectural Pleasure*. Berkley, University of California Press, 1999.

Kahn, Jr., Peter H., Rachel L. Severson, and Jolina H. Ruckert. "The Human Relation with Nature and the Technological Nature."

Current Directions in Psychological Science, 2009, pp. 37-42.

Lien, Laura L. "Home as Identity: Place-Making and Its Implications in the Built Environment of Older Persons." *Housing and Society*, 2009, pp. 149-170.

Lynch, Kevin. *Image of the City*. Cambridge, MA, The Technology Press & Harvard University Press, 1960.

Mallgrave, Harry Francis, "Should Architects Care about Neuroscience?" in *Architecture and Neuroscience*, ed. Philip Tidwell. Espoo, Finland: Tapio Wirkkala-Rut Bryk Foundation, 2013.

Messervy, Julie Moir. *The Inward Garden: Creating a Place of Beauty and Meaning*. Piermont, NH, Bunker Hill Publishing, Inc., 1995.

Oswald, Frank and Hans-Werner Wahl, "Dimensions of the Meaning of Home in Later Life," in *Home and Identity in Late Life*, ed. Graham D. Rowles and Habib Chaudhury. New York: Springer Publishing Company, 2005.

Pallasmaa, Juhani, "Towards a Neuroscience of Architecture," in *Architecture and Neuroscience*, ed. Philip Tidwell. Espoo, Finland: Tapio Wirkkala-Rut Bryk Foundation, 2013.

Van Hal, Eloy. Personal interview. 20 June 2017.

Westius, Anders, Kjell Kallenberg, and Astrid Norberg. "View of life and sense of identity in people with Alzheimer's disease." *Ageing & Society*, 2010, pp. 1257-1278.

IMAGE CREDITS

1. Photo by Hector Lopez on Unsplash
- 10-1. Photo by authors
- 10-2. Photo by authors
- 11-3. Photo by authors
- 11-4. Photo by authors
12. Photo by Jeff Sheldon on Unsplash
- 14-1. Photo by Cristian Newman on Unsplash
- 14-2. Photo by Luizmedeirosph on Pexels
- 14-3. Photo by Rawpixel.com on Adobe Stock
- 16-1. Photo by Scott Webb on Unsplash
- 17-2. Photo by Matthias Zomer on Pexels
- 20-1. Photo by Daniel Frese on Pexels
- 20-2. Photo by Pablo Rebolledo on Unsplash
- 20-3. Photo by Alina Vilchenko on Pexels
- 24-1. Photo by Rawpixel.com on Adobe Stock
- 24-2. Photo by Bohemian_Heart Tanusree on Pexels
- 24-3. Photo by Pixabay
- 28-1. Photo by Andrey Popov on Adobe Stock
- 28-2. Photo by Mehdi Sepehri on Unsplash
- 28-3. Photo by tloventures on Adobe Stock
30. Photo by Matthew Bennett on Unsplash
32. Photo by Emre Kuzu on Pexels
- 34-1. Photo by authors
- 34-2. Photo by authors
- 34-3. Photo by authors
- 36-1. Photo by Christopher Boswell on Adobe Stock
- 37-2. Photo by Jonatan on Adobe Stock
- 39-1. Photo by Tobias Bjorkli on Pexels
- 39-2. Photo by Valdemaras D on Pexels
- 42-1. Photo by authors
- 42-2. Photo by authors
- 42-3. Photo by authors
- 46-1. Photo by authors
- 46-2. Photo by authors
- 46-3. Photo by authors
- 50-1. Photo by authors
- 50-2. Photo by authors
- 50-3. Photo by authors
- 54-1. Photo by authors
- 54-2. Photo by authors
- 54-3. Photo by authors
- 58-1. Photo by authors
- 58-2. Photo by authors
- 58-3. Photo by authors
60. Photo by Edu Carvalho on Pexels
62. Photo by Maybe Tomorrow on Pexels
- 64-1. Photo by Benjamin Suter on Unsplash
- 64-2. Photo by Katherine Grace on Unsplash
- 68-1. Photo by authors
- 68-2. Photo by TheVisualsYouNeed on Adobe Stock
- 68-3. Photo by agneskantarak on Adobe Stock
- 72-1. Photo by authors
- 72-2. Photo by authors
- 72-3. Photo by authors
- 76-1. Photo by authors
- 76-2. Photo by Syda Productions on Adobe Stock
- 76-3. Photo by Chastagner Thierry on Unsplash

ABOUT THE AUTHORS

SPECIAL THANKS

Project Mentors

J. David Hoglund
 Martin Siefering
 Daniel Cinelli
 Richard Rosen

Graphic Design

Wendy Soto



JENNIFER SODO

AIA, LEED AP BD+C

Jennifer is an architect and designer in the senior living practice of Perkins Eastman, focused on design for dementia, biophilic design, and whole-person wellness. Her previous experience includes housing, higher education, and healthcare, and she draws on that background to identify opportunities for innovation in senior living. She strives to create both sustainable success for clients and stimulating living environments for older adults.



MAX WINTERS

RA

Max is a senior living planner and designer who is particularly focused on aging-in-community approaches, innovative dementia environments, and the transformative role technology will play in the future of aging. During his time at Perkins Eastman, he has worked with a variety of senior care providers to develop long term visions for their communities through strategic and master planning, and to realize those visions through the built environment.

If you would like to discuss this paper, please contact one of the authors or a member of the senior living leadership.

AUTHORS

Jennifer Sodo AIA, LEED AP BD+C
j.sodo@perkinseastman.com
646.225.5868

Max Winters RA
m.winters@perkinseastman.com
412.894.8345

SENIOR LIVING LEADERSHIP

Joseph Hassel IIDA
j.hassel@perkinseastman.com
312.755.1200

Martin Siefeling AIA
m.siefeling@perkinseastman.com
412.456.0900

Lori Miller CPSM, PC
l.miller@perkinseastman.com
412.894.8341

**PERKINS —
EASTMAN**

WWW.PERKINSEASTMAN.COM