

RHGT, Vol. XIII, Issue 25-26, pp. 9-30

VOICES FROM THE STREETS: TRENDS IN NAMING PRACTICES OF SINGAPORE ODONYMY

Francesco PERONO CACCIAFOCO

Nanyang Technological University (NTU), College of Humanities, Arts, and Social Sciences (CoHASS), School of Humanities (SoH), Linguistics and Multilingual Studies Programme (LMS), Singapore

Email: fcacciafoco@ntu.edu.sg

Shu Qi TUANG

Nanyang Technological University (NTU), College of Humanities, Arts, and Social Sciences (CoHASS), School of Humanities (SoH), Linguistics and Multilingual Studies Programme (LMS), Singapore

Email: stuang001@e.ntu.edu.sg

Abstract: Past studies on Singapore toponymy have mainly focused on etymological aspects of individual street names as distinct units, overlooking the relevance of naming practices across different languages. Singapore odonymy is still a largely unexplored field. An investigation into naming strategies in Singapore street names can provide deeper insights not only into the field of Historical Toponomastics, but also shed light on both the history of Toponymy in the local context and among different ethnic groups 'en masse'. This paper explores trends in naming practices in Singapore odonyms belonging to three different languages, namely English, Malay, and Chinese. A randomized sampling of 50 street names from each language was collected and analyzed according to specific naming strategies, highlighting the following categories: descriptive, commemorative, thematic, and borrowing. Results show tendencies towards naming strategies of commemoration and borrowing for English-derived odonyms, descriptive for Malay street names, and a strong preference for commemorative naming for the Chinese-derived ones. Further examination of the odonyms suggests a combination of social, political, and historicalgeographical factors underlying these multi-faceted naming processes. This paper aims at being a starting point for a series of studies on the almost unexplored field of Singapore Toponymy, developed through an approach that considers the social and sociolinguistic perspectives besides the conventional historical and etymological methods.

Key words: Singapore Toponymy, Odonymy, Naming Processes, Sociolinguistics, Historical Toponomastics



1. INTRODUCTION

Odonymy is one of the many sub-categories of Toponymy and refers specifically to the study of public street or road names and their origins¹. It also involves the investigation of the process of street names selection, standardization, and circulation².

Toponyms in general, including odonyms, serve various functions. With regards to academic research, they are considered invaluable sources in the investigation and reconstruction of ancient naming processes (Historical Toponomastics and Diachronic Toponymy), and in the disciplines of history of landscape, history of physical and political geography, population movements, and settlement dynamics³. Changes in place names can also provide valuable information on semantic and phonological shifts in languages⁴. Moreover, given that language is inherently associated with culture, place names coined and utilized by different populations can also provide insights into local traditions as well as the perceptions of their own environment by people and communities⁵. Functions of place names can also be subcategorized into individual and more general aspects. On an individual-focused level, names of streets and roads adopt practical functions as a form of organization of the spatial environment, aiding speakers in orientating themselves as well as in finding directions and destinations⁶. On a broader level, toponyms may give shape to the core of individual and collective memories and traditions, eliciting various connotations (both negative and positive) through events associated with specific areas⁷. With such functions, place names and their subsequent changes can, in turn, play a vital role in a contemporary nation by eliciting strong feelings among local people, especially for countries with multi-ethnic populations⁸. This is particularly relevant in the context of Singapore, which consists of four major ethnic groups and many other minority peoples.

This paper focuses mainly on the currently existing place names in Singapore. Specifically, the scope of the study revolves around the potential presence of tendencies towards different naming practices among the languages from which Singapore's street names are derived (the terms 'odonym', 'place name', and 'toponym' will be used interchangeably hereafter to refer to street names). The historical origins of toponyms will be discussed where necessary, to provide the readers with a more holistic perspective. In addition, to understand the current status of Singapore toponymy, it is essential to provide information on the recent history of place naming policies that were implemented in the post-independence period.

2. BRIEF HISTORY OF SINGAPORE

¹ Cf. Neethling, B., (2016), p. 144.

² Cf. Neethling, B., (2016), cit., p. 144.

³ Cf. Poenaru-Girigan, O.M., (2013), p. 155.

⁴ Cf. Poenaru-Girigan, O.M., (2013), cit., p. 161.

⁵ Cf. Poenaru-Girigan, O.M., (2013), cit., p. 155.

⁶ Cf. Neethling, B., (2016), cit., p. 144.

⁷ Cf. Helleland, B., (2012), p. 99; Taylor, K., (2008), p. 4.

⁸ Cf. Helleland, B., (2012), cit., p. 98.

Records of ancient Singapore date back to the early XIV century, when the island was previously known as *Temasik* – likely derived from the Malay word *tasek*, meaning 'lake'⁹. *Temasik* was then said to be renamed *Singapura* in the late 1300s after a usurper from Sumatra took control of the place. However, a more widespread story of the name involves the sighting of what was thought to be a lion (but, more possibly, a tiger) by Sang Nila Utama on the shore of the island. The name *Singapura*, therefore, according to this tradition, would derive from the combination of the Sanskrit words *Singa*, 'lion', and *pura*, 'city'¹⁰.

Singapore was purportedly already established as a trading port (part of the Silk Road) long before the British rule came about¹¹. Excavations carried out in the recent decades discovered potteries and several hundred artefacts from the Yuan Dynasty on the sites of Fort Canning and Empress Place, suggesting that trade had occurred along the Singapore River banks¹². Singapore was then ruled by several Sumatran Kings and for the next few centuries saw periods of unrest and wars before the British colonized it and, thus, marking the beginning of modern Singapore¹³.

The earliest cartography of 'British Singapore' dates to the 1800s. One of the more significant maps was sketched by L. Thomson for Sir Stamford Raffles during the time of British colonization (from 1819 to 1942)¹⁴. In the 1800s, Singapore experienced cultural influences from the increasing numbers of foreign immigrants, including Chinese and Muslim Tamils, who were seeking a peaceful place to escape from political struggles and wars from different parts of the world¹⁵. As a result, Raffles saw a need for crafting up a town plan, by segregating the different ethnic groups to prevent potential occurrences of racial conflicts¹⁶. This plan came to be known as the Raffles Town Plan. Subsequently, in the mid-1840s, a more detailed topographical map of the nation was drawn up by John Turnbull Thomson¹⁷. In this latter map, a number of the current existing toponyms in Singapore were already present, even though many underwent spelling changes and slight geographical shifts from their original areas over time. Examples include Toah Pyoh (now Toa Payoh) and Tanjong Passar (now Tanjong Pagar). Maps of Singapore were also drawn for a variety of functions, but mainly for military purposes, during the time of the Second World War. Today, they primarily serve redevelopment and documentation purposes. Despite the large collection of maps and documents, there is very little data pertaining to the topographical changes of streets at the time of and after colonization. One significant change to the landscape of Singapore involves the Singapore River, as it is possible to observe in maps from the 1800s up till recent years 18. At the outset of colonization, Raffles launched the first ever land reclamation project in Singapore around the south bank of the river, to realize the potential of the area as a trading port¹⁹. Subsequently, further work was carried out to level the surrounding hilly areas for

⁹ Cf. Miksic, J.N., (1985), p. 16.

¹⁰ Cf. Miksic, J.N., (2013), p. 150.

¹¹ Cf. Miksic, J.N., (1985), cit., p. 104.

¹² Cf. Miksic, J.N., (1985), cit., pp. 55-99; Miksic, J.N., (2013), cit., pp. 212-213.

¹³ Cf. NLB, (2017), passim.

¹⁴ Cf. SDS, (1828), *passim*.

¹⁵ Cf. Tan, T.T.W., (1986), p. 58; Yan, Q., (1986), pp. 1-9; Turnbull, M., (1989) p. 14.

¹⁶ Cf. Buckley, C.B., (1984), p. 84.

¹⁷ Cf. TBL, (1846), passim.

¹⁸ For a comparison, see TBL, (1825), passim; Turner, D., (1945), passim; MPA, (2000), passim.

¹⁹ Cf. SHB, (2016), p. 18.

commercial buildings and economic development²⁰. Such changes also continued after independence, when land reclamations were launched in areas such as *Pulau Saigon* (an island within the Singapore River) for industrial purposes²¹.

3. HISTORY OF TOPONYMIC POLICIES IN SINGAPORE

Having been under the British rule for decades and, subsequently, part of the Federation of Malaya under Malaysia (for only a few years), Singapore has inevitably undergone a multitude of changes in toponymic policies as well as many modifications of street names. The long British colonization time, as well as the 3-year merger with Malaysia prior to gaining independence in 1965, resulted in a vast amount of English and Malay street names 'implanted' on the local landscape even before Singapore's very own toponymic policies came into existence.

Shortly after independence, the Advisory Committee on the Naming of Roads and Streets was established in 1967²². Following that, significant modifications of the existing public street names were implemented by the government to promote the 'building' of a new national identity among citizens who were from different ethnicities, with the Chinese in the majority followed by the Malays and then the Indians²³. One of these efforts involved the eradication of English or British-derived toponyms from the colonial period, overriding them with Malay-derived place names, to show allegiance to Malaysia²⁴. However, this proposal met with strong resistance from the public, especially non-Malay citizens, who were mostly not well-versed in the language and, therefore, unable to understand the meanings behind the newly given odonyms²⁵. With others also interpreting such proposal as privileging one ethnic group over the others. Most locals thus sought to reinstate the English street names, which were at the very least neutral, if not familiar, to them²⁶. In addition, as the majority of the local population was of Chinese ethnicity, a gradually increasing number of toponyms with Mandarin Chinese as the source language began to appear. Subsequently, in 1968, the Committee of Standardization of Street Names in Chinese was established due to the need to standardize the Chinese translations of non-Chinese toponyms. The Committee was also involved in the development of English translations for place names derived from Mandarin, other Chinese vernaculars and Hokkien, which was the common *linguae françae* in that time²⁷. After further reformations by the place naming committees over the next few decades, the Street and Building Names Board was eventually established in 2003 and is currently the main committee in charge of naming public areas in Singapore²⁸.

4. SINGAPORE ODONYMS

12

²⁰ Cf. SHB, (2016), cit., p. 36.

²¹ Cf. SHB, (2016), cit., p. 56.

²² Cf. Yeh, Y.T., (2013), p. 127.

²³ Cf. Yeoh, B.S.A., (1996), p. 301.

²⁴ Cf. Kong, L., Yeoh B.S.A., (2003), p. 120.

²⁵ Cf. Kong, L., Yeoh B.S.A., (2003), cit., p. 121.

²⁶ Cf. Kong, L., Yeoh B.S.A., (2003), cit., p. 121.

²⁷ Cf. Bolton, K., Ng, B.C., (2014), p. 308.

²⁸ Cf. SBNB, (2018), p. 2.

According to the *Mighty Minds Street Directory*, there were approximately 4,400 street names in Singapore as of 2015, and the situation is substantially unchanged in 2018²⁹. Many of these odonyms have roots in the official languages of the country (i.e. English, Malay, Chinese, and Tamil). Most of the Singapore toponyms were founded through the combination of generic (*Road*, *Street*, etc.) and specific (simplified) elements (*Jurong, Serangoon, Elizabeth* etc.)³⁰. The most basic structure observed involves the combination of each element, giving rise to double or duplex names such as *Pekin Street*, *Serangoon Road*, and *Jalan Kayu*. The sequence of combination for such double names depends largely on the structure of their source languages. This accounts for the occurrences of both the *Generic Element* + *Specific Element* (as in *Jalan Kayu*, which follows the morphological structure of its source language, Malay) and *Specific Element* + *Generic Element* combinations (as in *Pekin Street*) in Singapore³¹. In addition to double names, many complex toponyms consist of more than two elements, as in *Ang Mo Kio Industrial Park* 1³².

Given the multi-ethnic context of Singapore, it is also unsurprising to witness combinations of languages within a single street name, such as *Bukit Mugliston*, a compound of the Malay word for 'hill' (*bukit*) and an English name (*Mugliston*). Another instance of that is the amalgamation of the Malay generic element *jalan*, meaning 'street', and *lam sam*, the specific element in Hokkien meaning 'south hill', to form the odonym *Jalan Lam Sam*³³.

4.1. Changes in Singapore Odonyms

Unlike other countries, such as, for example, former Yugoslavia, with a history involving massive political and ethnic changes that, in turn, resulted in substantial alterations in their toponyms³⁴, modern Singapore has a relatively short history, which did not call for such extensive changes in the toponymic landscape. Even after significant historical 'eras', such as the British colonial rule and the merger with Malaysia, local streets did not undergo large-scale shifts in their names, probably because of factors such as the resistance to changes by the public, as aforementioned. Nevertheless, one point of modification worth noting lies mainly in the change of spelling of the place names³⁵. With Chinese vernaculars being the *lingua franca* of local people in the mid-1900s, a number of Singaporean street names were initially associated with them. Examples include the common colloquial uses of Lor for 'road' and Kue for 'street' among Chinese place names, which were both adapted from the Hokkien dialect. We can also see this in the initial use of *Nee Soon* for *Yishun*, which was based on Teochew spoken by a group within the local Chinese community³⁶. Most of these designations were standardized and revised to Mandarin Chinese spellings upon the founding of the Committee of Standardization of Street Names in Chinese³⁷. Similarly, such standardizations can also be observed in

²⁹ MMSSD, (2015), pp. 12-53.

³⁰ Cf. Poenaru-Girigan, O.M., (2013), cit., p. 164; Ng, Y.P., (2017), p. 7.

³¹ Cf. Ng, Y.P., (2017), cit., p. 8.

³² Cf. Ng, Y.P., (2017), cit., p. 7.

³³ Cf. Ng, Y.P., (2017), cit., pp. 99 and 217.

³⁴ Cf. Rajić, L., (2012), pp. 205-208.

³⁵ Cf. Ng, Y.P., (2017), cit., p. 45.

³⁶ Cf. Ng, Y.P., (2017), cit., p. 43; Savage, V.R., & Yeoh, B.S.A., (2013), p. 407; Song, O.S., (1984), p. 516.

³⁷ Cf. Kong, L., Yeoh B.S.A., (2003), cit., p. 125.

Malay place names. This can be exemplified by the alteration of the toponym *Tampines*. The name *Tampines* was first recorded in maps from 1828, and has existed in different forms, including *Tampenus*, *Tampinis*, and *Tampenis*, thereafter³⁸. The word *Tampines* was said to be derived from the tree known as *tampinis* in Malay, which was widely cultivated in the area, although another source asserts the origins of this toponym to be from a creek in the area, known as *Tampenis*³⁹. Therefore, the origins of that place name remain unclear. Nevertheless, the name was subsequently standardized to *Tampines* in 1939 by the Rural Board⁴⁰.

In addition to the standardization of spellings, it is also possible to highlight phenomena of semantic change among toponyms. An instance to illustrate this could be Ang Mo Kio, which is claimed to be derived from the word ang-mo in Hokkien, literally meaning 'red-haired', an expression referred to (non-Asian) foreigners, as well as kio, meaning bridge⁴¹. This area was named this way due to the presence of a bridge built by Thomson in the 1840s⁴². However, although pronunciation and spelling were preserved, the semantics of the place name was later modified to mean 'spacious and prosperous bridge', with the redevelopment of a new town. This change was possibly made to eliminate the vernacular usage and, at the same time, to euphemize the place name through the association of a name with pleasant connotations. Another example of such linguistic refinement of place names includes Sentosa. The area was originally known as Pulau Blakang Mati, literally meaning 'island behind death' in Malay⁴³. This is a reference to the fortifications built by the British during the Second World War that faced the sea to the south and the fact that Singapore was invaded by the Japanese from the north ('behind'). The current name, which denotes 'tranquility' in Malay, was adopted in 1970, when the region was redeveloped into a resort island⁴⁴.

5. NAMING PRACTICES IN SINGAPORE

Street names in Singapore belong to different categories, including, among others, commemorative names, borrowings, and derivations from specific themes. Although the naming practices can be summarized into various sets, as stated, these categories are not strictly separated from each other, and often overlap, with toponyms arising through a combination of different naming strategies. The Singapore context allows highlighting a convergent direction in the naming process of the street names: the action of the government on the local odonymy is accompanied by the everyday interaction of the users with the streets and their names, involving in the naming and re-naming process the 'voices' of everyday people⁴⁵.

5.1. Commemorative Naming

³⁹ Cf. Savage, V.R., Yeoh, B.S.A., (2013), cit., p. 367; Ng, Y.P., (2017), cit., p. 409.

⁴⁴ Cf. TST, (1970), p. 10.

³⁸ Cf. SHB, (2017), p. 4.

⁴⁰ Cf. SHB, (2017), cit., p. 4.

⁴¹ Cf. Ng, Y.P., (2017), cit., pp. 71-72.

⁴² Cf. Cornelius, V., (1999), *passim*.

⁴³ Cf. TST, (1969), p. 4.

⁴⁵ A very valuable paper on this issue is Creţan, R., Matthews W.P. (2016), pp. 92-102, considered the first scientific work developing theories on users (everyday people) of street names, and a leading theoretical analysis of voices of the street on (re-)naming practices.

One of the most salient naming practices in Singapore is commemorative naming. Streets are named after individuals (and, sometimes, their family members) who have contributed significantly to the country's development⁴⁶. Streets and places deriving their designations from names of persons are prevalent in the local context. Many were named after the owners of well-known plantations / orchards and estates (such as Oxley Rise, Prinsep Street), governors and councillors of Singapore (Jervois Road, Crawford Street), heroes from war times (Mountbatten Road, Havelock Road), members of the Municipal Commission (Farrer Road, Jalan Eunos), and other prominent figures involved in legal (*Pickering Street*) or educational fields (*Boon Keng Road, Blackmore Drive*)⁴⁷. There are also special cases in which not only the individuals themselves, but also names of their family members appear in street names. This, for instance, is shown by several odonyms along the estate Yishun (previously known as Nee Soon), derived from the names of Lim Nee Soon's family members, such as Chong Kuo Road and Peck Hay Road, named after the son and wife of Lim Nee Soon⁴⁸. Additionally, with the colonization, many streets were named after British and European royalties, such as Victoria Street and Albert Street⁴⁹. Commemorative street names from the post-independence time also include Sheares Avenue, named after the second president of Singapore, and Hon Sui Sen Drive, named after a Singapore Minister of Finance in the 1970s⁵⁰.

Interestingly, a smaller number of toponyms in Singapore relate to historical events, as compared to the ones derived from anthroponyms. Even in the cases of significant historical moments, indeed, the diachronic tendency highlights the fact that streets would be named after specific individuals who distinguished themselves in those occurrences, rather than after the events themselves. This could suggest a preference in naming practices towards individual commemoration over specific historical moments. An example of Singaporean toponyms connected with a notable local historical event is *Dakota Crescent*, name given after an aircraft (the American airplane *Douglas DC-3 Dakota* belonging to the Royal Air Force, which landed at Kallang Airport before it was closed) that crashed in that place on June 29, 1946, killing all the passengers on board⁵¹.

5.2. Descriptive Naming

Descriptive odonyms are abundant in Singapore. These names are generally developed in two ways. Firstly, a number of street names were coined after the primary economic and agricultural activities that had flourished in their corresponding areas. Examples falling under this descriptive category of naming include *Nutmeg Road* and *Sago Lane*, which were named after agricultural activities (and their related products) that occurred near their areas⁵². Many other streets were also named after plants and trees widely cultivated in a specific region, including *Kranji*, *Sembawang*, and the earlier mentioned *Tampines*⁵³.

⁴⁶ Cf., Yeoh, B.S.A., (1996), cit., p. 305.

⁴⁷ Cf. Yeoh, B.S.A., (1992), pp. 314-316; Ng, Y.P., (2017), cit., pp. 14 and 21.

⁴⁸ Cf. Ng, Y.P., (2017), cit., pp. 337, 122, and 354.

⁴⁹ Cf. Ng, Y.P., (2017), cit., p. 27.

⁵⁰ Cf. Ng, Y.P., (2017), cit., p. 23.

⁵¹ Cf. Ng, Y.P., (2017), cit., p. 137.

⁵² Cf. Ng, Y.P., (2017), cit., p. 17.

⁵³ Cf. NPB, (2015), passim.

Secondly, street names were also coined after landscape features or anthropic facilities which once existed (or still exist) in their specific areas. One instance of such derivation is *North Bridge Road*, coined after the name of the oldest bridge in Singapore, the Elgin Bridge⁵⁴. Other similar examples include *North Canal Road* and *Crescent Lane*, named after specific facilities or prominent geographical features of their respective areas⁵⁵.

5.3. Borrowings

Another major component of the odonymic naming process in Singapore comes from the borrowing of place names from foreign languages and their respective countries. Most of the place name borrowings come from Great Britain, because of the British colonization times. These borrowings can be observed in many areas, including housing estates, such as *Berwick Drive* and *Moreton Close*, and in localities where army bases once existed, for instance *Battersea Road*⁵⁶. Some roads were also named after British colonies, including *Canada Road* and *Kenya Crescent*⁵⁷.

Apart from the British-related borrowings, many street names in Singapore were originally either imported from the surrounding regions or derived from names of ethnic groups, including *Bugis*, *Arab Street*, and *Pekin Street*. These areas were characterized by the massive presence of the respective populations residing in their territories, as shown by documents recording the settlements patterns of Bugis, Malay, Arabic, and Chinese immigrants⁵⁸. Borrowed place names may also serve commemorative functions. This can be exemplified by the presence of several roads along the locality of *Kovan* named after towns in Scotland (*Glasgow Road*, *Hillside Drive*, *Leith Road*), in memory of a Scottish member of the Rural Board, R.A. Dix⁵⁹.

5.4. Thematic Odonyms

Thematic toponyms can also be observed in Singapore, with most of the street names findable in specific areas or parts of estates and named after a specific theme. *Maple Avenue, Oak Avenue*, and *Elm Avenue* along *Bukit Timah* were named after trees, while the *Upper Thomson* area shows flower-themed street names such as *Carnation Drive* and *Jasmine Road*⁶⁰. A specific example illustrating the theme-based concept of street naming could be the housing estate *Sengkang*, where place names within the whole estate were coined after several water-themed words, such as *Rivervale Road* and *Anchorvale Walk*. The 'design' of *Sengkang* was based on the theme 'Seafarer', possibly, in turn, derived from the presence of a fishing port along the region in earlier times⁶¹. Some estates showing clearly descriptive names, such as *Opera Estate* and *Teaching Estate*, also include road names semantically in line with the estates' themes⁶². Thematic

⁵⁴ Cf. Ng, Y.P., (2017), cit., p. 341; NHB, (2015), passim.

⁵⁵ Cf. Ng, Y.P., (2017), cit., pp. 342, 164, and 134.

⁵⁶ Cf. Ng, Y.P., (2017), cit., pp. 82, 87, and 330.

⁵⁷ Cf. Ng, Y.P., (2017), cit., pp. 106 and 270.

⁵⁸ Cf. Edward, N., Keys, P., (1988), p. 282; Ng, Y.P., (2017), cit., p. 74; Thulaja, N.R., (2003), passim.

⁵⁹ Cf. Ng, Y.P., (2017), cit., p. 141.

⁶⁰ Cf. Ng, Y.P., (2017), cit., pp. 32 and 109.

⁶¹ Cf. Cornelius, V., Hamid, A., (2016), passim; STS, (2000), p. 28.

⁶² Cf. Ng, Y.P., (2017), cit., pp. 66 and 185.

toponyms, indeed, can also be considered descriptive place names, as shown in the above examples.

5.5. Other Naming Practices

Apart from the above-mentioned categories, it is possible to highlight many other ways in which local place names have been coined, albeit less prevalent than the ones just listed. For instance, some streets in Singapore were named by using auspicious words from the Chinese vernaculars, as in Soon Lee Road, denoting 'smooth' in Hokkien⁶³. Places of worship and religion are also connected with street names. Moreover, streets may also be named after 'specific items' for less obvious reasons, as in Kasai Road, in which *kasai* refers to a 'cosmetic powder' in Malay⁶⁴. It is possible also that this place name has a descriptive nature, probably deriving from an 'item' or product once popular in that specific area. However, evidence supporting such claims is usually hard to trace due to the lack of relevant historical records. Similarly, various toponyms observed to be derived from names of plants and flowers could have originated from a descriptive strategy in their naming processes, although evidence may no longer be available. Additionally, changes in place names can also be made because of complementary purposes, such as the subsequent renaming of a neighbouring road to Makeway Avenue, when the adjacent Makepeace Road was named after the Editor of the Singapore Free Press⁶⁵. For purposes of consistency and convenience, the Derivative Method is currently the most common methodology used for place naming in Singapore, where many street names are coined based on one specific element combined with several generic elements, along with numerals attached at the end (the streets numbering system), as in Kaki Bukit Avenue 1 and Kaki Bukit Road 166.

Despite some valuable researches done on the toponymy of Singapore, there is still a lack of in-depth studies on different naming practices in the local context. Although the naming of public streets and areas in Singapore is currently determined by the government, toponyms were originally coined by populations who once resided in their respective areas. Many of these place names have been preserved and adopted by the institutions, with some changes or through a common process of standardization. In addition, and as mentioned, due to the multi-ethnic nature of the society, toponyms in Singapore are derived from many languages, including English, various Chinese varieties, Malay, Burmese, and others. Such a multi-ethnic situation, therefore, provides opportunities for cross-cultural comparisons of naming practices within the same context. To date, however, very few studies have directly discussed the different naming practices in Singapore. This includes Ng (2017), Yeoh (1992), and others, who briefly discussed some of the naming practices observed locally though their merely described the various naming practices without any further analysis or comparison across the toponyms originating from different languages.

This paper, as mentioned, aims to examine the trends in naming practices among odonyms in Singapore across three languages: Chinese, Malay, and English. Street names have been specifically chosen as the material for this research in consideration of the toponymic context of Singapore. Singapore is a relatively small city-state with only

⁶⁴ Cf. Ng, Y.P., (2017), cit., p. 266.

⁶³ Cf. Ng, Y.P., (2017), cit., p. 118.

⁶⁵ Cf. Ng, Y.P., (2017), cit., p. 317.

⁶⁶ Cf. Ng, Y.P., (2017), cit., p. 10.

micro-toponyms, such as street names, available for a comparative analysis. These micro-toponyms are, generally, more prone to changes and modifications in contrast to macro-toponyms such as names of towns and cities. For this reason, odonyms are a fertile territory for toponymic analysis within this specific local context.

The following sections focus on the investigation of Singaporean odonyms among the three above-mentioned languages, trying to ascertain if a specific language shows preference for any naming practice over the others. The aim of this approach is to explore toponymy in Singapore through both a historical and sociolinguistic perspective, trying to understand how specific place names came along and the potential cultural or societal factors that could have influenced the diachronic development of such names. A further analysis of the motivations underlying place naming would, in turn, shed light on the history of Singaporean toponymy and, possibly, on cultural and social values upheld by the different ethnic groups since the origins of the country.

6. METHODOLOGY

A total of 150 odonyms belonging to three of the official languages in Singapore, English, Chinese, and Malay, were collected as a sample for analysis. The odonyms were compiled by importing all the existing street and road names of Singapore from the *Mighty Minds Street Directory*⁶⁷ into Microsoft Excel, with the exclusion of odonyms originated from the aforementioned Derivative Method (i.e. toponyms derived from the same specific elements). Then, 50 significant odonyms per language were thoroughly analysed. At the same time, to ensure the accuracy of the street names in relation to their respective languages, the origins of each odonym was examined and cross-checked in different sources, including references on the Toponymy of Singapore⁶⁸, maps from the National Archives of Singapore, digitised newspapers, and online sources published by the National Heritage Board and the National Library of Singapore. In cases where the street name derives from a combination of languages or involves an overlapping of naming strategies, emphasis has been placed on the language and naming strategy of the specific elements composing it.

For data analysis, charts of place names from each language were generated to observe and deduce possible trends in naming practices within each language. The naming practices analysed are those aforementioned, classified into categories including commemorative naming after prominent figures or significant events, borrowed toponyms from foreign places or languages, thematic toponyms connected with a specific area, descriptive toponyms, place names derived from trees', plants' or flowers' names, and 'others' that comprise names not described in the previous sets. Street names falling under the descriptive category refer to either landscape features such as the morphology of roads, or toponyms derived from facilities or sceneries existing in their areas. Although toponyms derived from names of trees and plants could also serve descriptive functions (i.e. places were named in a specific way due to the presence of a plant species), another category has been created for them to distinguish those place names from the ones named after particular geographical and landscape features. Lastly, the 'others' category consists of toponyms which do not fall into other naming practices. This includes places named

.

⁶⁷ Cf. MMSSD, (2015), cit., pp. 12-53.

⁶⁸ Cf. Dunlop, P., (2000); Savage, V.R., Yeoh, B.S.A., (2013), cit., passim; Ng, Y.P., (2017), cit., passim.

after specific designations, objects, animals or fruits with no clear specifications of descriptive origins.

The results of this work have been examined to deduce possible reasons for the trends highlighted in the survey, with the main aim to shed light on the origins of the analysed odonyms, as well as their naming processes. A decisive point is the search for possible (internal and external) factors that could have influenced the naming processes in the different targeted languages. A comparison with existing analogous place names from different countries allows for the enrichment of the analysis and for an assessment of possible cultural connections.

7. FINDINGS

7.1. English-Derived Odonyms

Figure 1 shows the percentages of different naming practices adopted in Singaporean toponyms derived from English. According to Figure 1, the most frequently adopted naming practice in Singaporean toponyms of English origins is the commemorative naming, observed in nearly half of the sample (46%). This is followed by borrowed place names (22%), descriptive toponyms (18%), thematic toponyms (12%), and odonyms derived from trees' and plants' names (2%).

Unsurprisingly, most of the borrowed toponyms originate from names of towns in Great Britain, like East Sussex Lane, or countries which were once under the British rule, for instance Falkland Road. Similarly, English thematic toponyms mostly revolve around names of facilities and towns in Great Britain, which can also be considered borrowings. Other thematic street names in the current sampling include Gardenia Road, part of the 'floral' theme, and famous stage productions under the 'Opera' theme. Moreover, some street names under the descriptive category were named after the residences of prominent European figures. This includes Grange Road, named after the estate owned by Dr Thomas Oxley, Grange House. Similarly, South Bridge Road also has its toponymic origins in the famous bridge that was, in its turn, named after the war hero James Bruce, who was the eighth Earl of Elgin. This suggests a strong preference of the English place names towards commemorative naming as well as borrowings. Furthermore, given that most of the toponyms under the descriptive category originated from names of residences and, indirectly, from famous European historical characters, such naming could also serve commemorative functions at a secondary level. Therefore, the current results show a strong inclination of English toponyms towards commemorative naming.

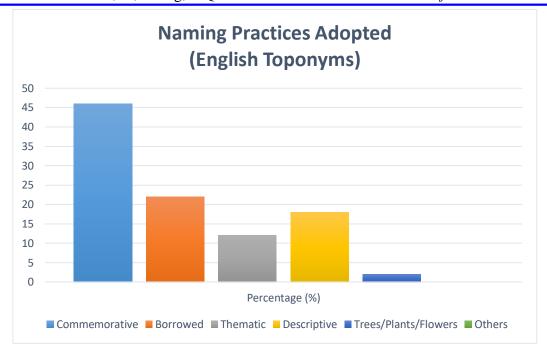


Figure 1. Percentage of Naming Strategies Observed in English-Derived Toponyms

7.2. Malay-Derived Odonyms

Figure 2 shows the frequencies of the naming practices adopted in Malay place names in Singapore. In contrast to the odonyms originated from English, Malay street names depict a minimal usage of commemorative and borrowed naming strategies (2%). The most frequently applied naming strategies are: descriptive (28%), thematic (20%), and derivations from trees', plants' or flowers' names (18%). In addition, many of the Malay place names fall under the category of 'others' (30%), with derivations ranging from animal names (*Jalan Belibas* and *Lorong Selangat*, named after fish species) to names of objects (*Lorong Stangee*, 'incense') to titles and designations of individuals (*Jalan Rajah*, 'ruler').

Malay street names falling under the descriptive category were developed through both the derivations from landscape features of the related places, and the description of activities and facilities existing in their areas. Some examples include *Lentor Avenue*, derived from the Malay word *lentur*, 'bend', due to the curved shape of the road, and *Bras Basah Road*, named this way since the area was once utilized for drying rice (*brass bassa* refers to 'wet rice' in Malay). Moreover, despite being categorized differently, half of the toponyms derived from 'trees, plants', and flowers' names serve descriptive functions, such as *Sembawang Road*, *Gambir Walk*, and *Dedap Road*, all of which were named after widely grown trees and plantations / orchards in the respective areas. Some street names under the 'thematic' category are also descriptive, such as *Sampan Place*, which refers to 'boats', because of the existence of boatyards in the area. These statistical results seem to suggest a preference, in Malay toponyms in Singapore, towards descriptive naming practices.

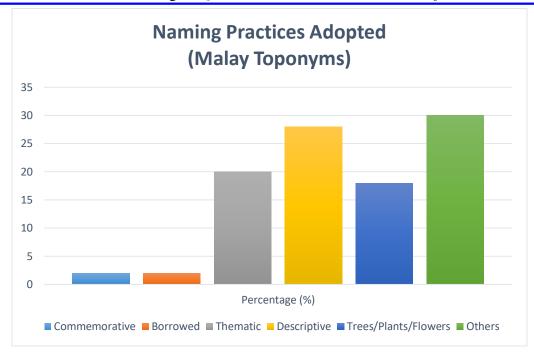


Figure 2. Percentage of Naming Strategies Observed in Malay-Derived Toponyms

7.3. Chinese-Derived Odonyms

Results of the analysis of the Chinese-derived toponyms are illustrated in Figure 3. The data shows an overwhelming amount of Chinese street names coined according to commemorative naming strategies (66%), followed by descriptive naming practices (20%). In contrast, relatively few toponyms fall under the 'others' and thematic (6%) categories. There is also a low frequency of borrowed street names (2%). No instances of Chinese street names derived from trees', plants' or flowers' names were found in the analysed sample.

Commemorative odonyms originating from Chinese were named after prestigious individuals and their family members, such as *Boon Lay Avenue*, after the businessman Chew Boon Lay, and *Pek Hay Road*, after Wi Pek Hay, the wife of the Rural Board member Lim Nee Soon. Interestingly, one of the commemorative place names in Chinese, *Yio Chu Kang Road*, was derived from a family name (the Yio family) instead of an individual. In the case of descriptive Chinese toponyms, all the derivations originated from geographical locations, facilities or sceneries, which were associated with the related areas. They include *Hougang Street* and *Chai Chee Road*, Hokkien names that literally translate as 'behind the pier' and 'vegetable market', respectively, due to the presence of these infrastructures in the respective places. *Pekin Road*, which was derived from Beijing, is the only borrowed place name found in the sample. Place names not falling into the 'others' category have been named either after types of fruit or from names with auspicious connotations, as in *Tai Keng Avenue*, meaning 'big celebration', or in *Sengkang Street*, indicating a 'prosperous harbour' in Hokkien.

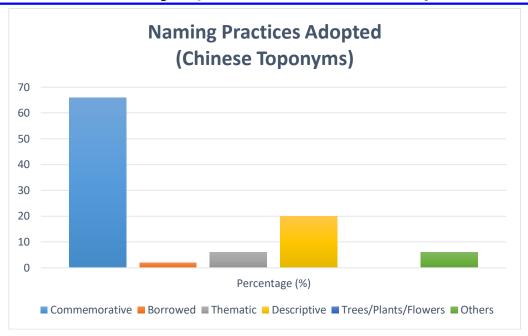


Figure 3. Percentage of Naming Strategies Observed in Chinese-Derived Toponyms

7.4. Summary

As a schematic summary, Figure 4 depicts the compiled data of naming practices highlighted across English, Malay, and Chinese-derived odonyms for a more detailed comparison. According to the survey results, the strongest inclination towards a specific naming practice, in this case commemorative naming, is shown in Chinese street names. This preference is also found in the English-derived odonyms, although to a smaller extent. In addition, place names with English as their source language consist of significantly more borrowings in comparison to those from the other two languages. Malay place names depict a relatively more balanced frequency of usage across thematic, descriptive, trees' and plant-derived names, and naming strategies which do not fall under the established categories. However, as mentioned, many of the Malay toponyms categorized under 'other' naming practices also show descriptive functions. Thus, a preference towards a descriptive naming strategy could also be postulated in Malay street names. I summary, the naming strategies producing toponyms coined after the names of trees and flowers and naming strategies using commemorative naming seem linked to specific languages. However, the descriptive naming strategy appears common across all the three languages.

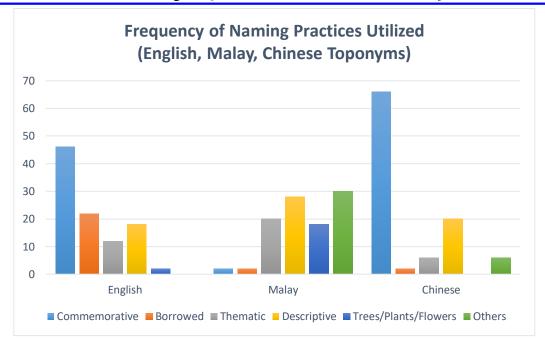


Figure 4. Naming Practices Utilized in English, Malay, and Chinese-Derived Toponyms

8. EVALUATION OF TRENDS

8.1. English-Derived Odonyms

The results for English odonyms obtained in this study suggest an inclination towards both commemorative naming and name borrowings from foreign places, particularly from Great Britain. There are several historical reasons which could be at the origins of such trends in English odonymy in Singapore. A significant aspect is the presence of the British for more than one century on the island. Indeed, most of the English-derived toponyms were developed during the colonization time, from 1819 to 1942. Some examples include Balestier Road, Albert Street, and McNair Road, which are all commemorative odonyms from the mid-1800s and early 1900s, as well as borrowed toponyms such as Oxford Road and Devonshire Road. The preservation of place names from foreign languages to pledge allegiance or maintain relations with a previous colonial power is not uncommon and, indeed, widespread all over the world, as illustrated, among other examples, by the preservation of the French toponym Saint Louis for a city in Senegal even after the end of French colonization. This is done not only for historical reasons, but also to sustain economic benefits arising from the connotations of a common past between the two nations⁶⁹. In Singapore, a new strategy, albeit unsuccessful, was adopted through the attempt to modify English toponyms into Malay place names in the post-independence era, to pledge loyalty to Malaysia, as aforementioned. Additionally, a complementary reason for the high frequency of commemorative place names in the island could derive from the implementation of naming strategies already utilized in the United Kingdom. Indeed, many toponyms in Great Britain are of commemorative nature. To cite a few examples from the existing place names in London, Angell Town, Canning

⁶⁹ Cf. Stolz, T., Warnke, I.H., (2016), p. 43.

Town, and Grahame Park were all named after either developers of the respective areas, or prestigious individuals who contributed significantly to the region ⁷⁰. Moreover, naming strategies specific to British street names in Singapore can also be likewise observed in London place names. Examples include Higham Hill, which was named after Higham House, and the presence of Shakespearian-themed streets in London ⁷¹. Analogically, Singapore also has thematic odonyms associated with the arts, such as Aida Street, as well as derivations of descriptive place names from historical residences like Duxton Road. This is unsurprising, considering that a significant number of British people held positions of power in Singapore during the colonialization period. Thus, the current trend of using English toponyms reflects the integration of naming practices used by the British into the local odonymic landscape.

Likewise, the significant amount of toponymic borrowings from Great Britain could also be a result of the incorporation of British naming strategies into the local context. As mentioned earlier, other than place names borrowings from United Kingdom, there are also several toponyms imported from other foreign countries once under the rule of the British Empire, such as *Kenya Crescent*. The use of such toponyms could possibly express the historical and political connections with the past colonial power, since Kenya was also a colony of the British Empire. The use of toponyms by colonial rulers to show their political power is not unusual, given that place names are closely associated with the daily lives of the people in those countries and can, therefore, facilitate 'nation-building' processes⁷².

8.2. Malay-Derived Odonyms

The results for Malay street names suggest a preference for descriptive toponyms along with derivations from the names of trees and plants. In addition, there are also street names originated from the names of a variety of items and animals, such as fish names, a trend which was not observed in the toponyms from the other two targeted languages.

Analogically to the English street names, for the Malay odonyms in Singapore it is possible to highlight similar naming patterns from neighbouring Malaysia. Records reveal that many place names in Malaysia have been coined according to a descriptive strategy based on the geo-morphological and topographical features (including flora and fauna) of the related specific and different areas from as early as the 1800s⁷³. Furthermore, derivations from the natural landscapes have always been common in place naming in Malaysia, with a preference for toponyms originating from the names of trees and plants. Instances of such street names from the capital city of Malaysia, Kuala Lumpur, include *Jalan Beresah* and *Jalan Ketapang*, both named after native trees, and *Jalan Sayur. Sayur* means 'vegetable, and the street was named this way due to the fruit and vegetable market that once existed in the area⁷⁴. Comparable examples from the Singaporean context include *Dedap Road* and *Gambir Walk*, reflecting the names of trees and plants, and *Bras Basah Road*, mentioned in Section 4.2. In addition, the incorporation of objects of daily use into place names has been also observed, especially in thematic categories⁷⁵.

⁷⁰ Cf. Mills, A.D., (2010), p. xix.

⁷¹ Cf. Mills, A.D., (2010), cit., p. 120.

⁷² Cf. Light, D., Nicolae, I., Suditu, B., (2002), p. 135.

⁷³ Cf. Isa, M., Kaur, M., (2015), p. 8.

⁷⁴ Cf. Isa, M., Kaur, M., (2015), cit., pp. 52, 139, and 220.

⁷⁵ Cf. Isa, M., Kaur, M., (2015), cit., p. 13.

Examples include odonyms derived from names of fish, prawns, and legends, coined with the purpose of spreading traditional knowledge and the awareness of cultural identity to residents. Place name derivations from trees, such as *Tanah Jambu*, and animals can also be observed, among other examples, in toponyms in Brunei, a country where Malay is the official language⁷⁶. Based on the occurrence of similar naming strategies in both the local context and neighbouring regions of the world with Malay toponyms, the current trend observed in Singapore could possibly reflect the underlying common cultural practices and ways of place naming adapted in Malay.

8.3. Chinese-Derived Odonyms

The results for place names with Chinese as the original language show a strong preference towards commemorative naming, followed by descriptive naming strategies. In addition, toponyms derived from adjectives with auspicious connotations not found in English and Malay data are also among Chinese place names. The strategy of commemorative naming in Chinese toponyms is not specific to the Singaporean context, with other countries, like China (People's Republic of China) and Taiwan (Republic of China), also utilizing similar naming practices. In both countries, street names are derived from prestigious figures, such as past leaders and presidents like in *Yat-sen Road* and *Zhongzheng Street*. However, compared to the results generated from our study in Singapore, there are more descriptive place names observed in both China and Taiwan than commemorative ones. This could be attributed to the relatively unstable history of those nations, which resulted in numerous drastic eliminations, changes, and renaming operations of street names⁷⁷. Nevertheless, just as naming places after landmarks and other natural features is widely applied in Malay toponyms, commemorative naming practice is equally found among various Chinese communities worldwide.

An interpretation of such an inclination towards commemorative naming could be associated with the traditions and cultural values of the different ethnic groups. The traditional values among Chinese, amongst others, emphasize on group orientation and respect for authority⁷⁸. As such, Chinese commemorative place naming in the Singaporean context could represent a manifestation of such beliefs, serving as a way of remembrance and respect towards those who have made noteworthy contributions to the society. Furthermore, the importance of group orientation is also illustrated by the commemoration of the family members of significant individuals, as shown by existing toponyms such as (in Singapore) the aforementioned *Peck Hay Road*, which was named after Lim Nee Soon's wife. Chinese culture, like in most Asian societies, promotes collectivism over individualism, and, according to Wong (2001), "In such a collectivist society, an honor bestowed upon a family member is shared by the family and beyond."⁷⁹ As such, the traditional values of respect in the collectivistic culture of the Chinese community could potentially account for the trend of toponymic commemoration seen in the current sampling. Likewise, Chinese place names comprising auspicious connotations can be linked back to the way names have been and are viewed within the specific community. To the Chinese, the semantics of a given name is equally important, if not

-

⁷⁶ Cf. Yunos, R., (2013), pp. 12-14 and 20.

⁷⁷ Cf. Huang, W., (2018), pp. 142-154.

⁷⁸ Cf. Zhang, C., Morrison, J.W., (2010), p. 4; Yau, O.H.M., (1988), pp. 51 and 53; Fang, G., *et al.* (2003), p. 136.

⁷⁹ Cf. Wong, Y.T.E., (2002), p. 5.

more, than its functional uses for identification⁸⁰. There is, therefore, in the Chinese context, a tendency to show preference towards words and phrases with positive connotations, when constructing a given name. This is a cultural convention also reflected in the process of place naming.

8.4. Descriptive Naming Strategies

Despite the presence of different naming tendencies in Singapore English, Chinese, and Malay odonyms, a common point found across all three targeted languages is the application of descriptive naming strategies. This indicates a close relationship between street naming and landscape features of the related areas, regardless of the cultural context or language involved. These findings are unsurprising, since place names are known to be strongly associated with their territories⁸¹, with one of the main functional purposes being the organization and differentiation of areas, thereby allowing users to orient and direct themselves to the desired destinations⁸². As such, toponyms are generally coined based on the local landscape and activities that once thrived in the area, despite the 'omnipresent' possibility of undergoing renaming processes due to other factors. This viewpoint has been shared and supported by other scholars. Kostanski (2016) defined this relationship as 'toponymic dependence', proposing that place names are developed and utilized for the functional purposes of location identification⁸³. Similarly, Williams and Vaske (2003)⁸⁴ refer to this as 'place dependence' and suggest that it could form the basis of 'place identity'.

The significance of descriptive odonyms can also be further illustrated by the development of unofficial street names by the Chinese residents in Singapore in the 1900s, including *Sin Pa Sat Pin*, literally meaning 'beside the new market', in place of the municipal toponym *Ellenbrough Street*, and *Kiau Keng Khau*, referring to 'the mouth of gambling dens' in place of *Church Street*⁸⁵. Most of these unofficial toponyms derive from the local landmarks or are descriptions of the landscape. These place names are closely associated with landscape features and this relationship is likely to be universal across all toponymic contexts, existing regardless of cultures or languages involved in the place naming processes.

9. CONCLUSIONS

This study has identified different trends in naming practices and processes among the English, Malay, and Chinese-derived odonyms in Singapore. Commemorative naming and borrowings have been adopted extensively in the context of British street

⁸⁰ Cf. Kaluzynska, I., (2015), p. 86.

⁸¹ Cf. Perono Cacciafoco, F., Cavallaro, F.P., Kratochvíl, F., (2015), pp. 30-39.

⁸² Cf. Neethling, B., (2016), cit., p. 145; Azaryahu, M., (1996), p. 312.

⁸³ Cf. Kostanski, L., (2016), p. 413.

⁸⁴ Cf. Williams, D.R., Vaske, J.J., (2003), p. 831.

⁸⁵ Cf. Yeoh, B.S.A., (2017), p. 48.

names, while Malay odonyms show a high percentage of descriptive toponyms. Chinese street names reveal a strong preference for commemorative naming strategies. The naming processes of odonyms in Singapore seem to depend on a combination of aspects, including political, historical, geographical, social, and cultural factors. This paper sheds light on the naming processes at the origins of street names in Singapore across three different ethnic groups and three different languages, all of which are currently recognized and approved by the local government. This paper also aims to serve as a starting point for a series of studies on the relatively unexplored field of Singapore Toponymy, providing a new methodology that considers social and sociolinguistic perspectives besides the conventional historical and etymological methods.

10. ACKNOWLEDGEMENTS

We would like to thank Associate Professor Francesco Paolo Cavallaro (NTU, SoH, LMS) for the generous help he has provided us with and for his valuable suggestions.

REFERENCES

- **Azaryahu, M.**, (1996), The Power of Commemorative Street Names, *Environmental and Planning D: Society and Space*, nr. 14, 3, pp. 311-330.
- **Bolton, K., Ng, B.C.**, (2014), The Dynamics of Multilingualism in Contemporary Singapore, *World Englishes*, nr. 33, 3, pp. 307-318.
- **Buckley, C.B.**, (1984), An Anecdotal History of Old Times in Singapore: From the Foundation of the Settlements under the Honourable East India Company, on February 6th, 1819, to the Transfer of the Colonial Office as Part of the Colonial Possessions of the Crown on April 1st, 1867, Singapore, Oxford University Press.
- Cornelius, V., (1999), Ang Mo Kio
 - [Retrieved from http://eresources.nlb.gov.sg/infopedia/articles/SIP_230_2005-01-25.html?s=ang%20mo%20kio].
- Cornelius, V., Hamid, A., (2016), Sengkang
 - [Retrieved from http://eresources.nlb.gov.sg/infopedia/articles/SIP_248_2005-01-20.html?s=sengkang].
- Creţan, R., Matthews W. P., (2016), Popular Responses to City-Text Changes: Street Naming and the Politics of Practicality in a Post-Socialist Martyr City, *Area*, nr. 48, 1, pp. 92-102.
- **Dunlop, P.**, (2000), *Street Names of Singapore*, Singapore, Who's Who Publishing.
- Edwards, N., Keys, P., (1988), Singapore: A Guide to Buildings, Streets, Places, Singapore, Times Books International.
- **Fang, G., Fang, F., Keller, M., Edelstein, W., Kehle, T.J., Bray, M.A.**, (2003), Social Moral Reasoning in Chinese Children: A Developmental Study, *Psychology in the Schools*, nr. 40, 1, pp. 125-138.
- **Helleland, B.**, (2012), Place Names and Identities, *Oslo Studies in Language*, nr. 4, 2, pp. 95-116.
- **Huang, W.**, (2018), A Comparison of Politics of Street Names in Taipei and Shanghai, in Ding, Y., Marinelli, M., Zhang, X. (Eds.), China: A Historical Geography of the Urban, London, Palgrave Macmillan, pp. 137-161.
- **Isa, M., Kaur, M.**, (2015), *Kuala Lumpur Street Names*, Singapore, Marshall Cavendish Editions.

- **Kaluzynska, I.**, (2015), Chinese Naming: Substitution by Homophones, *Acta Asiatica Varsoviensia*, nr. 28, pp. 79-91.
- **Kong, L., Yeoh, B.A.**, (2003), *The Politics of Landscapes in Singapore: Constructions of "Nation"*, Syracuse, Syracuse University Press.
- Kostanski, L., (2016), *Toponymic Attachment*, in Hough, C. (Ed.), *The Oxford Handbook of Names and Naming*, Oxford, Oxford University Press, pp. 412-427.
- **Light, D., Nicolae, I., Suditu, B.**, (2002), Toponymy and the Communist City: Street Names in Bucharest, 1948-1965, *GeoJournal*, nr. 56, 2, pp. 135-144.
- **Miksic, J.N.**, (1985), Archaeological Research on the "Forbidden Hill" of Singapore: Excavations at Fort Canning, 1984, Singapore, National Museum of Singapore, 1985.
- Miksic, J.N., (2013), Singapore and the Silk Road of the Sea, 1300-1800, Singapore, NUS Press.
- Mills, A.D., (2010), A Dictionary of London Place-Names, Oxford, Oxford University Press.
- MMSSD, (2015) = *Mighty Minds Singapore Street Directory*, (2015), Singapore, Mighty Minds Publishing.
- MPA, (2000) = Maritime and Port Authority of Singapore, Singapore Strait and Adjacent Waterways. Singapore River (Hydrographic Map Accession No. HC000594) [Retrieved from National Archives of Singapore: http://www.nas.gov.sg/archivesonline/maps_building_plans/record-details/fb4f3432-115c-11e3-83d5-0050568939ad].
- **Neethling, B.**, (2016), *Street Names: A Changing Urban Landscape*, in Hough, C. (Ed.), *The Oxford Handbook of Names and Naming*, Oxford, Oxford University Press, pp. 144-157.
- Ng, Y.P., (2017), What's in The Name? How the Streets and Villages in Singapore Got Their Names, Singapore, World Scientific Publishing.
- NHB, (2015) = National Heritage Board, (2015), *Historical Bridges over Singapore River* [Retrieved from https://roots.sg/learn/resources/virtual-tours/historic-bridges-over-singapore-river].
- NHB, (2016) = National Heritage Board, (2016), Singapore River Walk, Singapore, Heritage Board
 [Retrieved from https://roots.sg/visit/trails/singapore-river-walk].
- NHB, (2017) = National Heritage Board, (2017), Tampines Heritage Trail, Singapore, Heritage Board [Retrieved from https://roots.sg/visit/trails/Tampines-Heritage-Trail-Green-Spaces-Trail].
- **NLB**, (2017) = **National Library Board**, (2017), *Maritime Rivalry 1600/1818* [Retrieved from http://eresources.nlb.gov.sg/history/timeline/1600-1818].
- NPB, (2015) = National Parks Board, (2015), Roads and Places Named after Trees
 [Retrieved from https://www.nparks.gov.sg/activities/family-time-with-nature/recommended-activities/roads-and-places-named-after-trees].
- **Perono Cacciafoco, F., Cavallaro, F.P., Kratochvíl, F.**, (2015). Diachronic Toponomastics and Language Reconstruction in South-East Asia According to an Experimental Convergent Methodology: Abui as a Case-Study. *Review of Historical Geography and Toponomastics*, nr. 10, 19 20, pp. 29-47.
- **Poenaru-Girigan, O.M.**, (2013), The Relationship between Toponymy and Linguistics, *Anadiss*, nr. 1, 15, pp. 154-166.
- **Savage, V.R., Yeoh, B.S.A.**, (2013), Singapore Street Names: A Study of Toponymics, Singapore, Marshall Cavendish Editions.
- **SBNB**, (2018) = **Street and Building Names Board**, (2018), *Handbook on Guidelines for Naming of Buildings and Estates*. Singapore, Urban Redevelopment Authority [Retrieved from
 - https://www.ura.gov.sg/-/media/Corporate/Resources/Publications/Streets-and-Building-Names/SBNB-handbook-building.pdf?la=en].

SDS, (1828) = **Survey Department, Singapore**, Plan of the Town of Singapore by Lieut. Jackson (Survey Map Accession No. SP002981)

[Retrieved from National Archives of Singapore,

http://www.nas.gov.sg/archivesonline/maps_building_plans/record-details/f9926418-115c-11e3-83d5-0050568939ad].

SDS, (1836) = **Survey Department, Singapore**. *Map of The Town And Environs of Singapore* (Survey Map Accession No. TM000037)

[Retrieved from National Archives of Singapore,

http://www.nas.gov.sg/archivesonline/maps_building_plans/record-details/f98c5272-115c-11e3-83d5-0050568939ad].

SDS, (1872) = **Survey Department, Singapore.** *Land Divisions at Bukit Timah Road, Seletar, and Kranjee (Kranji) Road* (Survey Map Accession No. SP000200_3)

[Retrieved from National Archives of Singapore:

http://www.nas.gov.sg/archivesonline/maps_building_plans/record-details/f919448b-115c-11e3-83d5-0050568939ad].

SLA, (1985) = Singapore Land Authority, Singapore Road Map. Seletar (Survey Map Accession No. SP006585)

[Retrieved from National Archives of Singapore:

http://www.nas.gov.sg/archivesonline/maps_building_plans/record-details/fad728c7-115c-11e3-83d5-0050568939ad].

- **Song, O. S.**, (1984), *One Hundred Years' History of the Chinese in Singapore*, Singapore, Oxford University Press.
- **Stolz, T., Warnke, I.H.**, (2016), When Places Change Their Names and When They Do Not: Selected Aspects of Colonial and Postcolonial Toponymy in Former French and Spanish Colonies in West Africa The Cases of Saint Louis (Senegal) and the Western Sahara, *International Journal of The Sociology of Language*, nr. 239, pp. 29-56.
- **Tan, T.T.W.**, (1986), *Your Chinese Roots: The Overseas Chinese Story*, Singapore, Times Books International.
- **Taylor, K.**, (2008), Landscape and Memory: Cultural Landscapes, Intangible Values, and Some Thoughts on Asia, 16th ICOMOS General Assembly and International Symposium "Finding the Spirit of Place: Between the Tangible and the Intangible" (29 September 04 October 2008), Québec, Canada [Retrieved from

https://www.icomos.org/quebec2008/cd/toindex/77_pdf/77-wrVW-272.pdf].

TBL, (1825) = **The British Library**, *Part of Singapore Island* (Survey Map Accession No. SP006450)

[Retrieved from

http://www.nas.gov.sg/archivesonline/maps_building_plans/record-details/fb6eb3fd-115c-11e3-83d5-0050568939ad].

TBL, (1846) = **The British Library**, Plan of Singapore Town and Adjoining Districts from Actual Survey by John Turnbull Thomson, Govt Surveyor, Singapore (Survey Map Accession No. SP006439)

[Retrieved from National Archives of Singapore:

http://www.nas.gov.sg/archivesonline/maps_building_plans/record-details/fb55ba56-115c-11e3-83d5-0050568939ad].

Thulaja, N.R., (2003), Pekin Street

[Retrieved from

http://eresources.nlb.gov.sg/infopedia/articles/SIP_326_2004-12-15.html?s=pekin%20stree].

TST, (1969) = *The Straits Times*, (January 23, 1969), *A 'Paradise Island'*, p. 4 [Retrieved from

http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes19690123-1.2.20].

- **TST**, (1970) = *The Straits Times*, (September 10, 1970), 5 Share Cash Award in Blakang Mati Name Contest, p. 10
 - [Retrieved from
 - http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes19700910.2.100].
- **TST**, (2000) = *The Straits Times*, (February 8, 2000), *Sengkang Takes Shape*, p. 28 [Retrieved from
 - http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes20000208.2.36.7].
- Turnbull, C.M., (1989), A History of Singapore, 1819-1988, Oxford, Oxford University Press.
- **Turner, D.**, (1945), Singapore: North Sheet, Second Edition (Survey Map Accession No. SP006557)
 - [Retrieved from National Archives of Singapore:
 - http://www.nas.gov.sg/archivesonline/maps_building_plans/record-details/fb6115d0-115c-11e3-83d5-0050568939ad].
- **Williams, D.R., Vaske, J.J.**, (2003), The Measurement of Place Attachment: Validity and Generalizability of a Psychometric Approach, *Forest Science*, nr. 49, 6, pp. 830-840.
- **Wong, Y.T.E.**, (2001), The Chinese at Work: Collectivism or Individualism? *HKIBS Working Paper Series*, nr. 040-001, pp. 1-16 (Hong Kong, Lingnan University).
- Yan, Q., (1986), A Social History of the Chinese in Singapore and Malaya, 1800-1911, Oxford, Oxford University Press.
- **Yau, O.H.M.**, (1988), Chinese Cultural Values: Their Dimensions and Marketing Implications, *European Journal of Marketing*, nr. 22, 5, pp. 44-57.
- **Yeh, Y.T.**, (2013), "Erased Place Names" and Nation-Building: A Case Study of Singaporean Toponyms, *Asia-Pacific Research Forum*, nr. 59, pp. 119-155.
- **Yeoh, B.S.A.**, (1992), Street Names in Colonial Singapore, *Geographical Review*, nr. 82, 3, pp. 313-322.
- **Yeoh, B.S.A.**, (1996), Street-Naming and Nation-Building: Toponymic Inscriptions of Nationhood in Singapore, *Area*, nr. 28, 3, pp. 298-307.
- Yeoh, B.S.A., (2017), Colonial Urban Order, Cultural Politics, and the Naming of Streets in Nineteenth- and Early Twentieth-Century Singapore, in Rose-Redwood, R., Alderman, D., Azaryahu, M. (Eds.), The Political Life of Urban Streetscapes: Naming, Politics, and Place, Abingdon, Routledge, pp. 41-55.
- **Yunos, R.**, (2013), *An Introduction to the History of Geographical Place Names in Brunei*, Seminar of the United Nations Group of Experts on Geographic Names, Asia South East Division, The Empire Hotel and Country Club, Brunei Darussalam (13 May 14 May 2013)
 - $[Retrieved\ from\ https://www.jupem.gov.my/v1/wp-content/uploads/2016/05/Hj-Mohd-Rozan-An-introduction-to-the-history-of-geographical-place-names-in-Brunei.pdf].$
- **Zhang, C., Morrison, J.W.**, (2010), Imparting Cultural Values to Chinese Children through Literature, *International Journal of Early Childhood*, nr. 42, 1, pp. 7-26.