11

LIVING TOGETHER WITH DEMENTIA

Domestic Rearrangements

Lilian Chee and Lim Kun Yi James

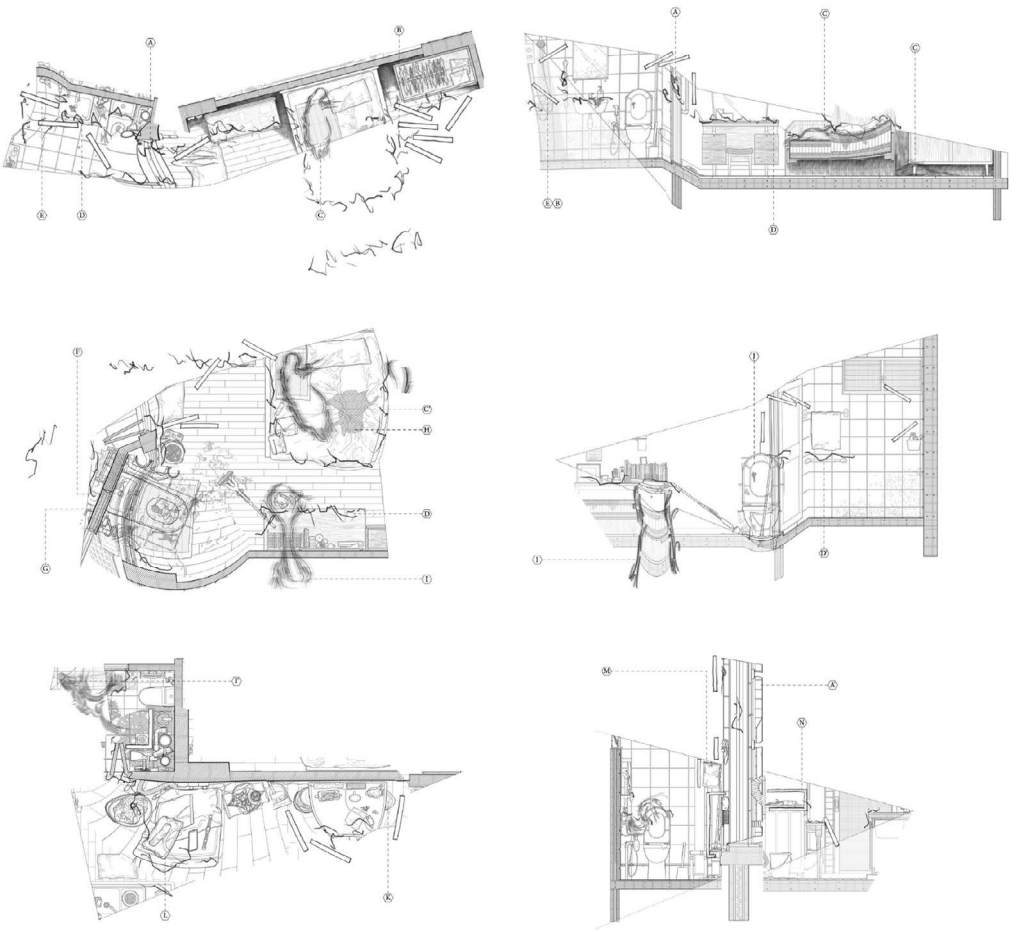

FIGURE 11.1a 'Hallucinatory Cartographies,' Lim Kun Yi James, *Please Give Gong Gong a Call*, 2023.

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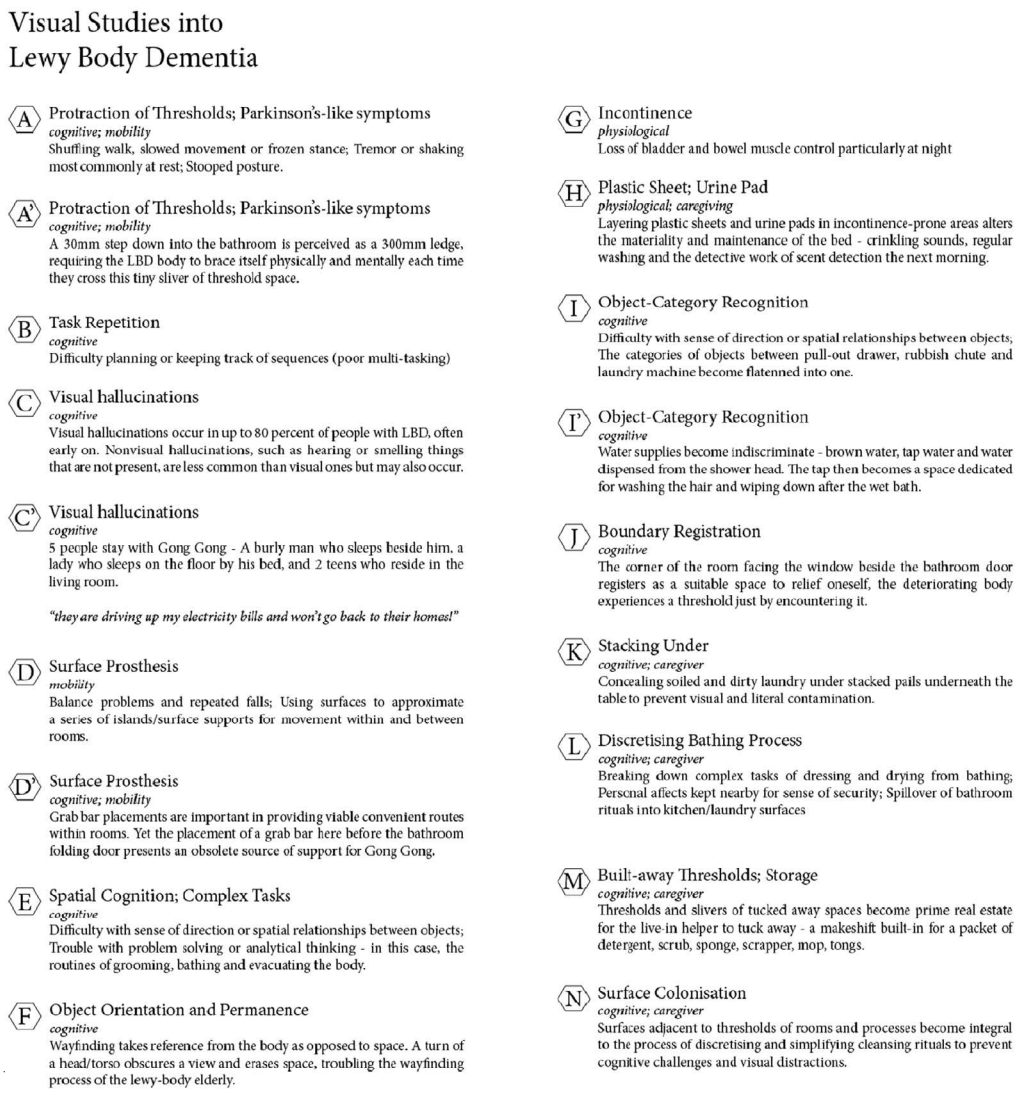

FIGURE 11.1b

Three sets of corresponding distorted and fragmented plan and section drawings of domestic interiors depicting the decline in visual-spatial cognition and mobility of a Lewy Body Dementia elderly.

Through a spatial-somatic reading of Lim's grandfather's (Gong Gong) flat, a series of fragmentary visual studies into the elderly man's behavioural and psychosocial episodes were produced. Paired with care work annotations and categorised Lewy Body Dementia (LBD) symptoms, the drawing is dialogically positioned between medical literature and LBD's affective experiences. In embodying Gong Gong's particularised modes of visual-spatial cognition, the drawing adopted unconventional techniques to overlay the difficulties of care and Gong Gong's distressed bodily postures. These include using a non-dominant hand and atypical digits to draw; binding the arm to restrict joint articulation; and transcribing hallucinatory recounts of care episodes experienced between Lim, his grandfather, the family and their live-in helper.

Dementia-in-the-world: Dementia, Ageing and the Spilt Self

> A 50mm step is a 500mm cliff drop. Gong Gong takes a long pause each time he reaches the bathroom door. Just like when he gets up from the sofa, you see him tensing. Preparing to shift his body and launch it into a new posture in a room that to him seems familiar yet not quite so. That moment of entering the bathroom feels like an eternity, pronounced in time, distance, and anxiety.

Dementia is framed in biomedical terms as a chronic and progressive condition affecting memory, cognitive abilities, emotions, motivations and behaviour which may debilitate the affected person's daily life (WHO 2023). Persons suffering from dementia, ranging in type and severity including vascular dementia, Alzheimer's disease, Lewy Body dementia and frontotemporal lobe dementia, amongst others, often experience spatiotemporal disorientation. This, in turn, produces difficulties in verbal communication, contextual understanding and social relations. Age is known as the biggest risk factor but because dementia is not categorised as part of normal ageing and is incurable, it is often seen as an intractable problem faced by individuals, families, societies and policy makers. There remains considerable stigma surrounding the illness (Higgs and Gilleard 2017; Lee 2024, 22–61; Swinnen and Schweda 2015, 9–20).

Challenging biomedical perspectives, there is now research from the fields of critical gerontology, performance studies and critical dementia studies which reframe dementia as a sociocultural construct as much as an incurable disease (Ward and Sandberg 2023; Zeilig 2014). The sociocultural construction of dementia emphasises a movement to recover personhood, an aspect often denigrated by the illness. Social initiatives and critical research into dementia aim to return dignity and humanity by considering degrees of autonomy and agency possible in the life of affected persons. Dementia activism (Bartlett 2014) and awareness of ageing citizens' rights have accelerated across many countries making possible transformed policies and collaborative platforms which bring together diverse parties including affected individuals, their families, their immediate communities, volunteer agencies, and state bodies involved in housing, care and health as stakeholders (Kiyota 2018, 2019a). The last two decades' return to the agential capacity of persons living with dementia (PLWD) for self-determination of their own lives has gradually shifted the approach from one of dependent care to enabling life with dementia in the midst of others (Hydén and Antelius 2017).

Yet, a persistence on normality, even in the life course of ageing, poses barriers for embracing radical change in mindsets. The elderly find themselves cornered by institutional demands to enrol as active stakeholders in increasingly normalised calls for 'healthy ageing' where illness lands them in a doubly alienated position of being biologically old *and* regrettably disabled by disease. To this end, critical dementia studies have situated dementia in the realms of disability and disability rights to challenge a 'curative imaginary' which aligns futurity with curative possibilities (Shakespeare et al. 2019; Thomas and Milligan 2018). Adopting instead an inclusive 'crip futurity' (Kafer 2013; Rice et al. 2017) which adapts and reimagines environments and social structures for differently abled bodies and minds means that mainstream ideas of dependent elderly care and its isolating environments which disconnect and further disable, also need retooling.

In 'Dementia is Dead, Long Live Ageing,' psychologist Julian C. Hughes (2013, 1:835) outlines why it is problematic when 'dementia' seemingly refers to a singular 'discrete disease

entity.' This tendency undermines dementia's range of conditions and symptoms. It oversimplifies dementia's complex suite of diseases. In doing so, clinical research and practice truncate the understanding of dementia's varied diagnoses and implications. Referring to the definition of 'dementia' as typically encompassing 'cognitive failure, chronic behavioural dislocation and psychosocial incompetence' (Berrios 1987). Hughes highlights how dementia research is often conducted through a 'hypercognitive' lens, erroneously eliding the psychosocial and behavioural impairment that accompany this condition. This argument outlines the pitfalls of isolating the experience of dementia as separate from 'ageing,' especially in the drawing of an artificial and often opaque threshold between diagnosis and pre-/un-/underdiagnosis: 'It is by no means simply a matter of scoring above or below a cutoff on a memory test. "Dementia" affects the whole person, and judgments about dementia must, accordingly, be whole-person judgments' (Hughes 2013, 1:838). Instead, Hughes (2013, 1:845) suggests a 'broadening concept' where the 'possibility of difference (of alternative ways to experience life)' is steeped within a 'host of biological, psychological, social and spiritual concerns.' Hughes' (2011) 'dementia-in-the-world' implies that old age is to be lived in the world, rather than sequestered away from the fullness and complexities of life.

Instead of pathologising old age, 'dementia-in-the-world' urges a consciousness towards the broad lens of ageing, countering social bias that consigns the elderly to debilitated modes of living (Bavidge 2005 quoted in Hughes 2013, 1:845). Hughes (2013, 1:846) notes that in engaging ageing 'as a proxy for living,' we can start to alter perceptions of the ageing body in 'ways that are creative and potentially therapeutic.' 'Dementia-in-the-world' necessitates a cultural and historical embodiment amidst other beings and requires comprehension of ageing persons through an understanding of their personal narratives and intimate life stories. Hughes also argues for the situated nature of human beings and that it is through relationships with others that our own subjectivity becomes realised: 'We need to see the person as a situated human being, who engages with the world in a mental and bodily way in agent-like activities, showing (amongst other things) desires, choices, drives, emotions, needs, and attachments' (Hughes et al. 2006).

The experience of care in the modelling of dementia-in-the-world asks for our 'whole sight' (Hughes et al. 2006) which means not dislocating the person from their various diminishing faculties. Such solicitude demands attentiveness and concern for the infirmed other as part of one's community. Instead of 'doing to' PLWD, the emphasis here shifts to 'being with' them (Hughes 2013, 1:847). Following this framework of being-in-the-world, 'our practical arrangements for and social attitudes toward our ageing lives' (Hughes 2013, 1:847) are altered. 'In-the-world' in this chapter refers specifically to the familiarity of domestic space as sites where relational identities are being co-constructed through modes of care, supported by new conceptions of spaces that allow for the elderly to being-in-the-world as they live out their lives.

To understand how an elderly person might possibly live freely amongst others first requires an understanding of how the elderly self realises/is realised and how s/he perceives/is perceived. Writing three volumes on ageing – *A Very Easy Death* (1964), *The Coming of Age* (1970) and *Old Age* (1977) – Simone de Beauvoir casts the ageing person as socially a marginalised and abject entity (Pickard 2023). Yet, the ageing self is not merely clarified biologically and socially but comes into being through a psychological process of personal discovery, the unravelling of a human condition which De Beauvoir focuses on. Philosopher Sara Heinämaa (2014) points out that de Beauvoir's thesis shows how

ageing is a sudden transformation, and that ageing poses an unexpected existential crisis since there is a tension between how we know ourselves and how others perceive us. We *become* old as we relate to and encounter others, who see in us an *other*, a disparate self. For the child, this passage of becoming other signals towards a delimiting adolescence, while in old age, the horizon is foreshadowed by death:

> The crucial idea here is that our own bodies are always given to us in a double way: originally and immediately as systems of sensibility and motility, and secondarily and mediately – via our relations with others – as perceptual and movable objects. These are not two separate realities but are two sides or dimensions of one complex phenomenon.
>
> *(Heinämaa 2014, 173)*

In *Old Age*, de Beauvoir reiterates the psychosocial consequences of this bodily disparity. In the chasm between 'the other-in-me' which manifests through the gaze of the other, and the 'for ever present me' which exists as an unshifting sense of self, De Beauvoir conceives a 'double alienation' (Gilleard 2022, 286) experienced in ageing. She lodges the condition of ageing as 'still recognizably my body but alienated,' both in the onset of realising self-identity and later from 'which old age only alienates further' (Gilleard 2022, 288). Jean Paul Sartre, whose work De Beauvoir responds to, iterates such alienation by distinguishing the precedence of the 'body-for-others' as an externalised and socialised entity realised for presentation to others, over the 'body-for-itself' a subjective and often hidden entity aligned with one's perception of oneself (Sartre 2003 quoted in Gilleard 2022, 289). Thus, old age materialises the self as external from the body and the elderly person is frequently 'realised through the gaze of the other' (Gilleard 2022, 288). De Beauvoir argues that in old age 'our being-for-ourselves – is incrementally subsumed beneath our embodiment for others' (Gilleard 2022, 289). The 'I' that we perceive ourselves diminishes until it is gone.

The argument for ageing-in-place, at home, is meant to mitigate this existential loss. Surrounded by people and objects the ageing person holds dear, the spilt between how they are perceived externally versus who they believe they are, is held in abeyance. Yet, ageing-in-place presupposes that 'place' is more or less stable. In this situation, how the home is configured – in its placement of objects, by the familiarity of social relations, and through persistence of everyday routine – is key. Furthermore, while architecture is specifically signposted as catering to different and often marginal groups, including women, children, the elderly, the disabled, the refugee/migrant, amongst others, truly inclusive architecture, for example, housing, should embrace all groups of people without needing specialisation. This means that if something is designed to afford good light, ventilation and thermal comfort; enable connectivity and freedom without compromising safety (latterly enhanced through assistive technologies); and encourage sociality by preserving contexts for new companions and tangible opportunities for reviving shared experiences, then that architecture should be adjustable for all groups. Hence, designing for dementia and the elderly – important aspects of humanity's diversity – is in essence designing better spaces for everyone.

In the second section, we offer a historical overview of Singapore's public housing landscape as it prepares itself for an imminently ageing demographic. Originally constructed around a youthful citizenry, since the 1990s, housing policies and design have

begun to address a population where more than 21% are expected to reach 64 years of age in 2026. There are several challenges to overcome. Firstly, care remains dependent on a unitary model of the family core, a structure coincident with Singapore's housing policies. Secondly, while public housing suggests shared amenities and spaces, affected

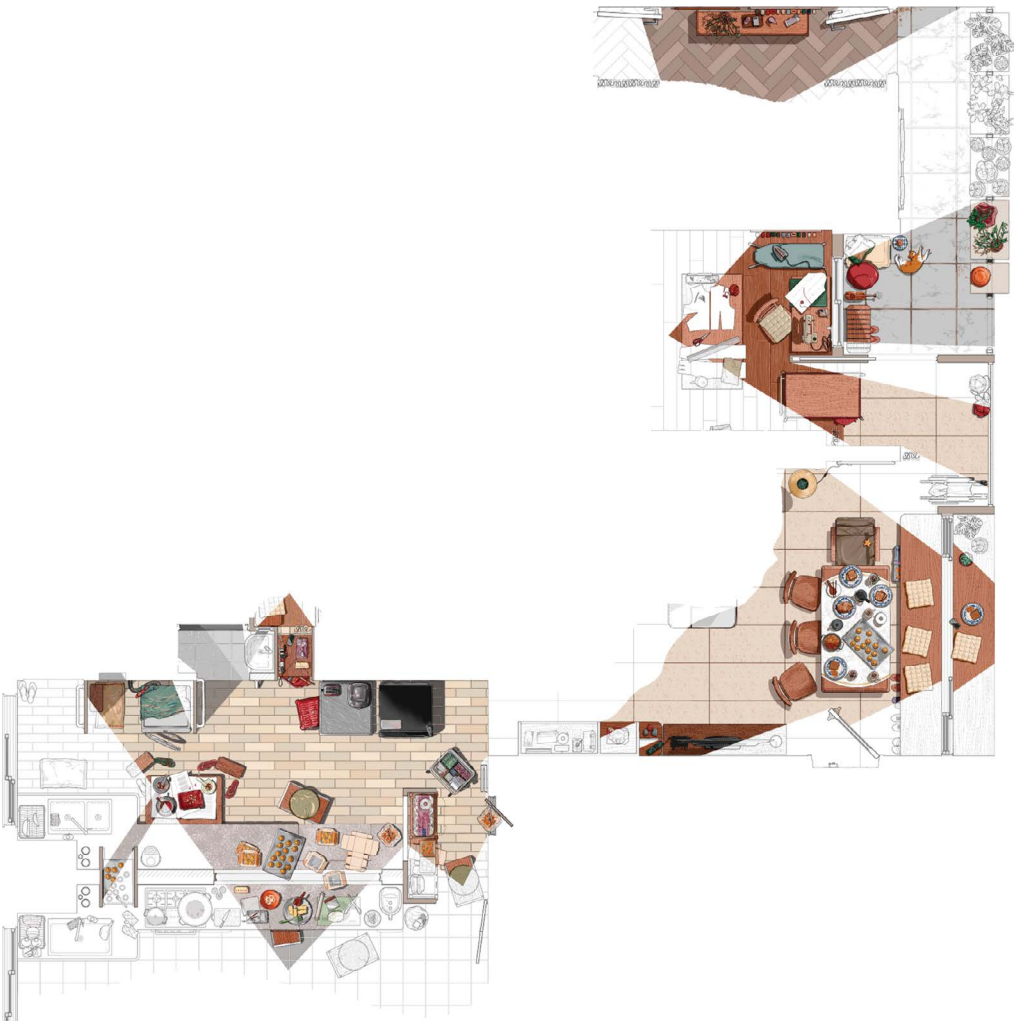

FIGURE 11.2 'Mealtime,' Lim Kun Yi James, *Please Give Gong Gong a Call*, 2023.

Plan drawing of lunch preparation itinerary, delineating a route through three adjacent housing units.

'Mealtime' depicts a travelling sous chef – Gong Gong – as he meanders across neighbouring flats amidst lunch preparations to oversee his neighbours' cooking techniques. The intricate repertoire of tasks to prepare a meal deters cognitive decline by engaging hand-eye-mouth coordination, olfactory and gustatory systems, and muscle and procedural memory (Lekker Architects and Lanzavecchia + Wai Design Studio 2020, 128). Echoing Julia and Paul Child's kitchen mapping diagrams, the drawing choreography co-creates mealtime through 'conscious enabling relationships to cooking techniques, ingredients, tools, and domestic spaces' (Penner and Rice 2024). By reconfiguring shared rituals to encircle Gong Gong's living and migratory body, concerted mealtime repertoires work to preserve his agency through decision-making exercises and interactions with loved ones in meaningful and involved ways.

persons and their carers are often contained within the insularity of their homes/flats as newer housing promotes more privatised and insular living with no common corridors, removal of ground-level open void decks and fewer neighbours living on each floor. Thirdly, centralised care facilities are separated from communal and domestic infrastructure, ultimately resisting opportunities for community-based models of care and mutual efficiencies within the extended networks of a lived housing block. In other words, housing models which prioritise privatised space, nuclear family living and centralised care amenities are at odds with the communality and familiarity desired by affected occupants and their families. Contrasting bureaucratic structures, we revisit the Ibasho principles for elderly care with its focus on relationality, tactility, continuity and agency.

In the third and final section, we demonstrate how doing architecture for dementia necessitates a constant movement between, and an attention to, different scales and objects – from the interior of the flat to the public spaces of the block; between the concerns of domesticity to matters of housing and planning. We will examine these shifts through a discussion of three creative practice outputs: *Objects for Thriving* (2022) by filmmaker Ian Mun and architectural and visual theorist and creative practitioner Lilian Chee, a short film on ageing, identity and reservoirs of memory, and *Losing Myself* (2015–ongoing) by academic Yeoryia Manolopoulou and architect Niall McLaughlin, a research on dementia and conceptions of space. We conclude with *Please Give Gong Gong a Call* (2023–2024) by designer Lim Kun Yi James, a design and drawing research on how to imagine public housing for dementia occupants and their carers. Additionally, Lim's annotated drawings feature in between the sections of this chapter offering a parallel narrative of architecture for dementia. In so doing, the ambition is to shift the conception of spaces for living with dementia from that of caring in isolation to an affective architecture of scenarios, bound by relationality and social compacts. The implication here is that architecture might recover its utopian purpose as a social condenser, serving a group where the fundamental question of what it means to be human is ultimately at stake.

Ageing in Place: Healthcare and Housing in Singapore, with a Rejoinder

> There have been many DIY modifications to Gong Gong's furniture. We reduced the height of his bed to prevent another accident. Then, he began to scratch his arm against the bed frame. An open wound formed. Mum said the elderly have "butterfly skin".

Dementia-in-the-world proposes that the world around those with dementia also change for the better. Indeed, designing for dementia is a test of architecture's ability to accommodate difference: the ageing population's changing neurodivergent identities and their transformed relationships with surrounding places and people. In this section, we discuss housing and healthcare infrastructure for an ageing population in recent Singaporean context, outside of the bounds of the institutional nursing facility. Ageing in the home for as long as possible is critical to maintain the older person's identity and body image. Given that autonomy is stripped from older persons through social bias, we ask what kind of care in the built environment might restore and rebuild this spilt self. Here, we situate architecture's role as mediating in-between biomedical and sociocultural perspectives. Beyond fulfilling urban restructuring plans and providing medical and care

infrastructure for an ageing population, we look to architecture's proactive agency in imagining and configuring possible scenarios where the elderly might thrive.

Following United Nations' standards, a nation assumes 'super-aged' status when the proportion of its population aged 65 and above surpasses 21% (MCA 2024). In Singapore, national-level healthcare initiatives, policy-informing research and care frameworks preparing citizens for the inevitability of old age are fully operational. During the 2023 President's Address, Minister for Health and Minister-in-charge of Ageing Issues, Ong Ye Kung, unveiled *Healthier SG*, a national enrolment-basis healthcare initiative spearheaded by the Ministry of Health (MOH) in response to the country's oncoming status by 2026. Encouraging early disease detection, tiered financial assistance schemes for chronic conditions, and monetarily incentivised adoption of healthy lifestyle programmes (MOH 2022) the rollout mirrors social pressures and national priorities confronting Singapore's once-youthful population.

By 2030, Singapore will join the ranks of more mature nations like Japan, Germany, Italy, South Korea and the US (Visaria and Malhotra 2023), far more rapidly than her global counterparts with a quarter of its citizens constituting this metric. According to Singapore's Ministerial Committee on Ageing (MCA), an expected 83,000 elderly residents will live in isolation and roughly 100,000 elderlies will suffer mild disability, requiring assistance to conduct minimally one daily task by 2030 (MCA 2023, 8). Refreshed in 2023, the *Action Plan for Successful Ageing* led by the MCA expounds three core pillars: 'Care, Contribution, Connectedness' to galvanise government agencies, voluntary welfare organisations, academic research, corporate sectors and community leaders (MCA 2023, 7). A decade-long funding for a multi-ministry taskforce involving health, housing and transport sectors will reform transport networks and domestic infrastructure to enable active ageing and enhanced care services (MCA 2024). Since 2014, 36 Silver Zones in designated housing estates have pioneered safer elderly mobility (MOT, n.d.) in line with age-friendly neighbourhoods. Active Ageing Centres (AAC) foster community partnerships with religious organisations and interest groups to broaden the reach of care networks.

Dementia management assumes a key focus with 1 in 10 Singaporeans aged 60 afflicted (Subramaniam et al. 2015). Following the shift to early identification, assessment and management, 16 memory clinics, 61 Community Outreach Teams (CREST) with Post Diagnosis Support (PDS) service and 24 Community Intervention Teams (COMIT) island-wide form an on-ground social armature for at-risk seniors and caregivers (MCA 2023, 37). Enhanced research on dementia, particularly scalable and novel care models demonstrating capacities in delaying and managing dementia are nationally funded (MCA 2023, 38).

A longitudinal design ethnographic study (AIC, CLC, and SUTD 2019) found that PLWD and caregivers are more sensitive to urban risks and stimuli, noting that built environment changes should 'introduce choice and new purposes incrementally' and 'preserve spaces that hold positive familiarity and value for residents' (Chiu and Lim 2023, 103). Pilot community-based participatory action research (CTPCLC and Dementia Singapore 2020) also engaged PLWD and caregivers in grassroot community workshops to raise dementia-awareness and implement murals as wayfinding anchors (Nanda et al. 2022). Noting the rise in Young-Onset Dementia and the rippling impact of dementia on family caregivers, Dementia Singapore explores individualised care, bringing support services

into the home and neighbourhood to defer admission into specialised care facilities that heighten delirium and accelerate cognitive decline in absence of familiar spatiotemporal routines (Nanda et al. 2022). More senior volunteers are participating in befriender programmes, acting as caregivers to peers through meal preparation and para-counselling services (Ng and Koh 2023).

In large part, these schemes exist as social compacts requiring not just top-down funding but also ground-up initiatives, anticipating that demand for eldercare over the next decade might overwhelm national healthcare capacities if not managed downstream. With most Singaporeans residing in public housing, the issues of ageing, care and connectedness have decidedly become key threads to the rejuvenation of ageing housing estates. In effect, the most relevant place to understand the needs of ageing residents is to study their needs at home.

Housing almost 80% of the population nationwide (DOS 2023), Singapore's leading public housing agency, Housing and Development Board (HDB hereafter), continues to be influential in its research and policies for growing together with the country's rapidly ageing population. HDB has been similarly pre-emptive in its policies on the changing resident demographic. Such policies transition from the preferred nuclear family popularised in the 1970s to an extended family structure in the 1990s. Several national initiatives since the 1990s address homeownership for an evolving workforce by shifting from housing provision for married couples with children to new singleton occupants and a burgeoning elderly demographic. These include priority balloting schemes and housing grants for homeowners who choose to stay near parents (HDB, n.d.-b). Across flat typologies, HDB has provided several senior housing options including new and resale multigenerational flats and purpose-designed community-care apartments launched in 2021 with pre-fitted senior-friendly fixtures (HDB, n.d.-c). Since 2009, the government purchases a portion of the lease for older flats through the Lease Buyback Scheme, allowing elderly homeowners to remain in their homes with lifelong fixed-sum monthly payouts until the residents themselves expire (HDB, n.d.-a).

Estate-scaled pilot schemes like integrated purpose-built high-rise housing village for the elderly were realised in Kampung Admiralty (2015) (Zhuang 2020) and planned for Yew Tee (2027) (Lin and Chan 2021). HDB's most recent health-focused age-friendly neighbourhood and precinct design, the Health District @ Queenstown, was announced in 2021. Situated within one of Singapore's oldest housing estates, the pilot scheme for research and policy on integrated health and living is a multidisciplinary and cross-sector effort (HDB, NUHS, and NUS 2021) to create an environment affording 'preventive health and care delivery programmes' reconfigurable to other housing estates (HDB 2021).

Singapore's coordinated national drive to prepare for ageing through healthcare initiatives and housing provisions is significant. At the same time, intensively choreographed age-friendly infrastructure could also be conceptualised to remain intentionally 'unfinished,' open to occupant input. Co-experiencing such infrastructure – a place for many bodies and minds, bringing together young adults and children together with the elderly – can begin to address issues of isolation and loneliness often exacerbated by exclusively age-focused design. Co-creation is key to ownership, since 'community is something that we make with others' (Kiyota 2018, S49). Today, the oldest public housing estates in Singapore have either been upgraded to cater to new demands of the multigenerational

family or demolished to make way for ageing residents and shrinking young families. Collectively, these Estate Renewal Programmes – introduced in 1995 in alignment with HDB's 5-year building programmes – often involve a complete overhaul of older housing stocks, including demolishing landmarks crucial for memory and orientation. The wholesale renewal of neighbourhoods departs from current efforts to 'anchor ageing in the community' (MCA 2024). Environmental gerontologist Emi Kiyota (2018) emphasises that the challenge for architecture is to create an environment that does not sequester the elderly away but provides connectivity to the world at large so that elders can be supported without having to drastically change their lives or sever relationships.

In the Queenstown pilot, the Margaret Drive Active Ageing Centre could potentially distinguish itself. A ground-up initiative to engage seniors in varying degrees, from programme organisation to workshop facilitation, or simply participating (Li 2024), it is a collaboration between local social service agency FaithActs with global non-profit Ibasho, founded by Kiyota. *Ibasho* which translates to 'a place where you can feel like yourself,' is an elder-led community that engages the elderly population as 'change agents' (Kiyota 2019a, 172). Founded in 2011, the eldercare model was pioneered in the town of Ofunato following the devastation wrought by the Great East Japan Earthquake. Since then, Ibasho has culturally adapted and led elderly programmes in other post-disaster sites including Nepal and the Philippines (Aida et al. 2023). The elder leaders and community members planned, built and still lead operations and programming of the Ibasho Café, which has been instrumental in the physical and psychological recovery of the Ofunato community. In its first 6 years of operation, the Ibasho Café has served more than 70,000 people and hosted more than 5,250 events, at which elders shared knowledge on traditional cooking, organised a farmer's market, led afterschool care groups and showed young people how to manage daily life without electricity (Kiyota 2024).

Kiyota (2018) asks if there is a middle ground between well-intentioned institutional care on the one hand, and keeping the elderly living for a longer time in their own homes, on the other hand. Through Ibasho, the aim is to change elderly care mindset from that of 'total independence or near-total dependence' into one of interdependence and relationality. The organisation works with elderly leaders through formal and informal ways to 'co-create physical infrastructure that is then managed by the elders' (Aida et al. 2023, 1). Through the social and collaborative placemaking process, a robust social network can grow and social capital is strengthened between community members. The Ibasho method focuses on relationality, interdependence, continuity and tactility, privileging use of existing sites and systems which are recognisable, adaptable so as to grow together with their occupants.

In *Home Bodies,* literary critic James Krasner (2010) similarly advocates tactile and embodied domesticity as central to identity-construction. He argues that life-altering events such as grief, ageing and chronic illness demand a somatic reconfiguration of our relations with our homes, memories and identities. Reconceptualising domestic space through tactility instead of kinaesthesia, 'one we push and rub up against rather than moving through gracefully' (Krasner 2010, 16), the home is constituted primarily through relations of attachment and togetherness, as opposed to isolation. Tactile domesticity informs an occupant's 'body schema' as opposed to their 'body image.' The former 'describes the continual, sensorimotor mapping of the body in relation to its immediate surroundings,' while the latter constitutes the 'neural self-representation of one's body in

relation to surrounding space, based in part on memory and habit' (Krasner 2010, 16). For the elderly whose cognitive abilities are in decline, a body schema's affective domestic space allows for new experiences and new memories to be made.

Advocating a middle ground, Krasner (2010, 28) asks how to mend the binary between 'the healthy and the impaired body,' especially given that other bodies – in grief, in pain, in confusion, under stress – are essentially fragmented rather than healthy and whole. He references feminist author and bioethicist Rosemarie Garland-Thompson's (1997) work on the figuration of the 'culturally normative body' where spaces built for the normative body inevitably polarise and debilitate non-normative bodies, 'The cripple before the stairs, […] the amputee before the typewriter, and the dwarf before the counter' (Krasner 2010, 23). This universal body image is entrenched in Ernst Neufert's ubiquitous Architect's Data (Neufert and Neufert 2012), a handbook for architects (Boys 2017, 141). Instead, the body schema depends on rituals, relationships and interdependent interactions between ourselves and the people around us which that 'other bodies become incorporated into our body image' (Krasner 2010, 33). We are defined through our relationality with people and things around us. Such relationality is accentuated particularly for the elderly whose definition of selfhood becomes increasingly eroded through social bias and isolation. Hence, tactile domesticity is an affective and relational space made of objects and people, routines and practices, which grow and adapt into a domestic realm where we 'understand our bodies as companied, accompanied, beloved' (Krasner 2010, 33).

In this situation, where and how architecture might operate most effectively, and what forms it could take, if not on the scale of the building, need reconsideration. In *Architecture and Affect*, Lilian Chee (2023a) argues for architecture's potential to operate critically from the middle ground. Placing itself in connection to, and in the midst of things, rather than a standalone object, architecture is conceived as a situation-specific construct which leverages on relationality between sites, human and nonhuman subjects and objects, practices and relationships. Thinking through a situation means that architectural methods cannot proceed from *a priori* assumptions of what is best for the dementia elderly from architecture's perspective. Best practices of safety and security in design for example, often lead to isolation, alienation and anxiety amongst elderly and their caregivers (Kiyota 2019b; Manolopoulou 2022). To create architecture from within affective dementia relations and situations means to listen for, record and translate new patterns of becoming: fear towards shadows, forgetting and remembering via objects and arrangements, enjoying a day out in the sunshine, being around with others who care. In a situation where the ageing self requires a scaffolding of things, relationships and rituals to create affective contexts for new memories and experiences, the opportunity is not just to adjust architecture for an elderly population but as de Beauvoir has argued, the occasion opens itself to changing architecture so it accommodates all minority groups.

In other words, making and thinking architecture through relationality benefits everyone. The shift in perspective here will entail relooking at architecture in two ways: first, as spatial strategy for sociality, longevity and respite, and second, as creative modality for new expressions of ageing and dementia drawn from lived experiences. These shifts will influence how we see, make, draw, think about, and with, the ageing occupant, or imagine what PLWD, might appreciate. If the future horizon seems increasingly limited for the elderly, how can spaces and ways of living be imagined, moving away from an unlimited futurity towards a richly textured and eventful present time?

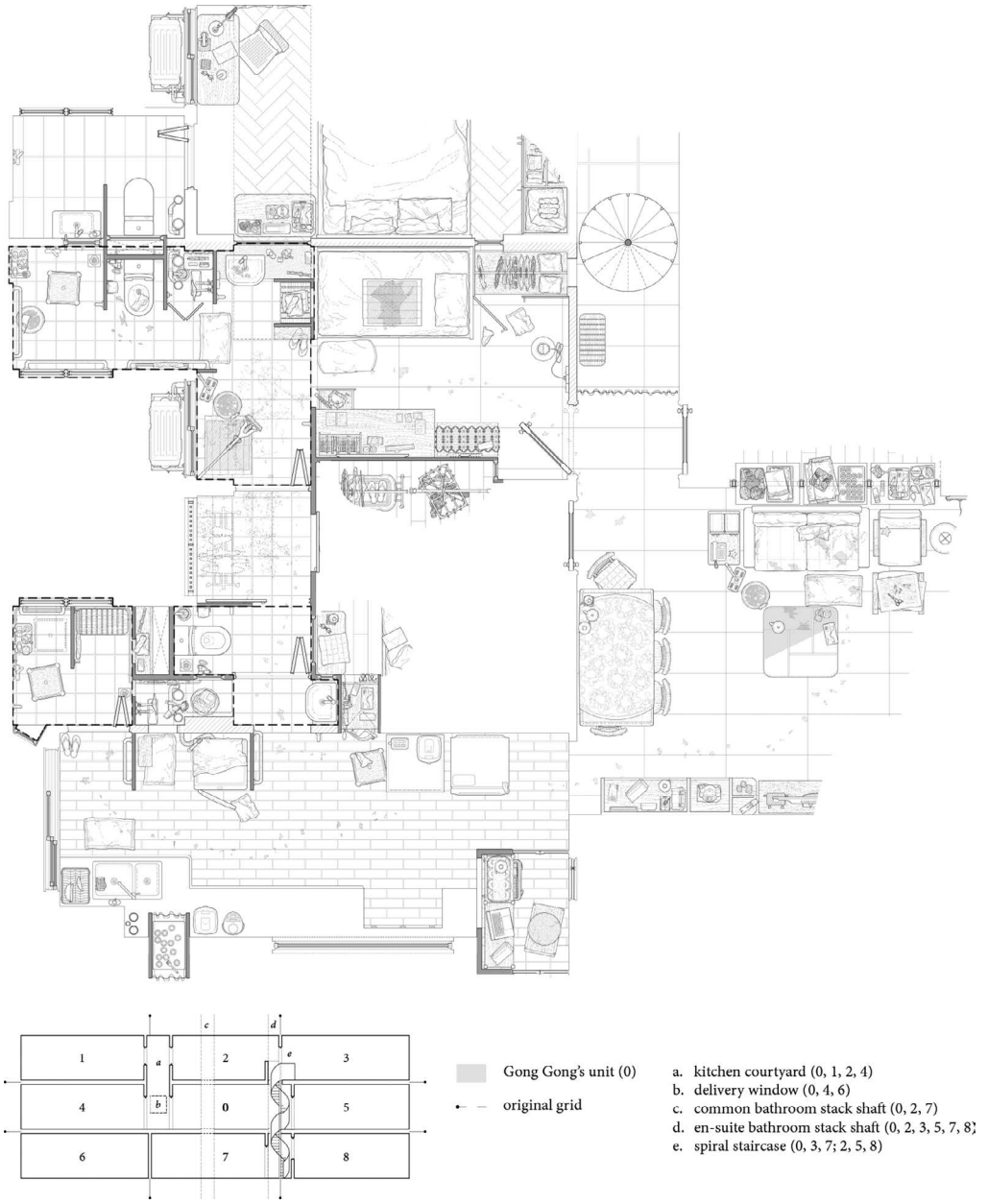

FIGURE 11.3 'April Showers,' Lim Kun Yi James, *Please Give Gong a Call*, 2023.

Plan drawing of two bathrooms connected by a meandering route that Gong negotiates when it is time for his shower. The plan shows a series interconnected passageways articulated by openings, vestibules, gaps, doors, windows, sliding panels, etc.

'April Showers' shadows Gong Gong's intimate bathing ritual. Here, the 'bathroom' is no longer confined to one area but spatially scattered throughout the flat. Gong Gong meanders, pauses, undresses, and cleanses between two wet rooms, pursuing his own unravelling spatial itinerary. Space and time scatter and stretch as 'bathing' happens across his flat and over an afternoon. Tracing Gong Gong's detour, a continuum of tactile supports (Lekker Architects and Lanzavecchia + Wai Design Studio 2020, 181) engender autonomy and resist an 'environmental centralisation' of infirmed bodies (Krasner 2010, 146). The design co-opts shelves, table tops, door frames, and a kitchen countertop as inconspicuous forms of support. It works through 'leaky' typologies – anterooms, courtyards, bathroom stack shafts, windows which are envisaged to connect eight neighbouring units – to create a network of caregiver stations. The neighbourhood monitors Gong Gong's roaming body through amplified shadows and sounds, enacting a neurodiverse landscape of co-presence and collective care.

As surgeon Atul Gawande (Gawande and Tippett 2017) emphasises, the most important question for doctors attending to elderly patients facing their later years of decline is neither better medications nor better medical procedures but simply asking, what a good day would look like to such persons. For architecture, as much as medicine, it would be to understand what the elderly would prioritise for happiness and fulfilment given their loss of control and independence. In short, tangible and achievable well-being is key. In the last section, we look at what architecture's creative practice research might reveal about enabling well-being in this limited but challenging situation.

Doing Architecture for Dementia: Objects, Rituals, Domesticities for Well-Being

> In Gong Gong's kitchen, red and white pails nest like Russian dolls under the marble table. Dirty clothes are tucked in between the pails to discourage further rummaging episodes. Clothes soaked in urine are separated from clothes soiled with sweat and flaking skin.

In the essay film *Objects for Thriving* (Mun and Chee 2022), three elderly homeowners are depicted in their own flats in the suburban public housing estate of Whampoa, located in southeastern Singapore. The estate has a high prevalence of older occupants, with more than 10% being over 65 years of age. Since 2015, a pilot project led by non-profit organisation Tsao Foundation has supported elderly residents here allowing them to age in their homes for as long as possible (Basu 2015). One of us went into the estate prompted by questions of legacy and heritage, but ultimately to articulate how cultural memory might resonate with citizens on the ground. Focusing on three domestic objects – a Butterfly brand sewing machine, a granite pestle and mortar, and talismans deemed to bring good fortune to the family home – the film observes how personal memory is acquired and preserved, asking the septuagenarians and octogenarians what is meaningful and how life might be lived to the fullest within their modest public housing flats.

The three women are in good health. In turn, they take good care of the objects which reciprocally serve them – the sewing machine and the pestle and mortar were, respectively, bought or handed down when the two women got married. In the third family flat, talismans of various shapes and materials are hung in significant corners of the large flat combining two separate units; one owned by the mother, and the other by her son and daughter-in-law. The talismans extend the aura of family altars, one placed in the front room and the other at the rear end of the flat. These objects are essential to scaffold memory, both old and new ones (Krasner 2010; Rubinstein and Parmelee 1992, 47). These objects allow the older occupants to thrive because they trigger memory, evoke lived experiences and events, become points of conversation, signal care and stewardship and mark a lineage between the elders' past and their families' future. The reciprocity of care between person and object extends to the domestic spaces where these objects are held. The flats also enable these elderly to thrive. They house the objects whose heft and bulk appear anachronistic and out of place for today's compressed daily rhythms.

These domestic objects reveal how psychical, social, material and cultural relations come together in their midst. Chee (2023b, 2022) has argued elsewhere that 'domesticity' can act as an analytical frame to delineate the fine-grained material-social configurations

of belonging, which escape definition in the monolith concepts of 'home' or 'housing.' Such domestic configurations include a network of physical and imagined spaces; passive and active agents; mundane and ritualistic practices; housing policies and identity politics, class and gender norms, and the uneven distribution of power and resources including that of affective care labour. Drawing on Judith Butler's (2016) conception of bodily vulnerability being interwoven into our surrounding infrastructure, Chee (2023c) makes a case that to think public housing through the analytic of domesticity is to conceptualise an affective infrastructure of interdependency where architecture is equally fragile and granular, wedged in-between things human and nonhuman. Seeing a flat through objects enmeshed within their complex domestic settings enables an understanding of lived space, multi-perspectival experience and shared aspiration, often obscured by architecture's defined brief, its specialised modes of representation and its singular history. Within domesticity's ambit, what might an architectural process or project resemble?

Repositioning the architect's vision and control in the realm of lived experiences, the multimodal research project *Losing Myself* (Manolopoulou and McLaughlin 2022, 2016) begins by returning to a nursing home, the Alzheimer's Respite Centre in Dublin by Niall McLaughlin Architects, completed in 2009. Built within an eighteenth-century walled garden, the centre occupies the middle of three terraced levels. It was planned as a series of new garden rooms where occupants could freely wander while anchored to their surroundings by changing seasonal light and evolving garden colours and textures, much like one could do if one were at home. When management of the facility changed from volunteers to professional healthcare workers, the occupants' independence was traded for their safety, and the building's autonomous agency came into question (McLaughlin 2020, 56).

Referencing a tapestry of perspectives from disciplinary and user expertise housed in an inclusive website (Manolopoulou and McLaughlin 2016), architect/academic Yeoryia Manolopoulou (2022) describes their attempt at a dialogical approach to reconsider the Dublin facility after seven years of use, but particularly to get past architecture's own blind spots of 'best practices.' Constructed around a rich ethnographical archive of dialogue which involves careful listening, *Losing Myself* captures diverse voices from neurological, gerontological and anthropological research, caregiving stories, patient anecdotes, healthcare accounts and lessons from art, media and design.

Using dialogue as a creative method, the multimedia installation at the 15th International Architecture Exhibition at the Venice Biennale involved 16 draughtspersons attempting to redraw imagined experiences and movements of 16 occupants using the Dublin facility. The 16 partial and hybrid plan drawings enacted a series of open-ended negotiations within the facility's base plan drawing, where significantly, each drawing was recorded on film, 'as actions rather than as static artefacts' (Manolopoulou 2020, 305). It is the action, the experiment of ephemeral, collaborative, relational and partial drawing – drawing after or before another person; drawing in relation to one's immediate perception of specific objects and spaces; drawing with partial knowledge which is not drawing blindly but often drawing deeply detailed and textured manifestations – that comes closest to accounts from dementia patients and their carers about how the world comes into focus for the former. The act of being in another's position and sensing location and sequence, without the tools and cognition we have taken for granted, makes the social drawing radical and important to designing for dementia.

Contrasting the architect's all-seeing, sole-authored allocentric plan to the egocentric cognitive abilities of dementia individuals who comprehend relationships from self to other in simpler, circumstantial and scenario-specific instances (Manolopoulou 2020; Manolopoulou and McLaughlin 2022, 26), *Losing Myself* might be seen as the architects' own search for another kind of spatial sense that reconciles not just the dementia patient's loss but equally our myriad, fragmented, and perhaps confused experience of the world around us. The '16 lessons' (Manolopoulou and McLaughlin 2022) about care, autonomy, connections, the benefits of staying home and living with purpose,

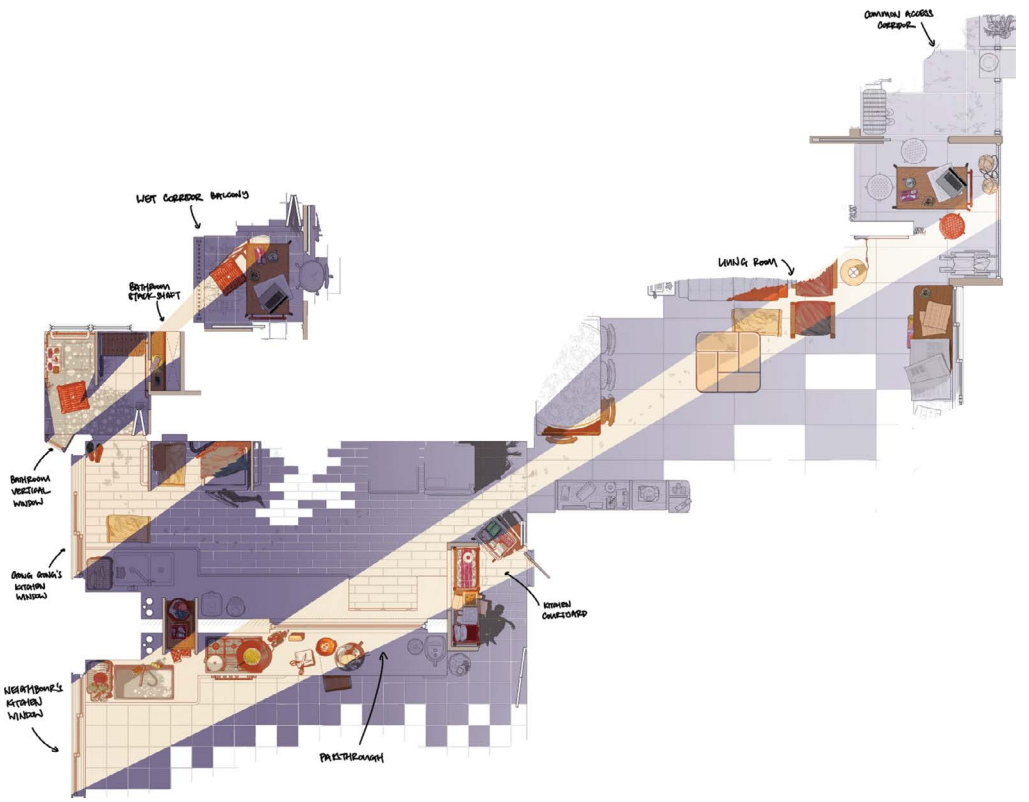

FIGURE 11.4 'Shall We Greet the Sun?,' Lim Kun Yi James, *Please Give Gong Gong a Call*, 2023.

Plan drawing showing sunlight streaming through a kitchen window connecting one adjacent unit to the next, and towards the common access corridor outside the individual units. Hallucinated figures are depicted amongst the shadows.

'Shall We Greet the Sun?' captures the liminal moment of twilight – before sunrise and after sunset – when long shadows turn into phantasmic figures. In the high-rise insular public housing block, the act of greeting the sun is enabled through a series of connected apertures: from a neighbouring unit's kitchen window, through another's drawn curtain, passing between a mesh frame housing fidget objects for Gong Gong, and out into the external common access corridor. Intensified visual and auditory hallucinations during 'sundowning' – a term describing a state of confusion that starts after sunset and lasts into the night – causes spectral anxieties in the LBD elderly (Khachiyants et al. 2011, 275). Olfactory, textural and aural prompts – morning coffee, bedtime moisturiser, birdsong – situated along this passage of light, act as sensory anchors. These anchors reinforce the occurrence of diurnal cycles, reminding Gong Gong there will be light soon.

amongst others, are concrete and specific scenarios drawn from external expertise and expert users. These are instructive of the kind of situational spatial sense that architecture needs to embrace and to be in-the-midst-of. Mclaughlin (2020, 53) writes that our 'spatial sense' determines how we understand the world, and as such is a 'cornerstone of the self,' which begins to erode as we lose our bearings together with 'who we are in our deepest identity.'

Conclusion: Another Dementia Story

> The window facing the corridor is Gong Gong's portal to the outside world. He cannot move too much but he likes to sit by the window. Here, he rocks his body back and forth, back and forth. It is at this window that we say hello to Gong Gong during our visits.

In place of a conclusion, we would like to tell another dementia story.

The drawings featured in this chapter are from *Please Give Gong Gong a Call* (2023–2024), a speculative design project by one of us that examines how shared boundaries configured around the domestic routines of an LBD elderly might reconceptualise alternative care networks. Lim's family's struggle with caregiving prompted his research. Through a constellation of 'leaky' typologies that connect eight neighbouring units, the design research is based on his own experience as a carer to his Gong Gong (grandfather) who suffers from dementia. The design for collective care literally begins from inside out, starting from objects, activities and relationships within the life of an LBD elderly, radiating out towards the architectural fabric of the public housing flat and the block.

In weekly research sessions with Chee, his then thesis tutor, Lim would skirt around the design thesis, spending a lot of time describing a meticulously drawn plan punctuated with verbal tales of his grandfather's domestic adventures. These include: how Gong Gong's bathtimes are adventurous romps between two bathrooms; Gong Gong's regular sightings of a Malay woman he recognised seemingly marooned on an island in his dark living room where the couch is located; Gong Gong asking if he had come to visit by boat; Gong Gong's flat having six rooms with another floor below (mixing up his three bedroom flat with his ancestral house in Hainan); how all kinds of visitors ended up sitting on Gong Gong's bed, watching TV into the night and driving the electricity bill up! These were probably longer-term memories from Gong Gong's past, lived on another faraway island but played out behaviourally and emotionally in his small Singapore flat. Yet, the colourful dementia stories remained frustratingly outside of Lim's architectural drawings.

Not unlike what Manolopoulou and McLaughlin have emphasised, Lim struggled with the autonomy of the allocentric plan drawing and his knowledge of the public housing flat. His personal lived experience with his grandfather's scrambled sequence of space and time, interfered with his own disciplinary training. The questions of how to draw and how to think otherwise of the given – a room, a door, a couch and a bed – which no longer held known meaning or hierarchies, forced a series of drawing experiments. Significantly, Lim also figured out ways of retelling these stories authentically, not short-changing their vibrancy and details. He wrote a brief that was cyclical, taking lessons from these stories, and one that regarded architecture as a tactile somatic frame, something existing amidst everything else, to support Gong Gong who needed to be cared for,

and equally, to sustain Gong Gong's caregivers who would need to be there for him, for the long haul:

> For those who suffer from dementia or who can no longer communicate, the only story left may be the simplest kind: two lovers embrace; a mother holds a child. Such stories can only be told with the body, through the sense of touch. The caregiver creates a space in which that story can be told and offers a body to help tell it, even when doing so is perilous and terrifying.
>
> *(Krasner 2010, 136)*

As Krasner (2010, 190) notes, 'domesticity can be collapsed to the body's edge; we can feel at home irrespective of the architectural space that surrounds us through sharing body image or bodily engagements with others, or simply through certain somatosensory comforts.' This leaky domesticity – from an intimate bathroom shaft to a convivial common access corridor – disrupts the atomistic family model by involving many others in the performance of care 'in-the-world.' Lim's project approaches care for the neurodiverse elderly, situated in the public housing flat, as a shared, co-creative and enabling enterprise where new insights for what it means to be human, and what humanity can offer each other in all our differences, are supported by domestic architectural rearrangements percolating from a piece of furniture to the entire housing block. This is not to say that what dementia patients and their families face are negligible. Yet, in diversifying the scales of dementia care from flexible third spaces to affective intimate spaces, *Please Give Gong Gong a Call* argues that caregiving can be something we shoulder together. And the concept of ageing in place can develop into a vision of having lived, loved, and been loved by others, while remaining at home together. Enabled by architecture's renewed purpose as social condenser, the dementia elderly's legacy of dignity, humour and hope may be glimpsed against a kinder and caring future horizon.

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Bibliography

AIC, Agency for Integrated Care, Centre for Liveable Cities CLC, and Singapore University of Technology and Design SUTD. 2019. 'Dementia-Friendly Neighbourhood Study: Singapore's First Local Evidence-Based Dementia-Friendly Environment Design Project'. Singapore.

Aida, Takeshi, Emi Kiyota, Yasuhiro Tanaka, and Yasuyuki Sawada. 2023. "Building Social Capital with Elders' Leadership through a Community Hub "Ibasho" in the Philippines and Nepal." *Scientific Reports* 13 (3652): 1–7. https://doi.org/10.1038/s41598-023-30724-7.

Bartlett, Ruth. 2014. "The Emergent Modes of Dementia Activism." *Ageing and Society* 34 (4): 623–44. https://doi.org/10.1017/S0144686X12001158.

Basu, Radha. 2015. "Whampoa's Way: Residents Live out Their Golden Years in Their Own Homes." *The Straits Times*, 14 April 2015. https://www.straitstimes.com/singapore/housing/whampoas-way-residents-live-out-their-golden-years-in-their-own-homes.

Bavidge, Michael. 2005. "Ageing and Human Nature." In *Dementia: Mind, Meaning, and the Person*, edited by Julian C. Hughes, Stephen J. Louw, and Steven R Sabat, 41–53. Oxford: Oxford University Press.
Berrios, G. E. 1987. "Dementia during the Seventeenth and Eighteenth Centuries: A Conceptual History." *Psychological Medicine* 17 (4): 829–37. https://doi.org/10.1017/S0033291700000623.
Boys, Jos, ed. 2017. *Disability, Space, Architecture: A Reader*. London; New York: Routledge, Taylor & Francis Group.
Butler, Judith. 2016. "Rethinking Vulnerability and Resistance." In *Vulnerability in Resistance*, edited by Judith Butler, Zeynep Gambetti, and Leticia Sabsay, 12–27. Durham and London: Duke University Press.
Chee, Lilian. 2022. "Housing and Domesticity." *Architecture and Culture* 10 (3): 554–58. https://doi.org/10.1080/20507828.2022.2121898.
Chee, Lilian. 2023a. *Architecture and Affect: Precarious Spaces*. Routledge Research in Architecture. London: Routledge.
Chee, Lilian. 2023b. "Domesticity and the Architecture Film: Caring-With Architecture." In *Architectures of Care*, edited by Brittany Utting, 1st ed., 43–68. London: Routledge. https://www.taylorfrancis.com/books/9781003296553/chapters/10.4324/9781003296553-4.
Chee, Lilian. 2023c. "Domesticity, Gender, and Architecture." In *The Routledge Companion to Contemporary Architectural History*, edited by Duanfang Lu, 185–201. Routledge. https://doi.org/10.4324/9781315674469.
Chiu, Elly, and Ren Ai Lim. 2023. "Creating Dementia-Inclusive Neighbourhoods through Partnerships with the Community; Singapore | Inclusive Communities." In *Urban Solutions Issue 22: Building Partnerships*, edited by Shawn Tan, Geraldyne How, and Nicole Lum, 98–104. Singapore: Centre for Liveable Cities.
CTPCLC, NUS Chua Thian Poh Community Leadership Centre, and Dementia Singapore. 2020. "Building an Inclusive Dementia Friendly Community (iDFC) in Kebun Baru." Singapore.
DOS, Singapore Department of Statistics. 2023. "Households - Latest Data." Government Agency. SingStat. 2023. http://www.singstat.gov.sg/find-data/search-by-theme/households/households/latest-data.
Garland-Thomson, Rosemarie. 1997. *Extraordinary Bodies: Figuring Physical Disability in American Culture and Literature*. New York: Columbia University Press.
Gawande, Atul, and Krista Tippett. 2017. "Atul Gawande: On Mortality and Meaning." On Being with Krista Tippett. 26 October 2017. https://onbeing.org/programs/atul-gawande-on-mortality-and-meaning/.
Gilleard, Chris. 2022. "Aging as Otherness: Revisiting Simone de Beauvoir's Old Age." *The Gerontologist* 62 (2): 286–92. https://doi.org/10.1093/geront/gnab034.
HDB, Housing & Development Board. 2021. "HDB | Health District @ Queenstown." Government Agency. HDB InfoWEB. November 2021. https://www.hdb.gov.sg/about-us/news-and-publications/publications/dwellings/Health-District-Queenstown.
HDB, Housing & Development Board. n.d.-a. "HDB | Lease Buyback Scheme." Government Agency. HDB InfoWEB. Accessed 15 July 2024. https://www.hdb.gov.sg/residential/living-in-an-hdb-flat/for-our-seniors/monetising-your-flat-for-retirement/lease-buyback-scheme.
HDB, Housing & Development Board. n.d.-b. "HDB | Priority Schemes." Government Agency. HDB InfoWEB. Accessed 29 July 2024. https://www.hdb.gov.sg/residential/buying-a-flat/buying-procedure-for-new-flats/application/priority-schemes.
HDB, Housing & Development Board. n.d.-c. "HDB | Seniors." Government Agency. HDB InfoWEB. Accessed 29 July 2024. https://www.hdb.gov.sg/residential/buying-a-flat/understanding-your-eligibility-and-housing-loan-options/flat-and-grant-eligibility/seniors.
HDB, Housing & Development Board, National University Health System NUHS, and National University of Singapore NUS. 2021. "Pilot Health District in Queenstown to Focus on Residents' Holistic Well-Being." *NUS News*, 20 October 2021, sec. Press Release. https://news.nus.edu.sg/pilot-health-district-in-queenstown-to-focus-on-residents-holistic-well-being/.
Heinämaa, Sara. 2014. "Transformations of Old Age: Selfhood, Normativity, and Time." In *Simone de Beauvoir?S Philosophy of Age: Gender, Ethics*, edited by Silvia Stoller, 167–87. De Gruyter. https://philarchive.org/rec/HEITOO-2.
Higgs, Paul, and Chris Gilleard. 2017. "Ageing, Dementia and the Social Mind: Past, Present and Future Perspectives." *Sociology of Health & Illness* 39 (2): 175–81. https://doi.org/10.1111/1467-9566.12536.

Hughes, Julian C. 2013. *Dementia Is Dead, Long Live Ageing*, edited by K.W.M. Fulford, Martin Davies, Richard G.T. Gipps, George Graham, John Z. Sadler, Giovanni Stanghellini, and Tim Thornton. Vol. 1. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199579563.013.0049.

Hughes, Julian C., J. Stephen, Steven R. Louw, and Sabat, eds. 2006. *Dementia: Mind, Meaning, and the Person*. International Perspectives in Philosophy and Psychiatry. Oxford; New York: Oxford University Press.

Hydén, Lars-Christer, and Eleonor Antelius. 2017. *Living with Dementia: Relations, Responses and Agency in Everyday Life*. London: Palgrave Macmillan.

Kafer, Alison. 2013. *Feminist, Queer, Crip*. Bloomington: Indiana University Press. https://www.jstor.org/stable/j.ctt16gz79x.

Khachiyants, Nina, David Trinkle, Sang Joon Son, and Kye Y. Kim. 2011. "Sundown Syndrome in Persons with Dementia: An Update." *Psychiatry Investigation* 8 (4): 275. https://doi.org/10.4306/pi.2011.8.4.275.

Kiyota, Emi. 2018. "Co-Creating Environments: Empowering Elders and Strengthening Communities through Design." *Hastings Center Report* 48 (S3): S46–49. https://doi.org/10.1002/hast.913.

Kiyota, Emi. 2019a. "IBASHO CAFÉ Giving Elders a Role to Play in Making Communities More Resilient." In *The Global Age-Friendly Community Movement : A Critical Appraisal*, edited by Philip B. Stafford, 169–87. New York: Berghahn Books. https://doi.org/10.1515/9781785336683-013.

Kiyota, Emi. 2019b. "Living with Independence and Purpose." In *Ethos* Issue 20, edited by Alvin Pang. Singapore: Civil Service College Singapore. https://knowledge.csc.gov.sg/ethos-issue-20/living-with-independence-and-purpose/.

Kiyota, Emi. 2024. "Ibasho Model of Elder Empowerment." 24 April 2024. http://generations.asaging.org/ibasho-model-elder-empowerment.

Krasner, James. 2010. *Home Bodies: Tactile Experience in Domestic Space*. Ohio State University Press. http://www.jstor.org/stable/10.2307/j.ctv16qk3fb.

Lee, Heunjung. 2024. "Performing (Ab)Normal: Reframing Ageing, Dementia, and Temporality." https://era.library.ualberta.ca/items/a30cca24-427d-4e3b-8fa1-5b7c631eaa76.

Lekker, Architects, and Lanzavecchia + Wai Design Studio. 2020. *Hack Care: Tips and Tricks for a Dementia-Friendly Home*. https://hackcare.sg/.

Li, Thian Wen. 2024. "Pilot Project in Queenstown Aims to Get Seniors to Lead and Plan Activities, Contribute to the Community." *The Straits Times*, 30 March 2024. https://www.straitstimes.com/singapore/pilot-project-in-queenstown-aims-to-get-seniors-to-lead-and-plan-activities-contribute-to-the-community#:~:text=This%20is%20the%20first%20Ibasho,are%20aged%2065%20and%20above.

Lim, Kun Yi James. 2023–2024. *Please Give Gong Gong a Call*. M Arch Thesis, Singapore: National University of Singapore.

Lin, Cheryl, and Emil Chan. 2021. "HDB Unveils Key Features of Yew Tee 'Vertical Kampung' Project, with Housing for Seniors." *Channel News Asia*, 21 October 2021, sec. Singapore. https://www.channelnewsasia.com/singapore/yew-tee-development-kampung-hdb-senior-healthcare-2257792.

Manolopoulou, Yeoryia. 2020. "Performing the Architectural Plan: Egocentric and Allocentric Drawing." In *Arts & Dementia*, edited by Ruth Mateus-Berr and L. Vanessa Gruber, 294–309. De Gruyter. https://doi.org/10.1515/9783110720556-019.

Manolopoulou, Yeoryia 2022. "Dialogic Drawing." In *Developments in Neuroethics and Bioethics*, 5:173–97. Elsevier. https://doi.org/10.1016/bs.dnb.2022.08.005.

Manolopoulou, Yeoryia, and Niall McLaughlin. 2016. *Losing Myself*. http://www.losingmyself.ie/.

Manolopoulou, Yeoryia, and Niall McLaughlin. 2022. "Losing Myself: Architecture and Dementia." In *Design Research Folios*, edited by Manolopoulou, Yeoryia, Barbara Penner, and Phoebe Adler. London: Bartlett Design Research Folios.

MCA, Ministerial Committee on Ageing. 2023. *2023 Action Plan for Successful Ageing: Living Life to the Fullest*. Singapore: Ministry of Health.

MCA, Ministerial Committee on Ageing. 2024. "What Is Age Well SG?" Government Agency. Age Well SG. 2024. https://www.agewellsg.gov.sg/about/.

McLaughlin, Níall. 2020. "Losing Myself: Designing for People with Dementia." *Architectural Design* 90 (6): 50–59. https://doi.org/10.1002/ad.2631.

MOH, Ministry of Health Singapore. 2022. "White Paper On Healthier SG." Government Agency. Ministry of Health Singapore. 21 September 2022. https://www.moh.gov.sg/news-highlights/details/white-paper-on-healthier-sg.

MOT, Ministry of Transport. n.d. "MOT Singapore – Inclusive Transport Infrastructure." Government Agency. Ministry of Transport. http://www.mot.gov.sg/what-we-do/motoring-road-network-and-infrastructure/inclusive-transport-infrastructure.

Mun, Ian, and Lilian Chee, dirs. 2022. *Objects for Thriving*. Documentary. NUS and Roving Productions. https://www.youtube.com/watch?v=ZYtBmE4_Qrk.

Nanda, Akshita, Charlene Chua, and Rebecca Pazos. 2022. "Living Outside with Dementia: How Singapore Builds Its Dementia-Friendly Neighbourhoods." *The Straits Times*, 21 September 2022. https://www.straitstimes.com/multimedia/graphics/2022/09/dementia-neighbourhoods-singapore/index.html?shell.

Neufert, Ernst, and Peter Neufert. 2012. *Architects' Data*. 4th ed. Chichester, West Sussex, UK; Ames, Iowa: Wiley-Blackwell.

Ng, Sabrina, and Fabian Koh. 2023. "More Seniors Stepping Forward as Caregivers to Their Peers, as Singapore Approaches "Super-Aged" Status." CNA. 16 May 2023. https://www.channelnewsasia.com/singapore/more-seniors-stepping-forward-caregivers-their-peers-singapore-approaches-super-aged-status-volunteer-red-cross-3491906.

Penner, Barbara, and Charles Rice. 2024. "Julia Child's Kitchens." *Places Journal*, September. https://placesjournal.org/article/julia-childs-kitchens/.

Pickard, Susan. 2023. "The Red Dressing Gown." December. https://doi.org/10.1163/25897616-bja10069.

Rice, Carla, Eliza Chandler, Jen Rinaldi, Nadine Changfoot, Kirsty Liddiard, Roxanne Mykitiuk, and Ingrid Mündel. 2017. "Imagining Disability Futurities." *Hypatia* 32 (2): 213–29. https://doi.org/10.1111/hypa.12321.

Rubinstein, Robert I., and Patricia A. Parmelee. 1992. "Attachment to Place and the Representation of the Life Course by the Elderly." In *Place Attachment*, edited by Irwin Altman and Setha M. Low, 139–63. Boston, MA: Springer US. https://doi.org/10.1007/978-1-4684-8753-4_7.

Sartre, Jean-Paul. 2003. *Being and Nothingness: An Essay on Phenomenological Ontology*. London: Routledge.

Shakespeare, Tom, Hannah Zeilig, and Peter Mittler. 2019. "Rights in Mind: Thinking Differently About Dementia and Disability." *Dementia* 18 (3): 1075–88. https://doi.org/10.1177/1471301217701506.

Subramaniam, Mythily, Siow Ann Chong, Janhavi Ajit Vaingankar, Edimansyah Abdin, Boon Yiang Chua, Hong Choon Chua, and Goi Khia Eng, et al. 2015. "Prevalence of Dementia in People Aged 60 Years and Above: Results from the WiSE Study." *Journal of Alzheimer's Disease* 45 (4): 1127–38. https://doi.org/10.3233/JAD-142769.

Swinnen, Aagje, and Mark Schweda, eds. 2015. "Popularizing Dementia. Public Expressions and Representations of Forgetfulness." In *Popularizing Dementia. Public Expressions and Representations of Forgetfulness*. Bielefeld: transcript Verlag.

Thomas, Carol, and Christine Milligan. 2018. "Dementia, Disability Rights and Disablism: Understanding the Social Position of People Living With Dementia." *Disability & Society* 33 (1): 115–31. https://doi.org/10.1080/09687599.2017.1379952.

Visaria, Abhijit, and Rahul Malhotra. 2023. "Commentary: Live Long and Prosper? A Super-Aged Singapore Society Does Not Have to Be a Sad One." *The Straits Times*, 26 August 2023, sec. Commentary. https://www.duke-nus.edu.sg/newshub/super-aged-singapore-society.

Ward, Richard, and Linn J. Sandberg. 2023. "Thinking Back and Looking Ahead: Co-Ordinates for Critical Methodologies in Dementia Studies." In *Critical Dementia Studies*, 263–77. Routledge.

WHO, World Health Organization. 2023. "Dementia." World Health Organization. 15 March 2023. https://www.who.int/news-room/fact-sheets/detail/dementia.

Zeilig, Hannah. 2014. "Dementia as a Cultural Metaphor." *The Gerontologist* 54 (2): 258–67. https://doi.org/10.1093/geront/gns203.

Zhuang, Justin. 2020. "Ageing Well Together; Singapore | Kampung Admiralty." In *Urban Solutions Issue 16: Health and Well-Being*, edited by Joanna Tan, Pei En Tan, and Jiayun Zou, 86–91. Singapore: Centre for Liveable Cities.