TRACK 1: PLACES

PLACE IDENTITIES OF JAPANESE SOCIAL HOUSING (DANCHI):

THE ROLE OF URBAN DESIGN IN CREATING A "PLACE"

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1. Introduction

1.1. Background

In the backdrop of post-war economic growth and rapid urbanisation in Japan (late 1950s to early 1970s), many large-scale developments took place in suburban areas to counteract the critical situation of housing shortages. These social housings, referred to as "*danchi*," which were suburban residential community with multi-family apartment blocks became a defining characteristic of the period. For its efficiency, *danchi* were generally developed into uniform homogenised forms. In reference to Relph's (1976) concept, lacking authentic and individual sense of identities, a typical *danchi* is more likely to represent *placelessness* than *place*.

Despite once perceived as an iconic lifestyle of the middle-class, welcoming working-age families, today its context is commonly associated with social issues (Nordin & Nakamura, 2018). Nearly half a century after the peak of developments, many *danchi* communities are faced with issues of weakened social structure such as, ageing population, depopulation, weakened neighbourhood relationships (Gouda & Okamoto, 2012), and deteriorating or dated physical issues such as, absence of elevators, dated or degraded basic infrastructure (Yoshikawa, 2010).

1.2. Theoretical Review

1.2.1. Place and Placelessness

Central to the entire discipline of *place*, a concept discussed extensively in various fields, is discussed in Relph's (1976) influential book "Place and Placelessness." While there is no one universal definition, it is widely accepted that a *place* is a significant aspect of human experience (Tuan, 1979; Relph, 1976; Cresswell, 2015; Dovey, 2016). As Relph states, the identities of place are composed of three interconnected elements: (1) physical features or appearance; (2) observable activities and functions; (3) meanings or symbols (Fig. 1).

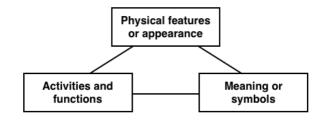


Fig. 1: Identities of place Source: Author

1.2.2. Placemaking, Sense of Place and Place Attachment

Relph (1976) also writes about placemaking as the process of how places with distinctive character forms. As Sepe & Pitt (2014) summarises Relph's statement, authentic places are "generated unselfconsciously and without theoretical pretence by individuals working alone or in small community groups over long spans of time" (p. 222).

As Relph (1976) describes, "sense of place' is the ability to recognise different places and different identities of a place" (p.63). Also, an "authentic sense of place is above all that of being inside and belonging to your place both as an individual and as a member of a community" (p. 65), which one knows instinctively. This is an important basis of the individuals' or community's identity.

Similar discussions on emotional tie to a place often uses the term *place attachment*. Place attachment has been a widely discussed topic and there are a variety of definitions suggested (e.g., Altman & Low, 1992; Hidalgo & Hernández, 2001). This paper will adopt the definition provided by Low (1992) who states, *"Place attachment* is the symbolic relationship formed by people giving culturally shared emotional/affective meanings to a particular space or piece of land that provides the basis for the individual's and group's understanding of and relation to the environment" (p. 165).

1.2.3. Hyoushutsu and Afuredashi

*Hyoushutsu*¹ (=expression) and *afuredashi*² (=overflow) are activities that could be interpreted as a mark indicating a territory. This idea has been especially popular in architectural planning research, as although *territory* can often be more of a psychological recognition of space, activities such as *hyoushutsu* and *afuredashi* allow this recognition to become visible and tangible feature of space. One representative definition adopted for this study can be traced back to studies by Suzuki & Sugiyama (1978) and Kobayashi & Suzuki (1981), later summarised by Suzuki (1984) (Table 1).

| Concept | afuredashi [あふれ出し] | hyoushutsu [表出] | |
|------------|---|--|--|
| Meaning | overflow | expression | |
| Definition | Natural, involuntary expansion of self to the exterior due to reasons such as lack of storage space | Deliberate expression of self to the exterior, where the resident intends to show their originality and decorate | |
| Diagram | | The | |
| Examples | Parked bikes | Flowerpots on doorsteps | |
| | Garbage bins Bundled carboard boxes | Decorative doorplates Seasonal ornaments | |

Table 1: Concept definitions Source: Author

1.3. Aim of Study

The central question in this research asks what factors create a thriving *danchi* and the role of urban design in massproduced housing developments that encourage a *place* to evolve. Mass-produced housing developments are a common

¹ Japanese: 表出

² Japanese: あふれ出し

and important, yet there remains a multitude of aspects undiscovered to fully understand how to create an environment that can respond to the diverse needs of people.

This study has focused on *danchi*, as one of the major types of mass-produced housing developments in Japan along with its typical *placeless* representation. Analysing the relationship between physical form and social structure, this study aims to understand what factors create successful *danchi* environments and how we can further approach solutions to the issues evolving them.

1.4. Approach and Methodology

1.4.1. Research Approach

While a typical *danchi* will more likely associate its uniform and homogenic features as *placelessness*, Kanazawa Seaside Town (Kanazawa SST) differentiates itself from the *placeless* nature. Its unconventional design approaches and evidence of strong place attachment by residents, even after several decades since its development, exhibits *placeness*. For these reasons, Kanazawa SST was selected. Key research questions are as follows:

- 1) What creates this *danchi* to be a *place*?
- 2) What physical and social aspects enable this *danchi* to thrive after 40 years?
- 3) What is the role of urban design in a mass-produced housing development?

1.4.2. Conducted Studies

A combination of qualitative approaches, including a questionnaire survey to residents, interviews to residents, community leaders, architect and observations of residents' activities were adopted for the case study to analyse the identities of place (see also Section 1.2.1) and its interrelation. The studies were carried out in three phases. All interviews were semi-structured and in-depth interviews (1-2h), conducted in the *danchi* in person (except two: one interview with the architect conducted elsewhere and one with a resident online using video-chatting software, Zoom).

Firstly, in addition to review of precedent studies, preliminary research was conducted through field observations and interviews to current and former residents. Following initial investigations, further area-specific fieldwork (observations, interviews, questionnaire survey) was organised (Table 2). The questionnaire has referred to a previous survey conducted by Tomioka Namiki Investigation Team (*Ton-nan-tai*) (2003) to make comparisons. Finally, study on physical aspects (development process and design visions/concepts) was done through review of literature and an interview with Ben Nakamura, who was one of the main architects involved in the planning phases. Table 3 shows an overview of conducted interviews.

| Note Medium | | Responses | |
|--------------------|------------------------|-----------|--|
| Distributed | | 110 | |
| Collected response | | 58 | |
| | Online form submission | 9 | |
| | Paper submission | 49 | |
| Response rate | | 53% | |

Table 2: Overview of conducted survey Source: Author

| Interviewee | | Number of people |
|------------------------|--|------------------|
| Residents Total | | 15 |
| | A: Long-term residents (20+ years, same residence) | 12 |

| B: Long-term resident (20+ years, changed residence) | 1 |
|--|----------|
| C: Short-term resident (5 years or less) | 1 |
| D: Former resident | 1 |
| Architect | 1 |
| | Total 16 |

Table 3: Overview of interviews Source: Author

2. Kanazawa SST: Development and Urban Design Concepts

Kanazawa SST is located in the southwest area of Yokohama, the second-largest city in Japan after Tokyo. It was developed as one of Yokohama City's urban development projects in late 1960s (Six Flagship Urban Development Project), which aimed to provide necessary infrastructure, housing and services to promote post-war reconstruction, as well as to combat additional difficulties faced in the economic growth period (City of Yokohama, 2012). This development on the reclaimed land is said to be one of the first housing development in Japan which explicitly stated its focus on "urban design" (Tamura, 1981).

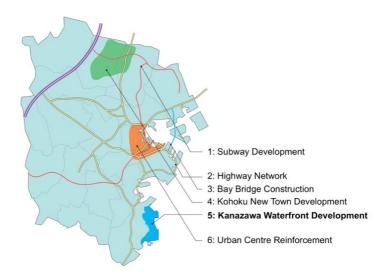


Fig. 2: Yokohama city and Six Flagship Urban Development Projects Source: City of Yokohama (2012), labels modified by author

2.1. Key Design Concepts

Architect Fumihiko Maki (of Maki and Associates) was appointed master architect and proposed the masterplan, stating that the core philosophy behind the design concepts was to establish an atmosphere of town where collective memory of *territory* and *scene* was shared amongst residents (Maki & Hayashi, 1981).

Territory does not simply imply jurisdiction but more instinctive, of one's psychological recognition of knowing where their *home* started, coming back from outside, or where they could feel *home* (Maki & Hayashi, 1981). *Scene* is also key to creating the collective memory of a town. Realising some elements of Japanese cities, where greenery and wooded area were woven into environment, was deemed important especially on the reclaimed land that would otherwise remain a bleak and desolate environment (Maki & Hayashi, 1981). *Hyousou*³ (=surface, outer layer) is another key element in

³ Japanese: 表層

extension *scene* (Maki & Hayashi, 1981). On planning terms, *hyousou* was regarded as the semi-public space where the public and private life of residents meet.

Planning strategies to realise these design concepts focused on creating a residential area rich in nature, structure of town by adopting grid pattern and outlining street hierarchy, and most importantly, *kouji*⁴ community, where the designers intended for street spaces to become the core of the community⁵ (Nagashima 1981). While utilising modern planning methods and building technology, there was continuous emphasis on embedding Japanese-ness (both visually and of community structure) in the *danchi*.

3. Kanazawa Seaside Town: Transformation and Current Situation

Residents, generally with similar socio-economic backgrounds but from all over Japan, moved in with high hopes for their dream suburban lifestyle. Soon after the completion, *jichikai* (self-governing association, smallest and most fundamental community group for residents) worked to establish their community structure. Community activities (e.g, sports matches, festivals, cultural education programs) have been organised by *jichikai* members, which have now become rooted in Kanazawa SST.

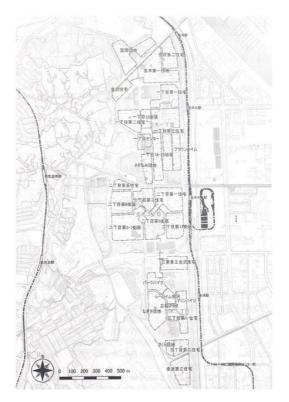


Fig. 3: Map of Kanazawa SST and *jichikai* jurisdictions Source: Korekara no Namiki wo tsukuru kai⁶ (2018)

⁴ Japanese: 小路

⁵ Noted from interview with Ben Nakamura (November 6th, 2021)

⁶ Japanese: これからの並木を創る会

Like most *danchi* in Japan, ageing population and depopulation is critical in Kanazawa SST today. However, contrary to common beliefs of declining *danchi* communities, previous studies have found Kanazawa SST to represent strong sense of place, many residents expressing high evaluation of their living environment (Ton-nan-tai, 2003).

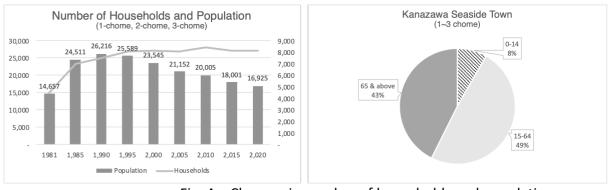


Fig. 4a: Changes in number of households and population Fig. 4b: Population percentage by age group Source: Author, based on data of City of Yokohama (2021)^{7,8}

4. Private-Use of Semi-Public Spaces

Preliminary observations of Kanazawa SST found resident activity extended to outdoor spaces to be a significant feature. One of the low-rise housing blocks, composed of 2-story and 3-story housing, was selected to further study this aspect.

Physical Features and Appearance

The block follows the street hierarchy, street spaces becoming more intimate and private further inside (Table 4). Residents have direct access from their dwellings to either *kouji* or *roji* space.

| Name | O-dori | Tori | Kouji | Roji | Uraroji |
|-------|----------------------------------|--------------------------------------|------------|------------|--------------|
| Users | Car (Pavement: pedestrian) | Pedestrian, emergency vehicles | Pedestrian | Pedestrian | (Pedestrian) |
| Image | | | 9 | | |

Table 4: Street types, users, and images Source: Author

Activities and Functions

Dynamic behaviour of *hyoushutsu* and *afuredashi* is observed in the neighbourhood. Some common types of *hyoushutsu* are placement of flowerpots around their housing, outside on their doorstep or spread out into *roji* space or private usage of pre-existing flowerbeds, adding their own flowers or decorations (Fig. 5a, 5b).

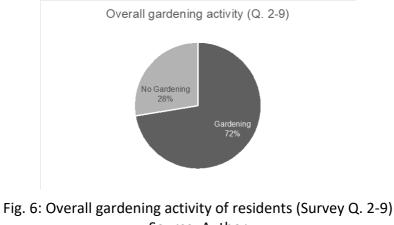
⁷ Retrieved from: https://www.city.yokohama.lg.jp/city-info/yokohamashi/tokei-chosa/portal/jinko/choki.html

⁸ Retrieved from: https://www.city.yokohama.lg.jp/city-info/yokohamashi/tokei-chosa/portal/jinko/chocho/nenrei/r3cho-nen.html



Fig. 5a, 5b: Sketch of residents' activities Source: Author

Rules provided by kanri-kumiai (management association, more focused on the hardware of buildings and infrastructure as opposed to jichikai focusing on software of community activities), prohibit private usage of public property. However, residents as well as kanri-kumiai seem to accept the activities. As one resident says, "There's no point saying. If they did, it will become dirty without people taking care of flowers and things. The empty spaces will become full of weeds not taken care of. If the empty spaces can be used for planting flowers, the resident there will take care of the place."⁹ Although the specific location of activities differed between housing types, the majority (72%) of residents were found to be enjoying some kind of gardening activity (Fig. 6, 7a, 7b).



Source: Author

⁹ Quoted from interview with Resident A-5 (July 8th, 2021)

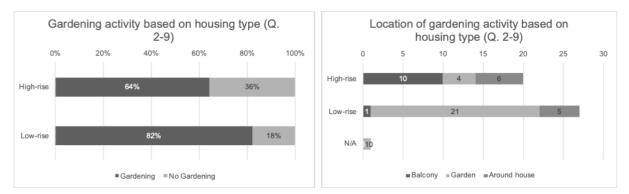


Fig. 7a: Gardening activity based on housing type Fig. 7b: Location of gardening activity based on housing type Source: Author

Meanings and Symbols

Activities of *hyoushutsu* were not just an enjoyable hobby or visually pleasing to observers but were found to have significant meanings to residents and their neighbourhood relationships. Sometimes planted flowers could become triggers for communication between neighbours, positively impacting their community relationships, or encourage a sense of place to evolve for residents.

A resident with a colourful and well-maintained front garden mentions,

"People that pass by here, they see the flowers and enjoy. Sometimes, people stop here (to see the flowers). Recently, when there was a rare type of flower blooming, someone casually spoke to me. You see, we can have this small communication. It's also that people enjoying the flowers as they walk by."¹⁰

Sometimes these communications between residents are not done explicitly, but through unspoken interactions. One resident reflects,

"When I'm walking through the roji and I see the flowers in bloom I think, 'Oh, they must be working very hard on it, it's blooming beautifully," and from time to time I get to see all kinds of flowers. Small things like that make it fun for me to walk around. Knowing there's a place like this close from my home, it gives me a sense of relief, I guess."¹¹

As found from residents' activities and its impact on neighbourhood relationships, it can be inferred that the chain of these residents' activities has come to form a loosely defined community network (Fig. 8). *Hyoushutsu* and *afuredashi*, although not an organised activity and solely reliant on voluntary motivations, were found to have significant meanings to the community, unlike social groups (e.g., Origami group, Pet club) which are independently managed.

 $^{^{\}rm 10}$ Quoted from interview with Resident A-9 (July 11th, 2021)

 $^{^{\}rm 11}$ Quoted from interview with Resident A-7 (July 29th, 2021)

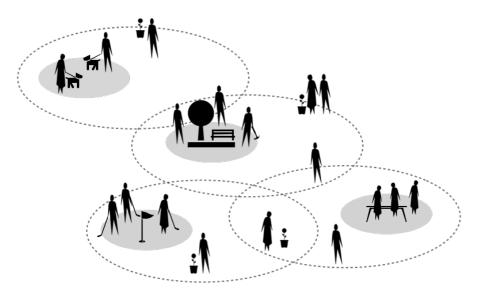


Fig. 8: Image of community network Source: Author

5. Pond & Grapevine Association

A more intense and collective behaviour of *hyoushutsu* and *afuredashi* can be observed in the placemaking activity done by voluntary residents' group of "*lke-to-Budoudana-no-kai*" (Pond and Grapevine Association, PGA).

Physical Features and Appearance

The activity takes place in an open space located in the centre of the block in between low-rise housing blocks (Fig. 9). The open space has two access points, a wider access point from *kouji* on the northern side and a narrower one on the south, leading to a *roji* with two intersections lead to *uraroji*.



Fig. 9: Source: Google Earth (2021), modified by author

Activities and Functions

The placemaking activity by PGA started a few years ago, led by elderly residents who have retired from their jobs. Furniture (e.g., benches, tables, stools, decoration) and tools (e.g., night lights, protective shades, fishnets over the pond) have been added by residents (Fig. 10).

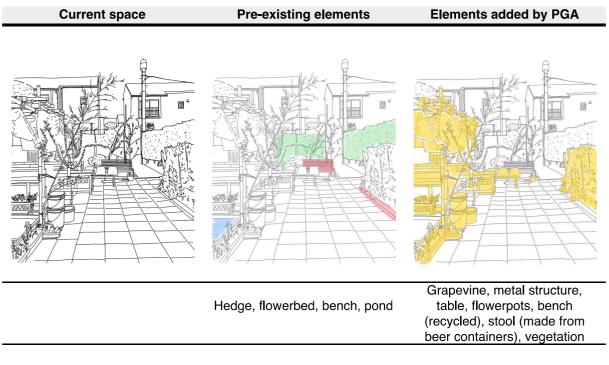


Fig. 10: Spatial features Source: Author

It has now become a community space for residents, to use daily and for community events. Until this open space became actively used by members of PGA, people only gathered to clean the pond, which were assigned tasks for neighbouring residents. As one resident mentions, "There was a pond here but there was just a tree planted. We'd clean (the pond) five or six times a year, and that was it. There was no enjoyment in that".¹²

¹² Quoted from interview with Resident A-6 (August 7th, 2021)

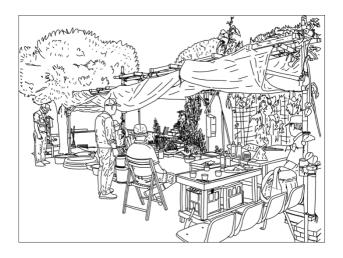
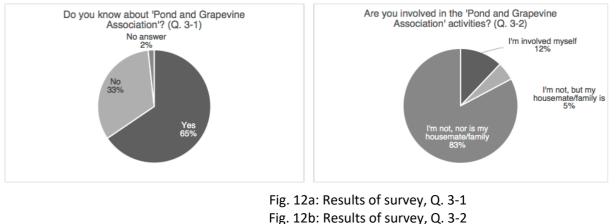


Fig. 11: Sketch of residents' gathering Source: Author

Meanings and Symbols

While PGA is well known amongst residents, active participants remain the minority (Fig. 12a); however, some are occasional visitors for events (Fig. 12b).



Source: Author

The main demographic of daily users was found to be the 70s and 80s group (Fig. 13a). Mainly who are retired, spend more time in the neighbourhood. Interestingly, some who are not usually active participants of other organised community activities were found to be daily users or occasional users of PGA's space (Fig. 13b), which indicate the flexibility in usage and participation.

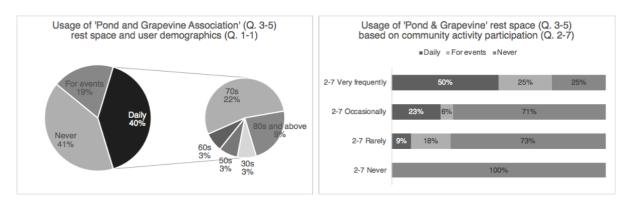


Fig. 13a: Cross-analysis of survey results (Q. 1-1 & 3-5) Fig. 13b: Cross-analysis of survey results (Q. 2-7 & 3-5) Source: Author

As found, a multi-layered social structure has evolved around the placemaking activity of PGA: core members actively engage in the space, creating and maintaining the rest space; occasional participants recognise the space and activities, visiting irregularly when there are events held; community members who do not participate but are aware of the space (Fig. 14).

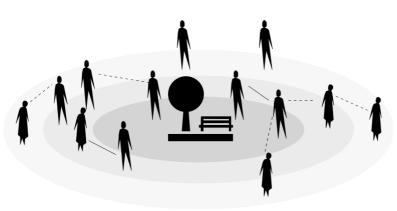


Fig. 14: Social structure around PGA Source: Author

6. Identities of Place

The study set out with the aim of assessing the identities of place in further uncovering the factors that creates and maintains a *danchi* where residents have strong place attachment. The current study found that the physical space, with intended meanings or symbols by the designers, has been further developed by the activities or functions added by residents and the community. While some of the activities and functions aligned with initial intentions, some were unexpected. Together, these residents' and community's activities and functions have transformed the *danchi* environment over the years, extending or altering its meanings and symbols.

6.1. Placemaking

From the observations in Sections 4 and 5, we see both the intimate act of collective placemaking of a specific location and the more unselfconscious placemaking of the wider residential area. Both placemaking behaviour is seen to be associated with an individual's attachment to place as well as the shared recognition of sense of place. Moreover, these observed activities and meanings are found to be important elements of the identities of place.

6.2. Variability in Conditions of Place

Returning to the framework of the identities of place, findings from this study has not only revealed the intimate and complex interrelation between the three elements observed but has also discovered the interesting inter-relationship that results in a *place* to evolve.

For instance, *hyoushutsu* and *afuredashi* (Section 4) has evolved in a space where the designers had initially planned certain physical features and appearances with meaning, envisioning certain activities to occur. With a focus on street spaces to be central to the community, designers provided spaces (e.g., flowerbeds at the entrance) to encourage residents' private usage outside their home. The current situation shows how these activities intensified and further defined the initially intended meanings or symbols. This transition can be broken down into four phases (Fig. 15a): (1) the physical features or appearance and the meanings or symbols had a strong tie at the stage of development, with activities and functions as

anticipated elements; (2) as residents move in, the activities and functions act towards the pre-defined physical features or appearance and its meanings or symbols; (3) the activities and functions have further strengthened the initially intended meanings or symbols and the three elements have a strong tie as identities of place; (4) as a result, its current state can be seen as a "place."

The case of PGA shows a different transition. While there were intentions behind creating open spaces for each block, the tie between certain physical features and its meanings or the anticipated activities were not as clearly defined by the designers. When residents started to act towards the space, refining spatial features, the open space became to mean more than just an open space. We can see its four phases of transformation (Fig. 15b): (1) relationship of the elements was not strictly defined; (2) the activities and functions further alternate the physical features or appearances of space; (3) new meanings or symbol for the actors (those who initiated the activity) as well as for the community has emerged; (4) as a result, its current space features an authentic sense of identity, seen as a "place."

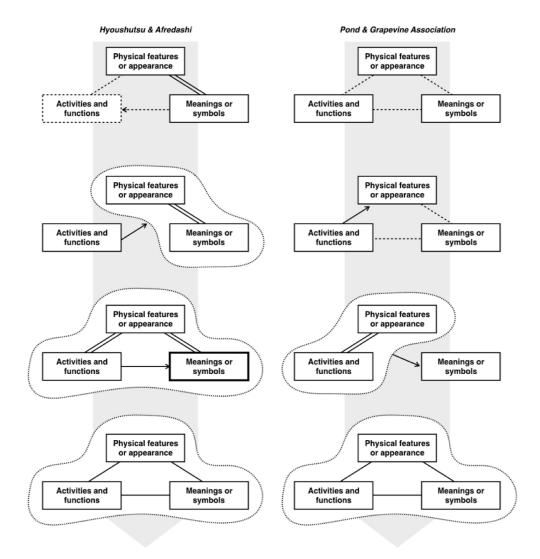


Fig. 15a: Transition of place identities – *Hyoushutsu* & *Afuredashi* Fig. 15b: Transitions of place identities – Pond & Grapevine Association Source: Author

In both of these cases (reviewed in Section 6.2), the designers provided mere guidelines for intended usage but it was not to restrict from unpredicted activities to occur. Due to the availability in developing certain activities (like creating a self-made flower bed in the street space or creating a communal rest space) a community network has formed and/or has made one feel stronger about their home. It must be noted, however, that it was not merely the availability of semi-public spaces but the relatively tolerant management and shared awareness that developed over the years that enabled such modifications. Semi-public spaces that were less strictly defined, spatially and literally, and open to interpretation allowed residents to develop their own activities and redefine the "place."

7. Conclusion

The study was designed to determine the role of urban design in mass-housing developments, through a case study of understanding the identities of place and uncovering the physical and social aspects that enable a *danchi* to thrive. As discussed in Section 6, variability in conditions of place as well as the importance of spaces open to interpretations was found. Interestingly, while the critical situation of ageing and decreasing of population remains a concerning matter, it was also found that the community that had matured together over the years was also a key factor in enabling the activities that encouraged "placeness" to evolve.

7.1. The Role of Urban Design in a Mass-produced Housing Development

The following conclusions on the role of urban design in a mass-produced housing development can be drawn from the current study: establishing inclusivity in design and orchestrating the intensity of definitions of space.

Housing complexes inhabit a diverse group of people and lifestyles, and spaces open to interpretation can allow each to find their own uses and meanings of space. As this study found, having some of the semi-public spaces open to interpretation allows the diverse group of people to each find their own meanings of the space. The open-endedness provides potential for change, elaborations, and developments, enabling a more inclusive housing environment.

Secondly, urban design as the orchestration of various elements composing an environment can control the intensity of definitions given to a space. While the loose and ambiguous definition of space is useful in establishing the inclusivity as stated above, it is not to encourage excessive freedom or to provide strict rules and indications. Definitions given to a space should be controlled in a way that allows certain interpretations to be made by the users to some extent yet manage the smooth cohabiting of residents.

Despite the exploratory nature, this study offers some insights into the role of urban design in housing complexes, particularly of important elements that will allow such environment to incorporate the diverse needs and respond to the changing lifestyles.

7.2. Research Limitations and Further Research

The generalisability of these results is subject to certain limitations. First, the current study is based on a small sample of participants. Secondly, the context of *danchi* is unique to Japan and findings need to be interpreted cautiously without its contextuality.

While the study found the importance of spaces open to users' interpretation and the importance to control the intensity of definitions accompanying space, further study is needed to derive specific methods on how to include these spatial features into housing developments. For instance, inquiries into what physical qualities can convey its availability of interpretation and encourage users to develop their activities remains unclear. It would be interesting to assess such spatial features, such as size, shapes, materials, surrounding setup, or location in relation to the level of users' interaction with space to further deepen understandings on such spaces.

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(3995 words)

References

Altman, I., & Low, S. M. (1992). *Place Attachment* (I. Altman & S. M. Low (eds.); 1st ed. 1992.) [Book]. Springer US. https://doi.org/10.1007/978-1-4684-8753-4

Ben, N. (2021). Personal communication [in-person interview].

City of Yokohama. (2012). *Urban Design Yokohama*. https://www.city.yokohama.lg.jp/lang/residents/en/about-us/other/shisei/english-ud.files/0048_20180927.pdf

Cresswell, T. (2015). Place : an introduction (2nd ed.) [Book]. Wiley Blackwell.

Dovey, K. (2016). Urban Design Thinking: A Conceptual Toolkit [Book]. Bloomsbury Academic.

Gouda, K., & Okamoto, R. (2012). Current status of and factors associated with social isolation in the elderly living in a rapidly aging housing estate community. *Environmental Health and Preventive Medicine*, *17*(6), 500–511. https://doi.org/10.1007/s12199-012-0282-x

Hidalgo, M. C., & Hernández, B. (2001). Place attachment: Conceptual and empirical questions. *Journal of Environmental Psychology*, *21*(3), 273–281. https://doi.org/10.1006/jevp.2001.0221

Kobayashi, H., & Suzuki, S. (1981). A Study on "Territory of Grouped Inhabitants" in Small Housing Groups: Part 1 Process of Territorialization. *Transactions of the Architectural Institute of Japan, 307,* 102–111. https://doi.org/10.3130/aijsaxx.307.0_102

Korekara no Namiki wo tsukuru kai. (2018). [Vision of Namiki, Ideas by Korenami] Namiki mirai bijon, korenami ann.

Low, S. M. (1992). Symbolic Ties That Bind. In I. Altman & S. M. Low (Eds.), *Place Attachment* (pp. 165–185). Springer US. https://doi.org/10.1007/978-1-4684-8753-4_8

Maki, F., & Hayashi, Y. (1981). [Interview: The experiment of Kanazawa Seaside Town – The attempt in urban design methods and cooprative planning] Taidan: Yokohama Seaside Town no jikken – Urban Design teki shuhou to kyoudou sekkei no kokoromi (in Japanese). *Toshi Jutaku*, 6–16.

Nagashima, K. (1981). [Approaching a street-type residential area, town planning of Kanazawa Seaside Town 1970-1975] Gairogata jutakuchi e no approach, Kanazawa Seaside Town no machidukuri 1970-1975 (in Japanese). *Toshi Jutaku, 168,* 22–32.

Nordin, N., & Nakamura, H. (2018). Social capital among ageing residents of housing complexes in suburban Tokyo: The case of Haraichi-Danchi and Oyamadai-Danchi in Ageo City. *PLANNING MALAYSIA JOURNAL*, *16*(5). https://doi.org/10.21837/pmjournal.v16.i5.409

Relph, E. (1976). *Place and Placelessness*. Pion Limited.

Sepe, M., & Pitt, M. (2014). *The characters of place in urban design*. *19*, 215–227. https://doi.org/10.1057/udi.2013.32 Suzuki, S. (1984). [House and Town: Logics of Housing Complexes] *le to machi: jukyo shugo no ronri* (in Japanese) [Book]. Kajima Institute Publishing Co. Ltd..

Suzuki, S., & Sugiyama, S. (1978). [Relationship between inner space and outside space of housing complexes] Shugo jutaku ni okeru juuko no uchi to soto no taiou kouzou ni kansuru kenkyu (in Japanese). Housing and Building Research Institute Report (Jutaku kenchiku kenkyujohou), *4*, 125–138. https://doi.org/https://doi.org/10.20803/jusokenjo.4.0_125

Tamura, A. (1981). [Ideas of urban design in Kanazawa Seaside Town] Kanazawa Seaside Town no Urban Design kousou (in Japanese). *Toshi Jutaku*, 17–21.

Tomioka Namiki Investigation Team (Ton-nan-tai). (2003). [Kanazawa Seaside Town report on investigation of residents' awareness] Kanazawa Seaside Town jumin ishiki chousa houkokusho (in Japanese).

Tuan, Y.-F. (1979). Space and Place: Humanistic Perspective. In *Philosophy in Geography* (pp. 387–427). Springer Netherlands. https://doi.org/10.1007/978-94-009-9394-5_19

Yoshikawa, T. (2010). The problem on aging of population and of buildings in housing estates with apartment houses. *The Japanese Journal of Real Estate Sciences*, 23(4), 54–59. https://doi.org/10.5736/jares.23.4_54