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[Tsai, Mimi](#)

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Vernacular Healing Landscapes in Australian Aged-Care Gardens

Abstract

Designing for people's health and wellbeing is one important purpose for landscape design in healthcare environments. The concept of therapeutic landscapes has been applied widely in various healthcare settings. This research extends the concept of therapeutic landscapes in ordinary everyday context and explores the role of gardens in Australian aged-care facilities. Fieldwork shows aged-care residents reclaim the outdoor environment by actively shaping the landscape to create special meanings and embed memories in characterising their current living space. Findings suggest broadening the current understandings of therapeutic landscapes to incorporate residents' *vernacular healing landscapes*. This paper addresses a gap in existing literature and introduces the importance of vernacular healing landscapes in aged-care facilities for its holistic reflection of older people's landscape experiences and connection with residents' memories, which positively contributes to their health and wellbeing. It argues for future design to value and incorporate residents' vernacular healing landscapes in aged-care gardens.

Keywords: therapeutic landscapes, vernacular healing landscapes, aged-care gardens, healthcare, older people, health and wellbeing

Introduction

Therapeutic landscapes play an important role in the application of designing for health. Gesler (1992, pp. 735-736) first developed the concept and defined the term as “landscapes associated with treatment or healing”. Adopting this understanding, users' physical health was a priority in the designing of healthcare environments in early research. Clinical proof highlights the healing benefits of incorporating therapeutic landscapes in healthcare settings. Velarde and Tveit (2007) suggest psychological, physical and behavioural effects are the most commonly seen evidence of health effects related to research in therapeutic landscapes, for example a reduction in blood pressure, a decrease in anger or aggression behaviours, and an increase in the ability to concentrate while fatigued (Ulrich, 1984; Ulrich, 2000; Devlin & Arneill, 2003; Dijkstra, Pieterse and Pruyn, 2006 and 2008). Apart from people's medical needs, social aspects of the therapeutic benefits are also valued in similar research. Winterton (2017) suggests therapeutic landscapes provide affordances for more social interactions to older people. Marcus and Barnes (1999, p. 43) also suggest “gardens in healthcare facilities mitigate stress and improve other health outcomes to the extent that they foster access to social support for patients, families and staff.”

While supporting users' physical health continues to be one of the priorities in healthcare design, the paradigm and understanding of being healthy has extended **holistically** which includes people's

overall wellbeing. In recent years, the most common definition of health is provided by the World Health Organisation. It defines health as “a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity” (2006, p. 1; 2017, n.p.). As the understanding of health and wellbeing has evolved, the concept of therapeutic landscapes is also maturing and incorporating a more holistic viewpoint on health and wellbeing in recent years (Williams, 2017). Williams (2017, p.2) suggests that “healing can take place in everyday, ordinary places, whether a residential backyard, a hospital room, or an imagined landscape.” There is a body of work that explores the meaning of everyday spaces such as ordinary, domestic, everyday landscapes that also contribute to people’s health and wellbeing. According to Chalmin-Pui et. al. (2019), domestic front gardens as everyday spaces significantly contribute to people’s health and wellbeing. In reality, older people spend much more time in their domestic gardens as they may see gardening as an enjoyable way to spend the additional time available in retirement (The Australian Bureau of Statistics, 2009).

However, the current understanding of everyday garden space is still limited (Chalmin-Pui et. al., 2019). Bhatti, Church and Claremont (2014, p. 41) state that “even though having access to a garden space is very common in the United Kingdom, it is hard to understand how domestic gardens are used or experienced and their owners’ perception about the space.” They suggest that domestic gardens as important aspects of everyday landscapes have often been neglected in research. This is also true for gardens in aged-care facilities. Most people associated gardens in aged-care facilities with therapeutic landscapes or healing gardens (Davis, 2011; Marcus and Barnes, 1999). Eddison (2011) suggests this “everyday” sense of gardening is vital to acknowledge if landscape design is to unshackle itself from the medicalised discourses which have become dominant in aged care. Apart from the clinical focus, aged-care facilities are also home to some older people. It is important to emphasize the homemaking aspects in aged-care facilities for its positive contribution to residents’ overall health and wellbeing (Tsai, Cushing and Brough, 2020). There is a gap in the research to explore the role of gardens as everyday spaces and their meaning for aged-care residents.

Through gardening, a garden space could relate to health and wellbeing in a way that is connected to an individual’s quality of life rather than in a curative way in response to illness. Buck (2016) suggests gardens and gardening are important to health and wellbeing for their positive contribution in the way that many health care interventions are not able to provide. According to Wang and MacMillan (2013, p. 154), gardening is “a holistic approach that may help facilitate a mind-body-spirit connection” especially for older adults. Dahlkvist (2016) suggests having accessible outdoor space at residential facilities for older people promotes positive landscape experiences, which contributes to better health and wellbeing. Cutler and Kane (2011 p. 30) also suggest that “beyond therapeutic benefits, being outdoors arguably is positively associated with improved perceptions of quality of life” .

Everyday domestic living space such as gardens is vernacular and encompasses special purposes for each individual. Jackson (1985) suggests vernacular landscapes as informal, organic, unplanned, and connected to everyday lives. The word “vernacular” is derived from the Latin word *verna* or *vernaculus* (Finizola et. al, 2012). In architecture, vernacular architecture refers to buildings within an area or a region that are connected to its people and the culture (Glassie, 2000). Following the same concept, the term, vernacular landscapes, emphasizes the strong focus on the people-place relationships in everyday living spaces. It refers to the landscapes created by the people who dwell and reside in the place, which encompasses special emotional connections. Roth and Eckert (2011) explore the vernacular landscapes of assisted living, and argue for the co-existence of vernacular private and public spaces within assisted living care environments. This research reinforces the importance for residents to express their agency in their living spaces for its livability and home-likeness. It is important to create home-like environments in aged-care gardens (Tsai, Cushing and Brough, 2020). Similarly, Kimber (2004) suggests cultivation in vernacular gardens positively contributes to people and their dwelling.

Domestic spaces are an essential part of people’s life experiences (Jackson, 1985). Tuan (2003) suggests people’s experience is a combination of emotions, memories, senses and interaction. While it is important to understand the medical geography of therapeutic landscapes, there is also this “everyday” sense of vernacular healing landscapes that contributes to people’s health and wellbeing in a holistic way. Roth and Eckert (2011) suggest the vernacular connection in the therapeutic landscapes promotes residents’ positive association to their domestic living environment in the aged-care facilities. The notion of health should be incorporated with a broader notion of health and wellbeing in residents’ day to day lives. Despite this important focus on patient benefits and the physical design, extant research generates little understanding of residents’ experience in aged-care gardens and the meanings attached to them. In addition, Gesler and Curtis (2017) suggest “the importance of qualitative, non-clinical studies” which could contribute to a more holistic understanding of therapeutic landscapes. As a result, this research explores the role of gardens as everyday spaces in aged care facilities and the connections to residents’ health and wellbeing.

Methods

This research applied a phenomenological framework to explore residents’ landscape experience in gardens; it also guided my understanding of residents’ behaviours related to gardens and to function as an interpretive framework. From this standpoint, landscape experiences in gardens for residents should be understood as a complex mixture of emotions, feelings, thoughts, ideas, memories, attachments and meaning-making.

This research acknowledges the diverse definition of an “aged-care facility” in different social-cultural contexts. The term “aged-care facility” in this paper refers to an aged-care living

environment with independent living, as well as assisted living and care homes attached to the facilities. This includes supported accommodation such as residential aged care, nursing homes and aged-care hostels. It does not include places like “retirement villages.”

In Australia, there are over 2500 aged-care facilities (Australian Institute of Health and Welfare, 2018). Typical case sampling is a method that is based on the “likelihood” of other similar cases (Etikan et. al, 2016) as a result, it reduces constraints of time and resources by selecting the standard cases to represent. According to Hargraves (2014), the majority of aged-care facilities in Australia are low-rise facilities. The two chosen sites in this research are low-rise facilities situated in Brisbane, Australia. They are identified as Currumbin Green Aged Care and Brookwater Aged Care in this paper. Both facilities have various levels of care, such as independent living, assisted living and care homes. They also have leisure and hobby infrastructures, such as hairdressing salons, diners, swimming pools, BBQs in the facilities. Both sites have gardens and outdoor formal landscape design. In particular, Currumbin Green Aged Care has a sensory garden within the premises. Whereas Brookwater Aged Care has a linear style of garden around the main building. Currumbin Green Aged Care belongs to one of the providers in Australia. It is close to major shopping centres and walking distance to public transport and currently accommodates approximately 134 residences. The other research site, Brookwater Aged Care is an aged-care facility with 128 beds (including a 40-bed low-care aged-care home). It is managed by a not-for-profit church organisation and located in suburban Brisbane, approximately 30 kilometers from Brisbane Central Business District. Both sites have 24-hour staffing to support its residents with higher-care demands.

This application was approved by [University Name] ([Acronym] Ethics Approval Number [blinded]). This research does not include participants with dementia or any severe illness due to the ethical clearance. The names of the research sites and participants are all pseudonyms to preserve confidentiality.

I conducted unstructured interviews, go-along videorecording and digital storytelling as methods for data collection. Together, these three methods helped to effectively engage older people as research participants. Overall, 40 people, including 35 residents and 5 staff, were interviewed. The other two methods, go-along videorecording and digital storytelling, were optional depending on interviewees’ availability. There were 12 of the 40 interviewees involved in all three data collection methods.

The first stage was unstructured interviews. I consulted with staff who were working in the facilities to gain a general understanding of their facilities and sought recommendations for potential interviewees. In the initial unstructured interviews, I built up relationships and gained a general understanding of residents’ perception of space. Stage two was go-along videorecording. According to Kusenbach (2003, p. 456), ““go-along’ is an ethnographic research tool that brings

to the foreground some of the transcendent and reflexive aspects of lived experience as grounded in place". One of the major benefits for this method is to reduce interviewee's anxious emotions to get a more authentic perspective. Go-along videorecording in this research was in-situ. I invited participants to take a recording device in the garden and stroll in their selected garden. During the walk, interviewees naturally commented on the environment. The process took approximately 30 minutes for each interviewee. Stage three was digital storytelling. Digital storytelling is generally facilitated in a group workshop format. As a result of time and resource restrictions, this method was modified into a one-on-one style. Residents provided scripts and images and took part in voiceover recording. Residents storyboarded the images with their scripts. This method produced various visual and sensory data that are valuable in assisting in exploration of residents' landscape experiences.

A thematic approach was chosen to analyse the data. Data such as video and voice recordings were transcribed into text format. I applied the use of software NVivo 10 for Mac as an integral tool to process various types of data and assist with data extraction and coding. Lewins and Silver (2007, p. 82) suggest that applying software to manage data in the coding process assists in identifying the similarities, differences, and patterns in data. Research data including interview recordings, digital stories scripts as well as images were coded in Nvivo. According to Smith (2000), by using the approach of content analysis, large amounts of qualitative information and data can be systematically and objectively extracted to a smaller and more manageable amount of data. I created and defined various categories based on the topics of content and developed an appropriate coding system. Qualitative coding is a process by which researchers can identify data that are relevant or are examples of more general ideas, instance, theme or category (Lewins and Silver, 2007). All data was coded by the relevance of each theme.

There are three main themes that emerge from the data analysis that help to understand how aged care residents encounter gardens experientially and the significance and meaning of the landscape. Theme one is about how residents relate to their gardens therapeutically. Theme two is how residents make some of the shared spaces personal through a process of reclamation. Theme three is how residents engrave special memories into the current landscape. Each theme was incorporated with diverse but interlinking information.

Findings

Theme 1: Connecting to Wellbeing

Connection to wellbeing is a common way residents associate with their gardens. Based on research findings, I suggest there are two ways residents associate with their gardens: one is a therapeutic type of connection which means residents use a garden space in a healing and restorative way to regain their mental wellbeing in life. It refers to stress reduction or mood change from negative to positive after being in the garden. My fieldwork shows that some residents have

built up a therapeutic connection by working in their own gardens or being engaged in the outdoor environment.

Jenni from Currumbin Green Aged Care described her own experience of the gardens in the villages. In her digital story, she identified the connection with gardens and memories of gardens being healing to her.

... Gardens such as these are healing in a variety of ways. We all bring to the present, memories of the past. (Jenni, Digital story transcript).

Barbara has experienced similar therapeutic connections with her garden. She said:

I enjoyed many hours amongst my colourful perfumed roses and flowers of every kind. This helped me greatly in the times that I felt lonely or depressed. (Barbara, Digital story transcript).

The other type is a healthy connection, which means one without any implication of stress, disease or healing and therapeutic needs. Residents simply enjoy and embrace the garden or nature for the pleasure of connecting to it. The purpose of spending some time in a garden is for relaxation and enjoyment which also positively contributes to health and wellbeing. A garden is simply a happy place to be in. A healthy association with the garden is to take the health benefits from being in the garden. Ronda from Currumbin Green demonstrated her landscape experience as a positive association to her garden in the facility. She likes to get up very early in the morning and after some housework, she would sit in the garden and enjoy bird watching and the early morning quietness. Being in her garden has brought her peace and tranquility. The peaceful spirituality has created a sense of connection to her wellbeing with the garden.

I get tranquility within my garden; I find peace and tranquility within my garden. I don't actually get tranquility when I'm gardening, I find that very strenuous, hahahaha [Laughs] ... Well gardening is hard work; it's not tranquil. But when it's finished and I'm standing in my garden I find it very tranquil and peaceful (Ronda, Interview).

Lisa from Brookwater Aged Care would just relax and appreciate other people's gardens.

I don't think I do a lot of heavy thinking. I just relax and just enjoy it. [she was pointing at someone's garden, Picture 1] That looks impressive, the way they got the flowers filling in the gaps on top of the rocks. (Lisa, go-along videorecording).



Picture 1. A view to a garden on top of the rocks.

Linking wellbeing to **their** environment, **the residents reveal their perceptions of their landscaped gardens, which is** strongly connected to residents' health and wellbeing. It is also a place that provides opportunities to extend the concept of their home. In the next theme, I will explore residents' reclamation of outdoor space in the aged-care outdoor environments.

Theme 2: Reclaiming outdoor space

Residents claim ownership and assert agency in the outdoor spaces. This process has facilitated the people and place relationship with the current living environment rooted in **a significant way in** residents' lives.

Rose from Currumbin Green is an example. Rose's late husband worked in a nursery, therefore working with plants and having a garden has always been her experience. She can no longer look after plants in her garden as a result of vision impairment. In order to keep some plants in her living environment, artificial flowers are alternative options for her garden design (Picture 2).



Picture 2. Rose's garden is a mix of artificial flowers and real leafy plants (the red and white flowers are artificial flowers).

Garden is very important to me, it always has been ... But I can't do the one [the garden] out the front anymore at my entrance. They [the flowers at the front] are not all real. I've had to give up real flowers..... I can't deal with real flowers with the water and cutting their stems..... I have to have a garden and flowers around me and even on the balcony they're not real. Mostly it has to be artificial because it's just hard. There's enough hard things to do (Rose, Interview).

Rob's way of reclaiming landscapes is to request more idle space and design it **himself** with his **choice of** plants and decorations. He **has** always utilised the idle **(or in between)** spaces to mark his territory. He **has also** decorated a transitional space between ramps with his favorite pot plants, hanging baskets and garden ornaments (Picture 3). Every time I visited him, he showed me his new design and new look (Picture 3, 4 and 5) and referred to the space as "his garden."



Picture 3. Rob's garden view 1 (which was created in a communal space)



Picture 4. Rob's garden view 2 (the same corner in different visit)



Picture 5. Rob's garden view 3 (the same corner in different visit)

Another **resident's** story that **highlights** the use of plants to reclaim landscapes as **their own**, was related to a view through one of the rooms in Brookwater Aged Care. There is one *Paulownia tomentosa*, commonly known as Princess tree, in the Brookwater car park (Picture 6). When I first met Thea, she explained that this tree was first planted by Brian as a gift to another woman who stayed in her room 20 years earlier. Brian was one of the founding members of Brookwater Aged

Care who was involved in scouting the current location of the facility 30 years ago. At the age of 93, he is a resident currently living in the independent unit with his wife. Thea told me that the view of the Princess Tree from her room was planted by Brian for a woman who lived in her room previously because the lady was getting too old and fragile to go outside very often. This tree brought great happiness to her before she passed away. Thea felt grateful that she can still enjoy the view of the Princess Tree as a result of this special gesture. In her story, Thea describes:

.....It [The tree] is special to me as I had to leave a small tree of the same name behind at the house we were in when I came in here [Brookwater] so I delight in this tree very much and I thank heavenly father for the two wise people [who] planted this tree here. It has brought great happiness to all of us in Brookwater for many years (Thea, Digital story transcript).



Picture 6. The special Princess tree in the Brookwater car park area.

In the next theme, I will explore how special memories were embodied in aged-care gardens. Residents' reclamation of current landscape for their interests or special purposes on some occasions involved past memories and nostalgia.

Theme 3: Engraving memories in gardens

Aged-care gardens can provoke specific memories for their residents. This theme explores residents' special memories and experiences in gardens during their lifetime, and how these relate to their current landscape. Often, residents have recollection of a childhood garden or past experience that was significant to their life.

Childhood memories also contribute to the development of memories of place. Findings show that residents have recurring memories about either the place they lived prior to moving into an aged-care facility or their childhood gardens. Jenni from Currumbin Green Aged Care describes very

colourful memories of her parents' and grandparents' garden in her digital story. She attributes her extensive knowledge and love of gardening to them.

I have memories of gardens with my parents and my grandparents at a very young age. The garden represents security, beauty and nostalgia. My mother created beauty in her front garden for all the neighbours and friendships were made while admiring the flowers. The vegetables from my father's back garden augmented the diet of many..... (Jenni, Digital story transcript).

In a different facility, Clare had been moving frequently before she settled in Brookwater Aged Care. Gardens play an important part in her life at all the places she lived. Being in a garden or working in a garden is her way to connect with her memories.

Gardening always brings back memories to me..... it would bring back all of that. All those memories again (Clare, Interview).



Picture 7. Clare's garden view.

In the same aged care **facility**, Chris planted three hibiscus plants at a corner of a parking area. He is one of the hostel residents, which means he is living in an assisted-living environment at Brookwater where he has access to higher care needs. When I first met him, he took me for a walk to pick flowers from a hibiscus plant and brought them to the reception desk (Picture 8). He enjoys sharing his hibiscus flowers with people who walk past. This routine has become a daily ritual that enables him to pay tribute to his late wife, Emma.



Picture 8. Chris is putting flowers on the reception desk.

Chris and Emma were the founders of the Queensland Hibiscus Society. Their life together included a shared interest in hybridising hibiscus plants. *Hibiscus rosa-sinensis*, is one of the award-winning tropical hibiscus flowers named after them. After Emma passed away, their friends gave Chris three shrubs and planted them at Brookwater Aged Care in memory of Emma. **Since Emma passed away, Chris has developed a routine of picking flowers from the three special plants, just like the old days when he and Emma looked after their own hibiscus garden in their old home (picture 9).**

... Emma and I, we were very close. We were very dedicated. It meant a lot. The hibiscus were brought down here in memory of Emma because she owns it ... Even today, being a resident at Brookwater, I am able to go to one of the gardens and tend to a bush of my hibiscus..... Picking the flowers brings back lovely memories of my dear wife Emma. The flowers also bring admiration of much pleasure to visitors and residents and their families when the flowers are displayed at reception. So, my hibiscus flowers are continuing to bring much joy to many people (Chris, Digital Story Transcript).



Picture 9. Chris is picking flowers from his hibiscus trees

Discussion

Research findings suggest that despite the formal landscape **designs in certain outdoor environments**, residents still have a need to create their **own gardens, with their choice of plants and layouts**. There is a missing **emotional/personal connection** with the formally designed landscape in the current outdoor environment. Residents **used** every possible corner to plant their choice of design as the extension of their domestic gardens. Fieldwork shows the vernacular nature of aged-care gardens **includes** elements that positively contribute to residents' overall health and wellbeing. Aged-care residents made an effort to introduce their preferred domestic characteristics into the existing outdoor spaces as *vernacular healing landscapes* because they encompass meanings that are significant in their lives. Vernacular healing landscapes connect to residents' past experiences with special meanings. Vernacular healing landscapes in aged-care facilities are domestic, personal and private rather than communal, shared or collective. These types of landscapes might be different from the formal design but are meaningful to the residents, **allowing them to shape their own environment. It provides residents with a sense of autonomy and some control over their living spaces**. Findings also suggest that vernacular healing landscapes at aged-care facilities are short-lived and temporary. They are constantly evolving and changing just like anyone's home which is ever-changing. Even so, it represents owners' tastes, preferences, and personalities.

Vernacular style within the manicured, institutional landscapes

Aged-care residents have varying aesthetic preferences and are actively shaping and designing their outdoor gardens. Instead of the traditional design process of conceptualising, drawing, and

planning out a garden, residents in aged-care facilities cultivate their ideal landscapes using their favorite plants and ornaments. Australian aged-care residents are active shapers of their living environments. Fieldwork shows residents cultivate their living environment to satisfy their demand for either being creative or expressing their personal preferences and needs. This approach helps to reclaim ownership of space. By doing this, they are modifying the aged-care landscapes. Given the fact that residents are actively changing the outdoor professionally-designed environments that are part of the aged-care landscape, the acceptance of one or more vernacular styles in an aged-care facility may challenge a designer's professional aesthetic. However, it would be hard to assume that a neat and tidy, perfectly designed aesthetic is always appropriate or even desired.

Findings also suggest users in aged-care facilities are residents who are in fact actively engaged in the environment through their ongoing desire to "garden". Current residents made attempts to be part of the aged-care landscape by growing their favorite plants, putting their personal garden decoration in places that were not part of the formal design. Their strong motivation to take ownership in the current village environment has created vernacular healing landscapes that are intrinsically entrenched in their ordinary day to day living space in their aged-care facilities. According to Wahl et. al. (1999), older people seek opportunities to actively participate in their living environments. This fieldwork experience has shown that residents use their planting tools to modify the aged-care gardens according to their preferences. Gardening cannot be portrayed as merely one of the activities happening in the garden space. Gardening is creating and designing residents' own preferred landscapes which are vernacular and healing. Residents' diverse garden styles may interrupt the cohesive, institutional aesthetics. Instead, aged-care landscapes were replaced with candid, authentic and homelike appearances that were cultivated and an expression of the residents.

According to Jackson (1984, p. 85), the definition of vernacular suggests the environment was "designed with the local environment in mind". An environment that allows vernacular healing landscapes is a place that incorporates residents' connection to the place. The residents were actively engaged in shaping their environment over time. They perceive their garden space as a living design rather than a finished product. Just like domestic gardens, they are constantly changing, growing, and evolving. Residents create ever changing landscapes which reflect the evolving nature of landscape in aged-care facilities and acknowledge the ongoing desire to be part of the landscape. It also responds to a phenomenological way of thinking to incorporate the joining qualities of both residents and the landscape in an aged-care facility context. Residents' impacts on the gardens shows the iterative nature of vernacular healing landscapes in aged-care facilities.

Meanings and memories of domestic landscapes

Landscape and memory are inseparable in aged-care gardens. Important memories are concealed in day-to-day vernacular healing landscapes. This is also evident in the findings. Residents'

memories are embodied in their gardens. Most of my research interviewees expressed strong connections to their past experiences and memories when I asked about their current living environments. Their memories of previous gardens have become their predominant ideas of *the* ideal outdoor environment. For some people, childhood memories have strong influences on their healthy landscape experiences. For instance, in Barbara's (resident) case, her recollection of her childhood gardens plays an important part in her current garden experience. This resonates with Sebba's (1991, p. 395) statement that "almost all adults identify the most significant place in their childhood with the outdoors". The landscape is represented in both memories and the real environment. The meaning in the gardens create special connections to the aged-care facilities hence they can "experience the environment as meaningful" (Norberg-Schulz, 1981, p. ix).

Some memories of loss are related to the current landscape. For example, the loss of autonomy, land ownership, personal belongings or loved ones. Residents pointed out that accessibility to memorable landscapes in the aged-care gardens has helped in connecting their past experience. According to Head, Muir & Hampel (2004), gardens are places that reflect people's memories, traditions, and changes in life. From an experiential perspective, memories have particular meanings to older people because they reinforce a sense of place and make connections with the current living environment. Landscape and memory are inseparable; often, they are intertwined. A resident is not merely an older person who has physical limitations that need to be addressed in the environmental design. It would be beneficial for the environment to reflect with an understanding of resident's own personal history, individual experiences and memories that made them who they are today.

"Time" in vernacular landscapes was strongly connected with memories. Even though the settings and visual appearance of physical space was influenced by seasonal changes, the connections with the particular landscape memories are not influenced by time. To residents, "time" in the gardens stay in a mix of past and present. This helps residents to reconnect with their past; and positively assists the transition of relocation when a resident is allowed to recreate their old home in the new apartment (Marcus, 1992).

Gardens are domestic spaces for people to express their cultural memories and backgrounds (Head, Muir & Hampel, 2004). A garden can nourish the connection of the current environment and past memories for the residents. This strong bond with their past home was reflected as vernacular healing landscapes in the aged-care outdoor environment. It deeply connects residents and strengthens the bond between people and their dwelling. According to Bengtsson and Carlsson (2013) when residents were exposed to outdoor settings, they felt like being at home and related to the past; it is also a way to engage in their previous way of life. Garden landscapes are not only an extension of a resident's home, they are also an extension of a resident's memories. Allowing scope for residents to express their vernacular healing landscapes by modifying an environment to

reflect their memories on aged-care landscapes would encourage the connections to their current living.

My findings also show that acknowledgment of residents' memories is currently missing in aged-care landscape design. The after-story of the three hibiscus trees and the Princess tree is that the hibiscus trees were moved to a less visible location and the Princess tree was removed because of new development within Brookwater Aged Care. Even though repurposing space to manage with increasing housing demand is inevitable in this aged-care facility, the significance of the plants was disregarded. The importance of objects and plants in the existing landscapes should be understood so that meanings can be interpreted and perceived in a way that balances both management needs and residents' vernacular healing landscapes in order to create a sense of place and a sense of belonging to its dwellers.

Conclusion

Man (sic) dwells when he can orientate himself within and identify himself with an environment, or, in short, when he experiences the environment as meaningful. Dwelling therefore implies something more than 'shelter'. It implies that the spaces where life occurs are places, in the true sense of the world (Norberg-Schulz, 1981, p. ix).

Returning to an experiential point of view, landscape is a complex phenomenon. The environment comprises a series of people and place interactions. Often, age-care gardens are designed with people's health and wellbeing in mind. Literature on therapeutic landscapes has captured important concepts of health-aware practice in environmental design and landscape research. My research suggests going beyond the current understanding of the relationships between residents and gardens to enable more flexible landscape experiences that contribute to residents' health and wellbeing. It suggests that residents desire autonomy and personal preference to shape, or have an input into their own landscapes. It is time to extend the discourse of therapeutic landscapes to an everyday context and develop a resident-centric approach to perceive aged-care outdoor spaces. The evolving nature of landscape and residents will continue to enrich vernacular healing landscapes in aged-care facilities.

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