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**Declaration**

I declare that this assignment is my own work and does not involve plagiarism or collusion. The sources of other people's work have been appropriately referenced, failing which I am willing to accept the necessary disciplinary action(s) to be taken against me.

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# **Chapter 1: Introductory Chapter**

## **1.1 Background**

The urban population in 2014 accounted for 54% of the total global population, and is projected to grow by a further 1.84% per year between 2015 and 2020 (WHO, 2015). Although cities have been widely praised for providing greater socio-economic opportunities and promoting interconnectedness and globalisation, cities and processes of urbanisation also give rise to many challenges, be they social, environmental or practical (Mansour, 2016).

Loss of identity is one of these challenges, and the subfield has increasingly become an area of interest for geographers and sociologists. A significant concern is being paid towards the concept of “urban identity” after the loss of characters, essence, soul, individuality and distinctiveness of many cities, especially those with a heritage, cultural, and historical significance.

Much criticism has been levelled at Singapore, whose constant processes of change and regeneration have been blamed by critics for weakening both national and local identity (Velayutham, 2007). This paper will seek to examine the effect that urban spaces have upon local identity construction in Singapore, and will also look at the effectiveness of current measures designed to bolster a sense of local identity.

## **1.2 Rationale**

Singapore, an unusually diverse nation comprising immigrants with different ethnic backgrounds, has long sought after a cohesive national identity. It is common for the most senior government ministers to reference this, with even the Prime Minister Lee Hsien Loong himself recognising the establishment of a national identity as a critical 50-year challenge for Singapore (Lee, 2015).

However, in the process of building this national identity, Singapore has paid less attention to building local identities, individual identities that differ between neighbourhoods. Standardised processes designed to provide shared experiences to the entire nation ignore regional differences, which were distinct in the past. Under British colonialism, Singapore was divided into racial enclaves, each with a specific character. According to Eng (1996), as late as the 1960s, new towns in Singapore each seemed to have unique local identities, before the Housing Development Board (HDB) came to “a realisation that rapid and simultaneous construction based on similar planning and development principles would result in monotony and uniformity

among new towns”, something that heralded a new phase in estate construction which focused on deliberate differentiation in characteristics to develop distinct local identities.

The uniform HDB flats are marketed as “a Singapore icon”, and they function as a cornerstone of Singaporeans’ place identity (Housing Development Board, n.d.). However, older citizens bemoan the loss of the communal-based kampungs which these blocks have replaced. Grieving over the loss of the “kampung spirit”, citizens are talking increasingly about the lack of attachment they feel towards the neighbourhoods they live in. “Mr Kelvin Cham lives in Punggol but feels that Bedok is more like home,” starts a Straits Times article about the loss of identity in new estates. Cham missed not only the communal spirit, but also a history and heritage that he was now distant from.

Urbanisation and globalisation, in conjunction with urban regeneration leads to a continuously changing physical landscape that causes a loss of rootedness. The contemporary situation in Singapore is one where local identity is de-emphasised in favour of national identity, often to the displeasure and detriment of residents. Measures designed to improve this are criticised as inadequate. Hence, it is important to determine the current health of local identities, and thereafter work to improve them by evaluating the effectiveness of current measures.

### **1.3 Research Questions**

1. How established are local identities in Punggol and Bedok?
2. How effective are current measures designed to strengthen local identity?
  - a. Community centres
  - b. Remaking Our Heartlands (ROH) Programme
3. How can urban space be designed to strengthen local identity?
4. What is the relationship between urban space and local identity?

### **1.4 Thesis Statement**

Local identity in Singapore is weak, with people unattached to both the spaces they live in and local communities. The government has introduced measures like the ROH, but this has been ineffective due to the chosen measures not being attractive for citizens in the particular neighbourhood, and a constant change in demographics.

### **1.5 Scope of Research / Delimitation(s)**

To answer the research questions, this paper used both quantitative and qualitative methods.

Two neighbourhoods of **Punggol and Bedok** were chosen as case studies. These neighbourhoods were chosen in order to examine the effectiveness of the ROH programme. Punggol underwent a comprehensive ROH, which targeted all aspects of the neighbourhood and aimed to establish it around a “waterfront city” identity (Housing and Development Board, 2012). In contrast, ROH in Bedok was conceived as a limited concept, with five key structures around Bedok MRT undergoing limited renovations.

Surveys were given to residents, and their answers were analysed to answer the research questions, providing a qualitative model. Staff at community centres and Residents Committees in these areas were also interviewed to answer Research Question 3.

### **1.6 Significance of Research / Usefulness**

Many studies using the framework of place attachment focus on the relationship of the individual to the environment, such as whether there is a “sense of belonging”. Less focus has been placed on the collective process of place attachment, where a community of individuals become attached to the spaces they live in. Current research on the nature of place attachment and the construction of local identity is oftentimes also theoretical in nature. Even where concrete case studies have been used, they are overseas, and no such studies have been conducted in Singapore.

More practically, the results may be used to evaluate whether government measures have in fact been successful, and whether there is a need for them to undergo reconsideration. It also provide useful insights into the practical implementation of the ROH

### **1.7 Limitations**

This paper suffers from a single primary limitation. Local identity as a whole is a complex construct, which cannot be solely attributed to differences between urban spaces.

## **Chapter 2: Literature Review**

### **2.1 Local Identity and its Composite Aspects**

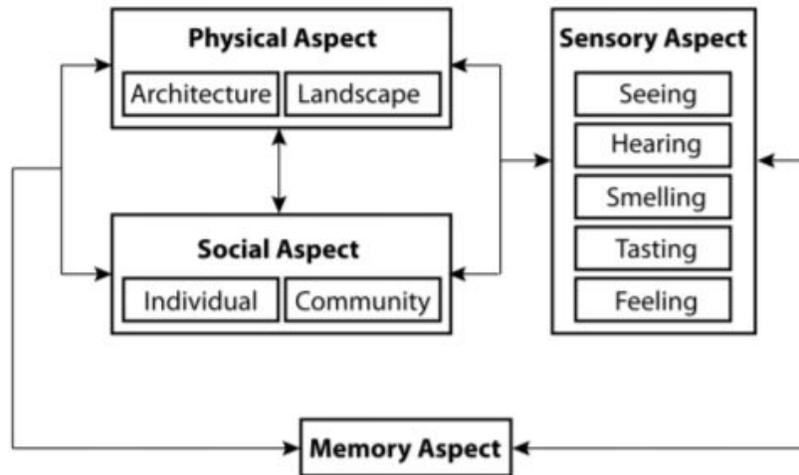
A common framework used to define and understand identity within sociology is social identity theory. Social identity posits that a social identity is a person's knowledge that he or she belongs to a certain social category or group (Hogg and Abrams, 1988). Three cognitive processes then take place: social categorization, social identification and social comparison. Such cognitive processes establish "ingroups" and "outgroups", which are responsible for shaping systems of social behaviour.

Four broad definitions of identity within social identity theory have been laid out by Andriot and Owens (2012). These are personal identity, role identity, social identity and collective identity. Collective identity refers to the "shared definition of a group that derives from its members' common interests, experiences, and solidarities. Local identity can hence be broadly understood in this context, as the collective identity of a group of people in the same neighbourhood.

According to Shao (2014), local identity "is the components that distinguish both the place and residents themselves to the other places and present a strong independent image for which people can develop strong identification and affection from."

Local identity has been frequently defined in relation to five other concepts: place identity, landscape identity, personal identity, cultural identity and community identity. Shao (2014) synthesised these concepts, taking their common factors and collaterising them into four major aspects.

His four aspects of local identity are the physical, social, sensory and memory aspects. The physical aspect consists of the architecture or landscape of a given place. The social aspect is divided into two factors: individual and community. The individual factor looks at how individuals make use of a space for activities. The community factor looks at both organised community activities and voluntary social interaction between individuals. The sensory aspect looks at how "places can be special to certain people because their biography is linked to these places". Finally, the memory aspect looks at "inheritance from [an area's] past, which is a benefit of a traditional community having long dwelt there" (Oktay, 2005). Again according to Shao (2014), this is usually expressed through physical and spiritual heritage, historical sites and monuments for example.



*Figure 1: Framework of local identity*

Each of the aspects interact with the others to form local identity. Physical and social aspects are closely related as the construction of urban space affects how this space is used. These then lead to the formation of the sensory aspect, as in the process of using these spaces, people form memories and become attached to them. Over time, as physical, social and sensory aspects intersect and a shared heritage develops, the memory aspect is formed.

This categorisation of local identity into four distinct aspects is both accurate and useful. It provides a concrete definition to prior vaguely defined terms. By synthesising literature from various separate theories and then recategorising them into four distinct aspects, Shao (2014) has developed a concrete conceptual framework to examine how local identity is constructed. He has added depth to this theory by detailing how the different aspects interplay. This aspect theory is hence the main framework this paper uses.

Koh (2008) lays out an alternate definition of local identity in a Singaporean context. She terms this as “rootedness”, but defines this term as “a strong sense of attachment to place and its accompanying socio-political culture”, a definition which is extremely similar to how local identity is defined, due to its emphasis on mutual ideas regarding attachment, and how this attachment develops as a result of space and culture (Shao’s physical and social aspects respectively).

Koh (2008) identifies five factors that lead to rootedness: physical familiarity, social connection, autobiographical attachment, passive belonging, and minorly, the sense that citizens have a say in national affairs. Physical familiarity, social connection, and autobiographical attachment are all extremely similar to Shao’s physical, social and sensory aspects.

But the fourth major factor, passive belonging, is new. For Koh, passive belonging “[stems] from the benefits, comforts and opportunities” offered by a place. This is important to the formation of rootedness and local identity, as it provides a comfortable psychological grounding, and leads to positive feelings that can strengthen one’s identification with a certain place.

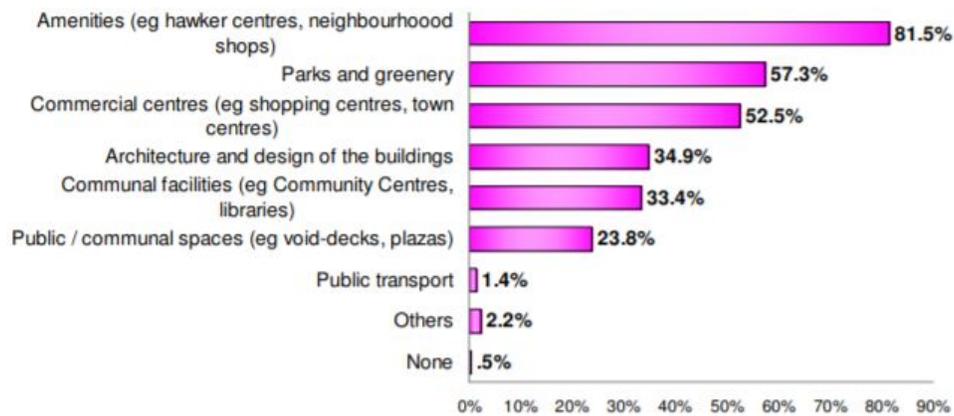
In conclusion, a literature review of local identity has found contrasting definitions of the term, which is usually not defined by itself but in relation to other concepts like place attachment and community identity. Shao (2014) provides the best definition of local identity by taking factors from the major theories linked to it, and then recategorising them into the physical, social, sensory and memory aspects. Koh (2008) adds a fifth aspect of passive belonging, which she feels is important in the Singaporean context.

This paper hence uses Shao’s four aspects, in addition to Koh’s idea of passive belonging as a conceptual framework to analyse the issue.

## **2.2 Local Identity within Singapore**

Prevailing literature claims that Singaporeans are attached to the spaces they live in. In the 2009 Lifestyle Survey conducted by the Urban Redevelopment Authority, 34.1% of respondents identified their housing estate as the place that left them with the fondest memories. In addition, 34.2% of respondents felt that housing estates were what made Singapore special (Urban Redevelopment Authority, 2010). As can be seen, the survey claims that a significant percentage of the Singaporean population is attached to their housing estates, whether through autobiographical attachment, or otherwise.

The same survey also looked at specific components which residents felt were important to the identity of their own housing estates. 81.5% agreed that amenities such as hawker centres and neighbourhood shops were an important part of local identity, while 57.3% felt that parks and greenery were important. The full results can be seen in the table below.



Note: Respondents were asked to select 3 aspects of the neighbourhood that are important to the identity of the area. Hence, the percentages do not add up to 100%.

*Figure 2: Important components of local identity as per URA Lifestyle Survey*

While this survey appears to provide a rather thorough understanding of the relationship between urban space and local identity, its limitations are threefold.

Firstly, the survey only shows that there is a strong sense of place attachment. Singaporeans are attached to the housing estates they live in, but this is not the same as having a distinct local identity. The social, sensory and memory aspects of identity construction have been ignored by this survey. Even when asked what gave their neighbourhood a local identity, respondents predominantly answered with items like “hawker centres” or “greenery”, factors which are in fact present throughout the whole of Singapore, and are not necessarily indicative of the presence of local identities.

Secondly, the survey was conducted across the entirety of Singapore. Hence, differences in results between different neighbourhoods cannot be identified. While local identity across Singapore may be generally strong, examples provided by respondents suggest that in areas like Tampines, Bedok and Toa Payoh, local identity is much stronger than elsewhere.

Finally, the survey was conducted in 2009. It is highly possible that as a result of increasing rates of globalisation and immigration, as well as the constant process of urban regeneration, local identity and its composite aspects have changed.

### **2.3 Remaking our Heartlands (ROH)**

The ROH has been designed as a method to ensure “vibrancy of the HDB heartlands” through the construction of distinctive physical structures, which will provide each neighbourhood its own unique identity (Housing Development Board, n.d.). Its 2007 launch by Lee Hsien Loong at the National Day Rally underscores its policy significance as a key area of development in Singapore’s search for cohesive identity. According to Glass and Salvador (2018), this has the effect of replacing a “textbook land use calculus [...] with a more contextual vision for estates”. However, despite an acclamation of the ROH’s principles, the study was theoretical in nature, examining material only from HDB policy documents and not engaging with sentiments and opinions of the ground, which potentially differ. A study that measures not just the theoretical effectiveness of ROH design principles, but also the concrete effectiveness of actualisations of these principles, is hence required.

Glass and Salvador (2018) further provided important insights on the classification of ROH schemes. They identified two types of ROH programmes that conceptually differed based on the age of the estate being targeted. In young estates, realisation was the main aim of the ROH, whereas in mature estates, regeneration was the primary objective.

## **Chapter 3: Methodology**

### **3.1 Photo Elicitation Interviews**

Photo elicitation is an academically recognised anthropological interview technique. Images provide greater potential for stimuli compared to verbal questions, and have been found to lead to longer and more valuable interviews. As such photo elicitation interviews were used in this study to show participants panoramic photographs of landscapes in their neighbourhood. They were then asked questions about these photos in order to see which aspect of the landscape they identify the most with. Questions asked were in accordance to Shao's framework of local identity.

The questions and photos chosen are in Appendix I and Appendix II respectively. The photos selected were all taken within the respective neighbourhoods. Common physical elements from both neighbourhoods were taken for the photos. They include: HDBs, parks, waterways, hawker centers, markets, public sculpture, and community clubs. Common social elements include: cycling, eating, talking and exercising.

Since the same elements from both places have been selected, results from both sites can be contrasted.

In total, 21 responses at each neighbourhood was obtained, with roughly proportional distributions of age and gender relative to actual demographics.

### **3.2 Interviews**

Photo elicitation interviews were occasionally accompanied by interviews. When respondents remarked upon a particular feature in the photos, impromptu questions were asked to clarify the attitude of respondents towards them.

Three respondents per town were chosen for structured interviews (Appendix II), one from the 0-18 age group, one from the 19-59 age group, and one senior citizen.

## Chapter 4: Discussion and Analysis

*Note: Values on all graphs are in percentage (%).*

This chapter begins with some brief remarks on visible differences between the physical settings of the two neighbourhoods. Three of the four research questions previously proposed are considered in the order they were previously listed, with each specific subsection answering one research question. The conclusion to this paper as a whole will serve answer the final research question about the relationship between urban space and local identity.

Conceptually, this chapter moves from general characterisations of the various neighbourhoods, to quantitative data which identifies what specific aspects respondents are most attached to, culminating in a detailed consideration of what makes these spaces matter.

### 4.1 Landscape Observation

Differences were found between the two sites upon observation, and the presence of these differences suggests that both sites have different identities.

The first difference was in terms of the design of residential buildings. In Punggol, HDBs were designed explicitly with wavelike motifs.



*Figure 3: Wavelike design of Waterway Terraces*

This urban planning observation agrees with the ROH plan for Punggol, which aims to give Punggol a “waterfront” identity. Similarly, water features were present in Waterway Point’s landscaping. In contrast, Bedok HDBs were angular and rectangular in design, bearing no unique motifs. Punggol also saw spaces within residences designed specifically for community interaction, such as a community farm, whereas the same was not true for Bedok. Hence, Punggol would be expected to have stronger physical and social aspects of local identity.

Another significant difference is in terms of parks and waterways. Punggol's parks and recreational areas are centred around water bodies, whereas Bedok's are not. This forces Punggol residents to congregate around water bodies whenever they want to do recreation activities, which is expected to build a physical aspect of local identity surrounding water.

## **4.2 Extent of Local Identity Establishment**

### *4.2.1 Overview*

Evidence of significant local identity in each town has been identified. Physical and social aspects of identity were strong in both towns, but memory aspect and sensory aspect was strong only in Bedok. In addition, Koh's factor of passive belonging appeared stronger in Bedok as well, suggesting that Bedok has a stronger local identity as opposed to Punggol.

Punggol's identity focuses on modernity and creativity, a message which resonates particularly strongly among younger residents. This can be seen from surveys in which public art and the design of new HDB flats were identified as structures unique to Punggol. Of eleven residents aged 0-39, 64% felt that public art was unique to Punggol, and 55% of residents felt that HDB flat design was unique, surpassing the average. In interviews, respondents also talked about high-tech physical elements of the neighbourhood, like multi-tiered bicycle stands, and high-tech community building measures, like "underblock parties" where movies were screened.

Bedok's identity focused upon convenience, memories and social interaction. Respondents determined its most unique physical feature to be its community centre, as symptomatic of its physical architecture as its purpose in facilitating community events. In addition, 71% found shopping to be the most important social activity. What is interesting is that respondents in interviews linked shopping to meeting friends, talking to friends, and the music of street buskers in the market, suggesting its significance as the dominant social aspect of local identity. Respondents also talked about the presence of five different markets, with an interviewee explicitly stating that the convenience such markets offered was why she continued staying in Bedok. Younger residents related to a different part of Bedok's convenience, that of accessible transport to the city. Interesting also is an apparent focus on helping. A respondent cited that what made Bedok special was not any building or social activity, but rather a process of care, where residents were willing to help one another, especially the elderly.

### *4.2.2 Memory Aspect*

In response to a question in the structured interview on distinctive buildings in the neighbourhood, a respondent in Bedok answered with Bedok Reservoir. Although the question

was originally intended to sieve out information relevant to the physical aspect, when asked to elaborate on his answer, the respondent's justification was entirely based on the memory aspect.

A male respondent in his 60s talked about the past history of Bedok Reservoir as a sand quarry. When further probed, he mentioned its prior status as a distinctive element of the community due to its uniqueness. HDB sources agree, specifying that sand quarries in Singapore were limited to, and in fact prolific, within Bedok and its adjacent neighbourhood of Tampines. When questioned about how he felt about the transformation of this quarry into a park, the resident felt that it did not affect him much, as the URA had taken care to preserve elements of the old site when conducting reconstruction, such as a section of wall spray painted with graffiti. He joked that he has other reasons to remember the reservoir, such as a string of suicides which occurred (in 2011). The respondent still visits the park with his family occasionally, and says that whenever he does so, it brings back memories of how the reservoir used to be.

His assessment of the park as significant was corroborated by another interviewee, a female who appeared to be in her 40s. She did not mention its status as a sand quarry, but recalled the spate of suicides there as well. This respondent visits it regularly with her family, and when further probed, mentioned playing with her children as a specific memory she has of the area.

These accounts are striking for multiple reasons. Firstly, it demonstrates the strong memory aspect in Bedok's identity, and is a testament to the power landmarks can have. However, it asserts that strong identity can still be developed even when people relate to different time periods of its history. Also interesting is how older respondents still identified with it given its redevelopment. I posit two reasons for this: the retention of historical fragments, as well as efforts made in redevelopment to continue to incentivise existing residents to visit the place (through taichi lessons and a focus on family recreation). When the first occurs, older residents are not completely alienated because they see an acknowledgement of its history, and when the second occurs as well, their autobiographical attachment to the place will evolve, adding memories from after its redevelopment to memories from its original state. Hence, such measures are why Bedok has a strong memory aspect of local identity.

This assessment of the reservoir is supported by the quantitative survey, in which 76% of respondents stated that they felt the reservoir was unique to their neighbourhood.

### **4.3 Effectiveness of Programmes**

#### *4.3.1 Remaking our Heartlands*

ROH in Punggol has four main objectives (Housing and Development Board, 2015). When categorised according to Shao's framework, they are:

- Physical:
  - Improving the design and quantity of public housing
  - Bringing waters closer to residents
- Social:
  - Creating a Punggol Town Centre for community activities
  - Activating the recreational coastline

This supports the earlier conclusion that the ROH in Punggol is primarily aimed at realisation, as opposed to the limited ROH in Bedok which looks at rejuvenation of several key buildings.

These goals were contrasted against survey results, revealing that the ROH has seen very limited success. The physical aspect of the ROH has failed, and even though it has seen success in the social aspect, there is no substantial difference when the most popular social activities in Bedok were compared with those in Punggol.

Which aspects in this picture do you think best represent the unique nature of the neighbourhood?

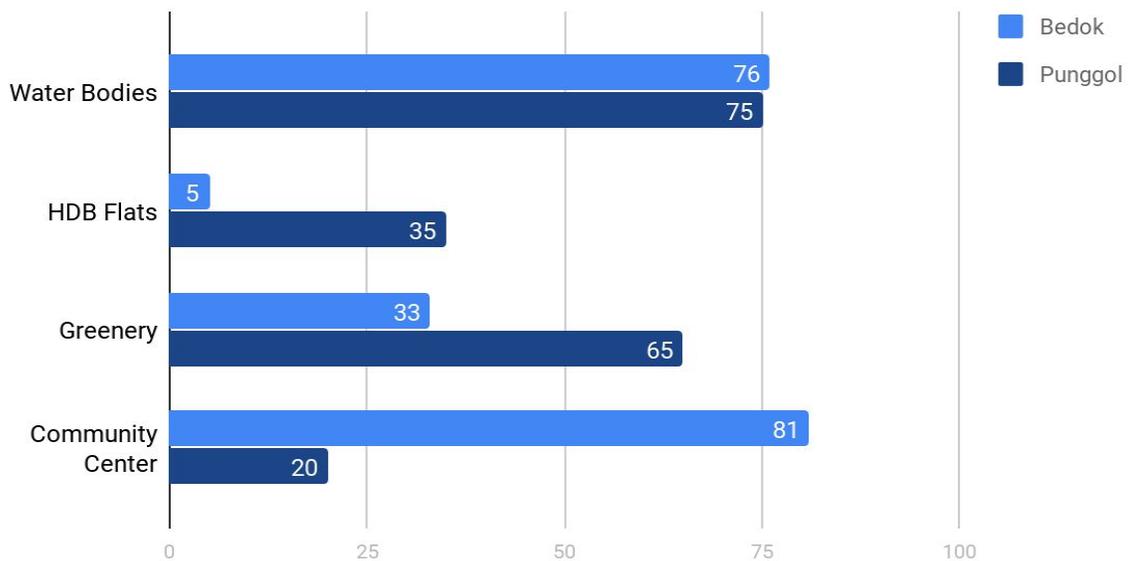


Figure 4: Physical aspect

The figure above is a chart looking at the percentage of residents which relate to selected physical features of their neighbourhood. It can be seen that the ROH's emphasis in Punggol on

a waterfront identity has failed, with no substantial difference between the number of residents who relate to it and the number of Bedok residents who relate to Bedok Reservoir. The ROH's second physical initiative, on improving the aesthetic of HDB flats to make them unique, has also failed, with only 35% of total residents finding them unique. The major improvement the ROH did bring was in greenery. Although significant, greenery was not a stated initiative of the ROH.

### What are some important social activities that can happen in these pictures?

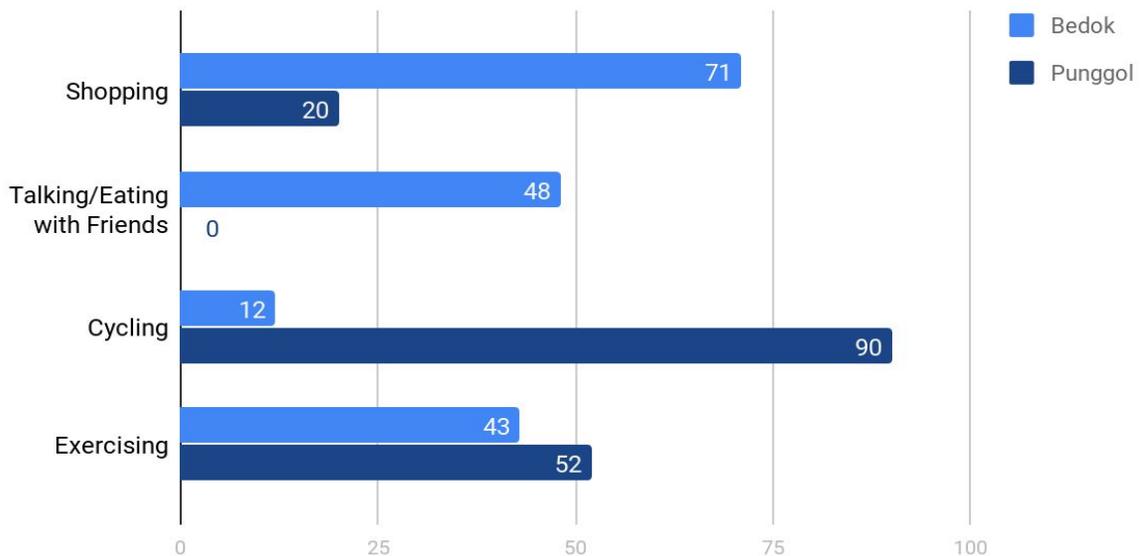


Figure 5: Social aspect

Looking now at the ROH's social aspect, it can be seen that the ROH has indeed achieved its goal of "activating the recreational coastline". The percentage of Punggol residents who feel that cycling and exercising is unique to their neighbourhood is a large increase from those in Bedok. However, Bedok's most important social activity, shopping, is still comparable to the more important social activities in Punggol, suggesting that the ROH's effectiveness has been minimal. The ROH in Punggol, despite its primary objective of realisation, has failed to realise its primary goals, hence showing its ineffectiveness.

The main ROH objective in Bedok, in contrast, was rejuvenation. This ROH was substantially better received by citizens on the ground. Its limited aim of "Town Centre reborn" was effectively realised, and residents expressed a high level of attachment to Heartbeat@Bedok, the main structure the Bedok ROH aimed to rejuvenate (Housing Development Board, 2015). This can be seen from Figure 4, where 81% of respondents expressed attachment to the place.

### 4.3.2 Community Spaces and Community Centres

Compared to 20% in Punggol, 81% of residents in Bedok felt that the community centre (CC) was important to them. However, there was no significant difference in community engagement in CC activities. About 50% of residents were involved in each neighbourhood, most of them attending one to five events a year, most usually festivals. A difference in community involvement hence cannot be the reason for the large disparity in perceptions of the importance of CCs. Reasons for this gap are primarily due to architecture, and the secondary use of the Bedok CC as a mall. An elaboration is presented in Section 4.5. For now, the conclusion that participation in CC events has no impact on the importance residents accord to CCs can be drawn.

Another question follows: does involvement in CC activities affect the social aspect of local identity? According to Shao's framework, this is true, but theory cannot be ascertained in this context due to the lack of specific survey questions investigating their relationship.

How many times a year do you participate in activities organised by the community centre?

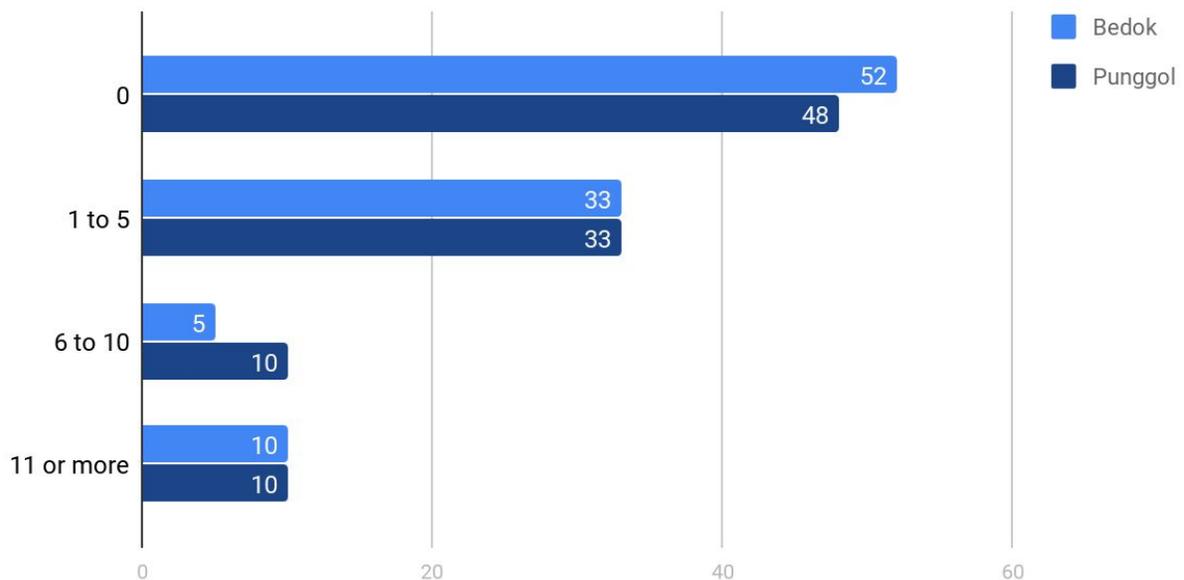


Figure 6: Community involvement in CC events

Similar to the low participation in CC activities, community spaces went underutilised. Bedok Community Center's central plaza, which was designed to let people talk and interact with each

other, was a mostly silent waiting area, with grandparents sitting there waiting for their grandchildren to end kindergarten. In Punggol, Punggol Town Hall was similarly lethargic, and community areas like parks were infrequently visited as well, even in the morning. This indicates that community spaces, even when designed with the intent of increasing resident interaction, oftentimes do not do so, due to the resistance by residents to engage in interaction.

#### **4.4: Manner in which the Design of Urban Spaces affects Identity**

This paper now considers the urban spaces which residents identify as the most important to them, and looks for common characteristics in their design approaches, which will provide insights on how urban spaces can influence identity.

Five physical elements were identified by more than 50% of respondents as important. Of these five, Bedok Reservoir and Heartbeat@Bedok (the community centre) came from Bedok, whereas waterways, greenery and public art originated from Punggol. These cannot be neatly categorised into certain archetypes of structures, because they span landscape, architecture and design embellishments. To find similarities, principles behind their design must be considered.

The first shared principle is inclusiveness. The urban spaces which residents best related to were those that all could enjoy, regardless of their age, gender, or physical disabilities. Heartbeat@Bedok provides us a case study. In the building, colours are used to differentiate areas of the building, which allows users to easily identify their location. Furthermore, shelters, lifts and ramps were placed in easily accessible locations, catering to Bedok's large elderly population. Similarly, Bedok Reservoir Park was mostly flat, with broad paths around the lake, making the terrain easy to navigate for the young and old alike. Shelters were abundant, as were large grassy areas where people sat and rested. In Punggol as well, despite the valley landscape in which many of the waterways were sunk, winding paths with a gentle gradient were available to connect the lower-altitude waterways to street level.

The second shared principle is an ability to cater to all demographics. Not just about inclusivity, it is necessary for public spaces to be able to offer amenities targeted at different sectors of the population in order to draw them and congregate them. Heartbeat@Bedok, overall the structure which most respondents felt was important, catered to children through a swimming pool and playground, youth through the presence of popular fast-food eateries, as well as adults through a grocery store and pharmacies like Watsons and the elderly through a Senior Care Centre. Amenities like a library, which caters to those of all ages, were also offered. This can be seen also in Bedok Reservoir park. Within a small area, taichi-doing elderly was observed alongside children playing at a playground, a track with cyclists, and a group of middle-aged residents clustered around a virtual "Gym", a hotspot for the augmented reality game Pokemon Go.

Likewise in Punggol, waterways offered shaded areas for the elderly to exercise, as well as a river for kayaking and a cycling track. This sort of multigenerational appeal can hence be correlated to the importance of a structure.

The last principle posited is that architecture must be related to the community. This can be done in three ways: using pre-existing values of the community to conceptualise design; soliciting the community in implementing the design; or giving members of the community roles to play in the actualised design.

Heartbeat@Bedok provides an example of conceptualisation. It carries a forestry design inspired by the forested area it once stood on, which shows an appreciation not just to space, but also to the neighbourhood around that space. The process here is similar to the earlier mentioned case study of the preserved graffiti wall in Bedok Reservoir, which prevents the alienation of longtime residents. The works of public art displayed in Punggol are evidence of community conceptualisation. These take the form of sculpture and mural, and are located in parks and housing estates. One such installation, metre-tall blocks which come together to form the word “LOVE”, was located next to a community farm, hinting at the symbolic relationship between the two. Punggol is a community where people love one another, such a statue insinuates, and are willing to embark on collective efforts like a community farm to help each other. The values of the community are hence reflected in the design of urban space, making it a stronger anchor for the community. Similar is Heartbeat@Bedok’s nomenclature. It conjures not just the importance of the heart as a hublike organ, a conduit and an intersection for other organs, but also the metaphor of a heart as symbolic of love and passion. Hence, the name evokes Bedok’s “care culture”, as briefly mentioned in 4.2.1, and also its broader identity which is built around social interaction and convenience, all while restating the unique nature of the building as a hub with many amenities and cross-demographic appeal. Values held by the community are truly embodied by this building, making it no surprise that it is the most important building for residents in Bedok.

An example of community involvement in actualised design can be seen in Heartbeat@Bedok. Heartbeat@Bedok contains a space specifically designated for fairs and community marketplaces. At the time of visit, it was occupied by a Hari Raya Bazaar, which consisted of small businesses and residents of the Bedok neighbourhood, which had congregated in the space to sell their products. Each had been given a small stall, and business was brisk in the morning. Simultaneously, preparations for a Zumba class were being made in another area by volunteers from the local Residents Committee. Residents of the neighbourhood are given a space and a stake in the actualised design, transforming it from a building for them to a building by them.

The closest equivalent to Heartbeat@Bedok in Punggol was Waterway Point, a mall catering to Punggol residents. However, residents did not express a similar attachment to Waterway Point, due to it having none of the elements of Heartbeat@Bedok described above. Despite being similarly revolutionary in terms of an architecture which took inspiration from and is named after the local landscape, it failed to invoke the values that are so crucial to Punggol's identity. Further consideration of this will be given in the final chapter.

## Chapter 5: Conclusion

This paper begun by exploring urban development in Singapore, and considering how it could potentially disrupt local identities. It then embarked upon a review of local literature, which was found riddled with gaps, making a new study necessary. The five-pronged framework contributed by Shao and Koh was then applied to the two neighbourhoods of Bedok and Punggol, where significant evidence of local identity was found, which were stronger in Bedok than in Punggol, but as a result of key landmarks rather than the ROH and community centres, signalling the failure of such initiatives. Analysis of these landmarks revealed three cardinal principles of successful urban design: inclusiveness, appeal to multiple demographics, and a community basis, all of which were identified in Heartbeat@Bedok, thus explaining its status as the most important building found in the surveys. These insights can be coalesced to answer the final research question on the relationship between urban space and local identity.

It is not how space is designed itself that shapes local identity, but rather how it is made use of. Community must be involved in these spaces; when they are not, they cannot relate to spaces and it will not be a part of their identity. Some of the events respondents cited as being most successful in building community, like underblock movies and busking, did not make use of urban space at all. Others, like shopping and exercising, did not require specific design features at all. What they had in common was an involvement from the community. The features which respondents felt were most important all had a strong instrumental function. They could be used and actively experienced, unlike the passive and static design architecture found in the Punggol HDB flats, which authorities aggressively implemented but were ignored by residents.

Heartbeat@Bedok is so important precisely because it offers so many different functions. The guiding principles of inclusiveness and cross-demographic appeal are fundamentally just ways to increase the access of such functions. Instrumentalism is the first step towards a structure which builds local identity.

The second is that it must be designed with the values of the community in mind. Again, Heartbeat@Bedok does this fantastically through its design elements of accessibility, convenience and care, which have been established as values which respondents feel are unique to Bedok. In contrast, Punggol's Waterway Point leverages only upon the physical status of Punggol as a seaside town. It fails to transcend beyond physical landscape to invoke shared values.

This is symptomatic of a larger ineffectiveness: that of the entire effort to base Punggol around being a seaside town. Singapore is after all an island, and it is easy to see why such a message might be less than resonant in Punggol. Another reason for ineffectiveness is that Punggol did

not originally have a seaside identity; seasidedness was only an identity imposed upon Punggol by urban planners. This is in contrast to Bedok, which as the interviews suggested had a culture of care and inclusiveness which predated the establishment of the ROH. The ROH capitalised upon already existing identities, and did not designate new identities by itself.

If these conclusions are validated, it suggests that the ROH needs to undergo a conceptual reconsideration. It cannot designate identities for a town and design buildings which will recall such identities, but rather it must emphasise on already present values. When reconstructing, it has to take care to preserve portions of what is already there, and be based upon a functionalist approach. This same principle must be universally applied, not just for the purposes of rejuvenation in mature estates, but also for the purpose of realisation in young estates.

## Appendix I: Survey and Interview Questions

### Interview

1. What are some memories you have about your neighbourhood?
2. Could you tell me what you think is special about your neighbourhood?
3. Narrowing questions if they're irrelevant:
  - a. Are there any distinctive buildings in your neighbourhood?
  - b. Are there community activities in your neighbourhood you participate in?
  - c. Are there any sounds, feelings, smells or tastes you get from your neighbourhood?

### Survey

First ensure that they are a resident.

1. What is your gender?
  - a. Female
  - b. Male
  - c. Other
2. To what age group do you belong?
  - a. 0-18
  - b. 19-39
  - c. 40-59
  - d. 60+
3. How many years have you lived in this neighbourhood?
  - a. 0-5
  - b. 6-10
  - c. 11+
4. How many times a year do you participate in activities organised by the community centre?
  - a. 0
  - b. 1-5
  - c. 6-10
  - d. 11+
5. What kind of activities do you participate in?
  - a. \_\_\_\_\_
6. I am now going to show you some pictures.
  - a. Which aspects in this picture do you think best represent the unique nature of Bedok/Punggol? (在场景中你认为能表达地方特色的元素有哪些?)

- b. What are some important activities that can happen in this location? / 这里会有什么重要的活动出现吗？

**Appendix II: Selected Pictures**

**Punggol:**



*Figure 7: Punggol mature estates*

Physical	Social
MRT Lines, Greenery, HDBs, Playground	Exercising, shopping at the market



*Figure 8: Punggol young estates*

Physical	Social
Farm, Public Art	Farming



*Figure 9: Punggol mixed development*

Physical	Social
HDB Flats, Park Connector, Canal, Greenery	Cycling, kayaking, running, exercising



*Figure 10: Waterway@Punggol*

Physical	Social
SAFRA Club, Park, Cycling path, Waterway	Cycling, running, kayaking

**Bedok:**



*Figure 11: Bedok mature estate*

Physical	Social
Market, Heartbeat@Bedok	Shopping, eating with friends, talking, gaming



*Figure 12; Heartbeat@Bedok*

Physical	Social
Playground, 4G fitness stations,	Playing, exercising, talking

heartbeat@bedok, HDB flats	
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Figure 13: Bedok Reservoir

Physical	Social
Reservoir, new condos, park	Fishing, canoeing



Figure 14: Bedok Reservoir Park

Physical	Social
Street art, park	Cycling, exercising, Pokemon Go

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