

Sustainable Transformation of Age-friendly Community Recreation Centre: The Impact of Transition Design on Design Research and Practice

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Field of Study: Design

Introduction

“Transition Design acknowledges that we are living in ‘transitional times’ . It takes as its central premise the need for societal transitions to more sustainable futures and argues that design has a key role to play in these transitions”(Irwin et al., 2015). The study will aim to explore how Transition Design affects Design Research and Practice, taking the sustainable transformation of recreation centres in age-friendly communities as an example, from the vision and perspective of the seniors, recognizing their entire lifestyle and involving the infrastructure reimagination(Irwin, 2015), including the products, services, space environment and social systems involved. Through literature research, interviews, case analysis, key product design and other methods, discuss the sustainable development characteristics and future trends of the age-friendly community recreation centre. From the perspective of Transition Design, observe the result difference of the new and old design methods. Design guidelines and strategies for sustainable age-friendly spaces under a Transition Design approach will be addressed, which will have a wide range of applications and sustainable significance.

Aim

Understand the current status and sustainable practical experience of the construction of recreation centres in the elderly-friendly community. Explore how Transition Design participates in the design practice to influence the planning and design of the elderly-friendly community recreation centres, how stakeholders can actively participate in the design process and play an key role, and find new ways and methodology in the design-oriented social transformation and thinking change to make our future community environment more sustainable.

Objectives

Through this research, identify and explain the characteristics and design rules of the elderly-friendly community recreation centres, and contribute to the theory about the relationship between product, service, environment and system of specific groups of people in the community.

Extract and propose design guidelines and strategies to achieve a system-level sustainable transition of the design-oriented community recreation centres.

Through the experience of new product, service, environment and system, sustainability

recommendations are made for the construction of future elderly-friendly communities and stakeholder participation in the design process is encouraged.

Research Questions

How to make the transition to a more sustainable future for design-oriented elderly-friendly community recreation centres?

According to the 2019 World Population Outlook (United Nations, 2019), by 2050, 1/6 of the world's people will be over 65 years old, which is an increase from 1/11 in 2019. How to properly arrange the life of the large elderly group in their later years has become a question discussed in many countries. The government has invested a lot of resources, manpower and material to establish nursing homes, security systems, and related service communities. However, at the same time, there are generally low infrastructure utilization rates in elderly care communities, uneven and unsustainable distribution of social public resources, and mental health of elderly people has not been paid attention to, and the re-contribution potential of the old age to society has been neglected. So is there possible to design a bottom-up solution based on a long-term vision for older people that can fundamentally improve their lives that transforms their lifestyles to become healthier and more sustainable? This is the question on which this study focuses.

Specific questions may also include: what are the strengths and weaknesses of existing geriatric products, service, space and system, how are products and spaces configured in an age-friendly environment, what is the supporting service system, how to create a platform for more people to participate in interaction with the elderly to enhance communication, and how to ensure the long-term operation of the new system.

Hypothesis

- Transition Design has a positive impact on design research and practice.
- The methods of Transition Design promotes the sustainable transformation of a design-oriented recreation centre in elderly-friendly community.
- The methodology of Transition Design leads the transition of design-oriented community to a sustainable future.

Methodology

Data collection will perform in two consecutive stages: The Study 1 (stakeholders experience and needs identification) and Study 2 (design quality evaluation).

Data Collection

Study 1: Qualitative Research

(1) Interview: e.g. Ask of the interviewee's feelings about the recreation centre in the community where they currently live, and describe them from the four perspectives of product, environment, service, and system, conduct on-site observation and recording, and record audio or video at the same time.

(2) Literature research: consult relevant literature, collect background information of the survey site, and analyze information from multiple angles.

Study 2: Workshop & Design Project

(1) Workshop: Organise workshops on relevant topics and summarise and analyse the results of the workshops.

(2)"Research by design": Possible new key product for elderly.

Data Analysis

Study 1:

(1) Statistical analysis: induction based on grounded theory

For these transcripts, this project will conduct thematic analysis of them in the context of grounded theory. It intends to adopt the analyzing principle that combines both theoretical and primary material analysis, contextual and category analysis. I will use the software Atlas. Ti 8.0 to analyze these data as well.

(2) Literature review

Study 2:

(1) Workshop: the results of the workshop will be presented and exhibited, and the results will be summarised in a paper for publication.

(2) Design quality evaluation: participants experience new products and then responded to survey questions. Analysis of the survey.

1. Transition Design

Transition Design is a proposition for a new field of design practice, study and research that advocates the transition of design-led societies to a more sustainable future (Irwin, 2015). According to Irwin (2015), Transition Design believes that we are living in an era of 'transformation' where every level of the social system needs to be fundamentally changed. We need to reconceptualise and re-imagine everyday life, based on local and regional ways of living, and to communicate new consciousness and approaches on a global scale. Setting a long-term vision and backcasting to the present, drawing on the experience and knowledge of cross-disciplines, dynamically adjusting the methodology and mindset in the step-by-step realisation of the short- and medium-term vision, with a view to eventually arriving at a more sustainable future.

2. Why Seniors

The world's population is ageing. The number and proportion of older persons is growing in almost every country in the world (UN, n.d.). According to data from *World Population Prospects: the 2019 Revision (UN, 2019)*, by 2050, one in six people in the world will be over age 65 (16%), up from one in 11 in 2019 (9%). By 2050, one in four persons living in Europe and Northern America could be aged 65 or over. New measures and concepts of population ageing are of great significance in assessing the living conditions and living arrangements of older people, their productive and other contributions to society, and their need for social protection and health care.

3. Age-friendly Community

Population ageing is poised to become one of the most significant social transformations of the twenty-first century, with implications for almost all sectors of society, including labour and financial markets, as well as demand for goods and services such as housing, transport and social security, and family structures and intergenerational relations (UN, n.d.). Increasing urbanisation and policy discourse in support of ageing in place raise the urgency of creating and planning for an age-friendly environment (Davern et al., 2020). National policies and measures to safeguard the lives of the ageing population will have a direct bearing on the quality of life of older people in their later years. Unlike young adults, older people's standards and requirements for the environment, facilities, policies and services in which they live need to be

adjusted due to their physical and psychological changes, and designers are paying more attention to the experience of this group of people and adopting a more inclusive approach based on the principle of fairness and respect to include them in the mainstream of daily life. This has given rise to concepts such as 'age-friendly', 'age-appropriate', 'accessibility' and 'inclusiveness'.

In recent years, community-based care, an emerging model of ageing that combines the advantages of family care and institutional care, has gained widespread recognition among older people for its convenient and comfortable services. In addition to accessing geriatric care and services within the local community, older people can live in a community they are familiar with and maintain a degree of independence and dignity in their lives (Zhang & Pan, 2021). The discussion of 'age-friendly' communities is based on the World Health Organisation's (WHO) definition of an age-friendly community as one where 'policies, services, environments and structures support and enable active ageing' (*Global age-friendly cities: A guide*, 2007). Policymakers and service providers are increasingly aware of the importance of providing 'age-friendly' services or products to older persons, and this trend has spread globally. The concept of 'age-friendly communities' is the latest manifestation of this trend in policy and discourse on ageing. The creation and maintenance of age-friendly environments is widely recognised as a core component of a positive approach to the challenges of population ageing (Lui et al., 2009).

4. Recreation centre in Age-friendly Community

According to Collinsdictionary (n.d.), in English 'recreation centre' means 'a facility open to the public for leisure and recreation activities'. When discussing recreation centres, this article always refers to a shared leisure space in a community for people living in the community, a place where people can make new friends, expand their leisure activities and explore their potential social value.

Recreation has a value for individuals and groups and also constitutes a means of improving the functioning of societies (Brandt et al., 2011). A quality recreation centre is a valuable asset to any community. A well-functioning community centre is a thriving hub of activity for youth, families, seniors, civic organisations, parks and recreation departments and more. Unfortunately, in many cities, community centres are unable to meet the needs of those around them. In some areas, there are currently no community centres (Jumpsix2, 2016).

This shows that community centres and recreation centres are extremely scarce in the city. The establishment of an inclusive shared recreation centre in an age-friendly community is therefore particularly important. Age-friendly urban planning has gone beyond healthcare considerations to include neighbourhood design and increasingly complex concepts of place (Lui et al., 2009). Recognising that age composition is a dimension of diversity, urban planners now emphasise the value of inclusive design in maintaining community heterogeneity (Gilroy, 2008). Thus, unlike traditional senior centres and day care centres, recreation centres in age-friendly communities, although designed primarily for older people, are open and accessible to all ages, promoting active living and becoming an important part of the 'lifetime' community.

Based on a Transition Design approach, the design-led age-friendly community recreation centre will move towards a sustainable future in a gradual transition.

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