## The Opportunity for "Design" to Influence the Ageing Process Itself

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The unprecedented shift in the age composition of the world, which the JPA has often highlighted, will impact upon all aspects of society—how we live, how we work, how we play and consume, and importantly the environments within which we do this. For the world of design this brings not only the growing necessity of engaging with this demographic trend, but also the opportunities and advantages of doing so.

There are, however, many myths surrounding this "grey burden". The first misconception is that ageing populations herald a world of disabled frail elderly people requiring purpose-built geriatric care centres. Rather, we are heading for a future with fit, active, older adults, who will need to adapt their living and working environments to cope with their slow reduction in physical, sensory, and sometimes mental, capacity. Nowhere will this occur more than in the arena of domestic architecture and design—for it is here, in our homes, that most of us will spend the last decades of our lives.

Current design interest, however, is still focusing on the "care" environment" with purpose built accommodation—sheltered housing and assisted living—comprising floor drainage suitable for a roll-in shower, wide staircases with handrails, and features which prevent falls, such as non-slip bathroom and kitchen floors. Driven by the growing need for long term eldercare in the community, both the UK and US, for example, will face a 30% increase in those over 80 during the next two decades, this has promoted the development of so-called hybrid homes—a combination of private living and community space. Retirement villages, like *De Paul Manor Estate* on Australia's Gold Coast, the UK's *Westbury Fields* in Bristol, and *Wexford Creek Campus of Care*, in Nanaimo, British Columbia, Canada, all combine housing, apartments and care facilities within the one complex.

While good design within caring environments is important, it ignores the opportunity for innovative creative design for the growing segment of the population who will remain active and independent well into their 80's, but will benefit from some



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adaptation to their living spaces. Most adults will spend their later lives in their own homes, requiring basic adjustments to lighting and sound as eyes and ears deteriorate, temperature control—we become less able to control our temperature as we age, and basic mobility issues—our small and large motor skills decline making us vulnerable to slips and falls. Simple design features, such as the external veranda with bi-folding windows in the senior housing development at *Viola-koti, Tampere*, north of Helsinki, can ensure that even during the colder months, a view to the outside with safe access is possible. As the ability to read and write diminishes, being able to engage with people and watch the day-today comings and goings becomes an important feature of daily life.

Crucial here is the universal design movement supporting design which is appropriate for those with diverse physical and cognitive abilities. Many countries have now adopted similar principles of universal design—lifetime housing (Europe), lifespan housing (United States), Flex housing (Canada). The Netherlands was the first country in Europe to introduce universal design principles into standards for housing. Other countries such as Austria, Germany, and Portugal, initially focused on addressing the needs of specific groups, and Italy relied on a progressive approach in which different degrees of accessibility and adaptability were stipulated for different building types or users, before moving to a design for all approach.

Singapore's *Ageing in Place* programme, Canada's "Future Proofing" initiative and England's *Lifetime Homes, Lifetime Neighbourhoods* strategy all set out to improve the safety and accessibility of living spaces.

A second misconception is that old people are an homogenous group, a "one-size fits all approach". Given that this segment of the population will be as diverse as the rest of society, it not surprising that there is debate around older people's preferences for domestic architecture. With Stockholm facing a rapid expansion of its older population, the municipality organised a competition to aid its planners and architects cope with the predicted 20% increase in older residents each year. Emerging out of the competition was an analysis of older peoples' views on domestic architecture which highlighted a desire for nostalgic design. In sharp contrast, the UK architectural firm Hunters has recently spoken out against the presumption that older people desire "pastiche chocolate-box architecture", and its senior accommodation in London has a clear contemporary futuristic feel.

Questioning appropriate senior design is also occurring in other regions of the world. As Asia has begun to age, so Western style concepts of elderly appropriate housing have been introduced. While luxury retirement resorts are increasingly a status symbol among the affluent in the large cities of Delhi, Mumbai and Bangalore neither India nor Bangladesh have a tradition of senior housing, and thus rely on Western norms and architectural values, which may conflict with local belief systems. Building codes setting standards for safety and accessibility, or even for handrail heights and flooring, may challenge occupants' religious or spiritual beliefs particularly around the design of bedrooms and washrooms.

Following criticism of its senior housing developments as being too Western in design, China, where around 18% of older people now live in senior housing, is adapting these models to incorporate elements of both Feng shui and the distinctive spaces needed for Chinese exercise and recreation. Australia-based *Waterbrook Lifestyle Resorts* and the Hong Kong developer *Kerry Properties* are both entering the lucrative Chinese market designing Asian style properties.



Home to one of the world's oldest populations, Japan is also moving from traditional family based multi-generational living. Not only are younger generations questioning the desirability of living with older parents, but the new Japanese retiree is viewing retirement more as a life style choice, and demanding independent living. *Sun City Park* in Yokohama has been designed by the US based firm Perkins Eastman, one of the first to capitalise on the growing market for luxury retirement housing now emerging in Japan. The site comprises two linked villages, one focusing on culture and leisure facilities, the second on health and fitness.

Even in Africa, where the older population is still low, the *Aging in Africa Project*, a Sustainable Retirement Village at *Lagoon Aby* in Côte d'Ivoire designed by HWKN, aims to be Africa's first retirement community. The development will combine small single storey homes with communal areas surrounded by with plentiful vegetation, and is intended as an inspiration for a new style of African communities.

Design is thus responding to ageing. However, there is a huge opportunity for design to influence the ageing process itself. In Japan, Tokyo based architects Arakawa and Gins are introducing new architectural forms and design philosophies based on their own ideas about ageing, creating *stimulating spaces* rather than assisted living. The "*Reversible Destiny Loft*", located in the Mikata area of Tokyo, aims to postpone or even reverse the physical and cognitive declines in old age. With uneven floors, electric switches in unexpected locations, brightly coloured walls, and doors deliberately so low that the elderly resident must stoop to pass through, the units are designed to stimulate the senses far beyond what an older person typically experiences in their daily lives. Here is the true interaction between domestic architecture and age—the space within which we shall spend most of our last years, becoming not an adaptation to ageing, but our aid to a healthy, active old age.

