Cities, Communities and Homes: Is the Urban Future Livable?

1. Paper/Proposal Title:
Care, physical environments and dependency: the design of housing for the high needs elderly to live independently

2. Format:
Written paper and verbal presentation

3. Author(s) Name:
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4. University or Company Affiliation:
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5. Abstract (300 words):
There is increasing demand for housing for the elderly who need care but want to live independently. However there is limited information on the types and levels of dependency of residents currently living in housing designed for the elderly and the housing types that best accommodate high-dependency. This paper explores the models of care, the physical environments and resident levels of dependency. It seeks to clarify the relationships between the service models, the physical environments and the types and levels of dependency of residents that result in the highest quality of life.

Focusing on retirement villages and the voluntary-sector rental housing for the elderly in the Wellington region of New Zealand, data on building type and support levels were collected followed by two surveys which focussed on models of care and physical environments for housing operators and levels of dependency for residents.

The research finds that the design of housing that allows dependent elderly to live independently must give greater consideration to their care. In particular, attention
should be given to strategies that maximise the availability and proximity of care. Even those with lower levels of dependency require assistance in their most private activities and requirements for privacy become more complex as the levels of care increase. This is true for both the care giver and the dependent resident. The apartment-typology provides the better proximity/flexibility of care and the greater barrier-free environment, but current designs fail to provide sufficient privacy for optimal quality of life. Close attention to the balance between availability/proximity of care and reciprocal needs for privacy can provide the best outcomes.

6. Author(s) Biography (200 words each):

Yukiko Kuboshima is a PhD Candidate in School of Architecture at Victoria University of Wellington. Yukiko graduated from Department of Architecture of Graduate School of Engineering at the University of Tokyo with Master of Engineering and worked in architectural practice in Japan for eight years. Yukiko’s PhD research project focuses on the design of the housing for the dependent elderly that improves their quality of life in New Zealand.

Jacqueline McIntosh, Senior Lecturer, Victoria University of Wellington, School of Architecture. Her main research interests are design-led culturally-appropriate participatory design for improved health and well-being.

Bruno Marques, Director of Postgraduate Programmes and Lecturer in Landscape Architecture, Victoria University of Wellington, School of Architecture. His main research interests relate to the integration of indigenous methods in participatory design in landscape rehabilitation and ecosystem services.

Geoff Thomas is a senior lecturer at the School of Architecture at Victoria University of Wellington, lecturing in Fire Safety, Building Code Compliance and Structures. His PhD was the first awarded in New Zealand in Fire Engineering in 1997. An engineer by training Geoff has developed research interests in building performance and usability from fire safety in aged care facilities taking into account the physical and cognitive issues that impact on life safety and from general compliance with building codes, a subject he teaches. Current research interests are fires following earthquakes, the effect of fire on structures, development of performance based fire codes fire safety and sustainable buildings, their impact on each other and compliance with building codes. Geoff has been active in the profession being a Practice Area assessor for Fire Engineering for Chartered Professional Engineers (C.P.Eng.), and a member of the registration board, and was elected a Fellow of the Institution of Professional Engineers of New Zealand in March 2016.