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MAGISTERSKÁ DIPLOMOVÁ PRÁCA

**The Intergenerational Differences in the Use of Sortal Classifiers in the
Southern Min Dialect**

Medzigeneračné rozdiely v používaní numeratívov v dialekte Južný Min

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Čestné prehlásenie

Vyhlasujem, že som diplomovú prácu vypracovala samostatne a uviedla všetky použité
pramene a literatúru.

Olomouc 26.06.2024


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Podpis

Abstract

This study focuses on the effect of Mandarin Chinese on Taiwanese Southern Min in the usage of classifiers and on the comparison of intergenerational classifier choices of Taiwanese Southern Min speakers. The theoretical part of the thesis discusses grammatical properties of classifiers, language situation in Taiwan, and its language policies. To obtain the data, an experiment in the form of a questionnaire and an interview was conducted, focusing on a sample of 16 participants born in 1945 – 1957 (senior generation) and 1998 – 2003 (junior generation), focusing on their background, language proficiency, and their classifier choices. The results show disparities between senior and junior generations of Taiwanese in the stances towards native language and proficiency in Taiwanese Southern Min. The study unveiled significant intergenerational differences in classifier choices, as the impact of Mandarin Chinese prevalence on the junior generation's Taiwanese Southern Min, but also a cross-generational abandonment of unique Taiwanese Southern Min classifiers, suggesting gradual language obsolescence.

Key words: Taiwanese Southern Min, Mandarin Chinese, classifiers, intergenerational differences

Summary of the thesis: 112 pages, 154 122 characters, 60 sources of literature, 76 appendices

Anotácia

Magisterská práca sa zameriava na vplyv čínskeho jazyka na taiwanský hokkien v oblasti používania numeratívo a na porovnanie medzigeneračných rozdielov hovoriacich taiwanským hokkienom vo voľbe týchto gramatických jednotiek. Teoretická časť magisterskej práce sa zaoberá gramatickými vlastnosťami numeratívo, lingvistickou situáciou na Taiwane a politickými stratégiami týkajúcimi sa lokálnych jazykov. Na získanie údajov bol uskutočnený experiment vo forme dotazníka a rozhovoru, ktorý bol zameraný na vzorku 16 účastníkov narodených v rokoch 1945 – 1957 (staršia generácia) a 1998 – 2003 (mladšia generácia). Výskum bol zameraný na lingvistické pozadie respondentov, ich jazykové znalosti a voľbu numeratívo. Výsledky štúdie ukazujú rozdiely medzi staršou a mladšou generáciou obyvateľov Taiwanu v postojoch k materinskému jazyku a v ovládaní taiwanského hokkienu. Štúdia odhalila významné medzigeneračné rozdiely vo voľbe numeratívo ako dôsledok vplyvu čínskeho jazyka na taiwanský hokkien u hovoriacich z mladšej generácie, no i postupné opúšťanie taiwanských numeratívo, naznačujúc postupnú jazykovú obsolescenciu.

Kľúčové slová: taiwanský hokkien, mandarínska čínština, numeratívy, medzigeneračné rozdiely

Zhrnutie práce: 112 strán, 154 122 znakov, 60 zdrojov použitej literatúry, 76 príloh

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Editorial note

Chinese characters are presented in the traditional form 繁體字. We use pinyin to transcribe Chinese characters from Mandarin Chinese. To transcribe Southern Min into Latin, we use the Taiwanese Ministry of Education-preferred romanization system Tâi-lô (TL).

1 Introduction

The thesis studies intergenerational differences in using sortal classifiers in Southern Min. Southern Min (also known as Minnan or Hokkien) is a Chinese variety spoken in southeast Mainland China (e.g., Fujian, Guangdong, Zhejiang, Hainan, Jiangxi), and Taiwan (also known as Formosa Island or the Republic of China) provinces (Chen, 2020).¹ The thesis focuses on Southern Min spoken in Taiwan (Taiwanese, Taigi or Taiwanhua (台語/台灣話)). According to the 2020 census by the Taiwanese Statistics Bureau, more than 80% of the inhabitants of Taiwan speak the Southern Min, dominating primarily the southern part of the island (National Statistics, 2020); however, the survey does not question speakers' proficiency. Although a large number of studies focusing on the grammar of the Southern Min or the influence of this language on Mandarin Chinese have been conducted, only a small number of studies question the intergenerational differences or the possibility of a language shift (Yeh et al., 2004; Liua et al., 2013). Taiwanese eventful history, rule change, different government approaches to the Taiwanese local languages, a recent media boom, and globalization indicate a possibility of language shift and intergenerational differences between speakers of Taiwanese Southern Min.

The focus of this thesis was motivated by previous studies that identified the differences in the sortal classifiers among the Chinese language varieties (e.g., Erbaugh, 1990, 2013, among others) and the influence of Mandarin Chinese prevalence on Taiwanese Southern Min, resulting in the lowering proficiency and slower acquisition of the Taiwanese Southern Min (Yeh et al., 2004). Furthermore, previous studies also unveiled grammatical simplification of Taiwanese Southern Min, resulting in syntax and vocabulary simplification and reduction (Hollo, 2019). Thus, the comparison of Taiwanese Southern Min intergenerational sortal classifier choices with their Mandarin Chinese cognates may unveil further simplification of the Taiwanese Southern Min's grammar and a gradual language shift towards Mandarin Chinese.

This thesis follows Švarný's (1998) division of measure words into further categories: sortal classifiers (also called classifiers), massifiers, measures of units,

¹ The area of Formosa Island will be referred to as Taiwan (TW).

and verbal classifiers. Sortal classifiers, as a prime focus of this study, are monosyllabic morphemes without lexical meaning with the function to characterise and generalise nouns. Although sortal classifiers lack lexical meaning, ‘they have meaning in the sense that a classifier denotes some salient perceived or imputed characteristic of the entity to which an associated noun refers (or may refer)’ (Allan, 1977, p. 295). The position of measure words is fixed – between the numeral and the noun. The combination of the numeral and noun without the measure word (sortal classifiers included) is ungrammatical (Erbaugh, 2006).

- | | |
|----------------|--------------------|
| (1) 三 貓 X | (2) 三 隻 貓 ✓ |
| <i>sān māo</i> | <i>sān zhī māo</i> |
| three cat | three CL cat |
| | ‘three cats’ |

A sortal classifier is also characterised as a morpheme paired with ‘a class of nouns by picking out some salient perceptual properties, either physically or functionally based, which are permanently associated with the entities named’ (Tai, 1992, p.591). The sortal classifier 條 (*tiáo*) may serve as an example – the word’s original meaning is ‘a stick’ – a long, narrow object. Although the classifier lost its lexical meaning, there is a noticeable correlation with the words it modifies, as it serves as a classifier for long and slender objects, such as scarves, ties, roads, rivers, etc.

The thesis examines and compares the sortal classifier choices between two generations: the senior generation born between 1945 – 1957 and the junior generation born between 1998 – 2003, in a sample of 16 participants. The focus is set on sortal classifiers as we assume to identify the intergenerational differences due to Mandarin Chinese prevalence, resulting in the gradual grammar simplification and assimilation with Mandarin Chinese (Hollo, 2019). The goal is to analyse the language shift, the influence of Mandarin Chinese on Taiwanese Southern Min’s classifier register and intergenerational differences.

The thesis is divided into two parts: theoretical and analytical. The theoretical part discusses Taiwanese Southern Min’s historical background and language policies directly affecting the current language situation. The analytical part is based on an apparent time quantitative study composed of a background questionnaire focused on participants’

background and language proficiency; and an answer sheet for participants' classifier choices. To avoid dialect differences within Taiwanese Southern Min, all participants chosen for the research purposes came from the south of the island – Gaoxiong and Tainan districts.

Based on the 20th-century language policies restricting the use of Taiwanese local languages, the new bilingual Mandarin Chinese-English policy, and previous studies unveiling the gradual lowering of the Taiwanese Southern Min language proficiency, grammar simplification, and Taiwanese incline toward the internationally recognised Mandarin Chinese (Yeh et al., 2004; Hollo, 2019), we hypothesise the presence of intergenerational differences in the use of sortal classifiers to be discovered via the classifier-choices focused answer sheet. We assume the senior generation uses the accurate Taiwanese Southern Min classifiers, and the junior generation code-mixes Mandarin Chinese and Taiwanese Southern Min classifiers while speaking Taiwanese Southern Min. Moreover, we hypothesise that the senior generation remains devoted to the Taiwanese Southern Min as the primary language of communication, and the junior generation has shifted towards Mandarin Chinese and other international languages, namely English, leaving Taiwanese Southern Min language practice to limited occasions (e.g., communication with older family members).

The study results confirmed these hypotheses – there is a significant difference in the classifier choices between the two generations. The participants' classifier choices were examined and compared with the information gathered from the specialised Taiwanese Southern Min and Mandarin Chinese measure words textbooks, grammar books, dictionaries, academic papers (Erbaugh, 2013; Fang & Connelly, 2008; Fang, 2008; Chen et al., 2020; Chiu, 2007; Li et al., 1995; Lin, 2015; Tai, 1999; Yang, 1991), and consultations with a Taiwanese Southern Min native speaker. However, the research results show that both generations are subject to the classifier register's simplification and assimilation with Mandarin Chinese, resulting in the omission of the unique Taiwanese Southern Min (TSM) classifiers and their replacement by Mandarin Chinese (MC) cognates (e.g. TSM 領 *niá* – MC 件 *jiàn* for clothing, TSM 葩 *pha* – 盞 *zhàn* MC for lamps, TSM 蕊 *luí* – MC 朵 *duǒ* for eyes and flowers). However, the senior generation maintains a high degree of classifier variation which is typical for Taiwanese Southern Min, e.g. 隻 (TSM: *tsik*) as a classifier with broad scope and growing neutralizing function,

尾 (TSM: *buê*) for fish, 卡 (TSM: *khah*) for hollow items, 粒 (TSM: *liáp*) for smaller round objects, and a wider variety. Junior participants tend to code-mix classifiers from both languages and often use Mandarin Chinese classifiers (pronounced in TSM) while speaking Taiwanese Southern Min: 個 (TSM: *kóo le*) as a general classifier, 顆 (TSM: *khò*) for round objects, 張 (TSM: *tng*) for furniture and a smaller variety of choices. Moreover, while all participants from the senior generation reported Taiwanese Southern Min as their native language, participants from the junior generation reported Mandarin Chinese (in Taiwan referred to as 國語 *guóyǔ*).

Given the results of the research, a question about the future of the Taiwanese Southern Min arises. Results of the language situation census by National Statistics (2020) show a significant disparity between the notion of the native language, as 66% of the senior generation (>65) stated Taiwanese Southern Min as their native language, while only 11% of juniors (14-25) stated the same. These results are supported by Le Pesant's (2011) study, where 13% of the junior generation stated Taiwanese Southern Min as their preferred language. However, these studies did not question the proficiency of the junior generation of Taiwanese. Proficiency was a relevant question during our research process, as finding junior participants with a good command of Taiwanese Southern Min was rather difficult. The launch of the Mandarin Chinese-English Bilingual 2030 Policy will undoubtedly play a vital role in the future of the already weakened position of the Taiwanese Southern Min, opening opportunities for further research.

2 Theoretical Part

2.1 Southern Min

Min is a branch of the Chinese language belonging to the Sino-Tibetan language family. Handel (2010) states that ‘Min (Mǐn 閩) occupies a unique position among the major dialect groups of the Chinese language family (also known as Sinitic)’ because while the other Sinitic languages come from the Middle Chinese, ‘Min is derived directly from the Old Chinese rather than from the Middle Chinese’ (p. 2). Scholars (Yan, 2006; Chappell, 2019) agree that the development of the Min occurred in several layers. According to Lin (2015), the oldest layer originated in the Fujian province before the arrival of the Han Chinese and is of a non-Sinitic but Austroasiatic origin. A few centuries later, during the Han Dynasty (221 BC – 220 AD), the military troops caused a spread of the Chinese language, followed by further sinicization by migration from the North to the South of China during the Northern and Southern Dynasties (AD 420 – 550) and Tang Dynasty (AD 618 – 907) period. An indisputable part of the Min’s language shift and code-mixing plays the 19th- and 20th-centuries’ colonial history, interaction with other language forms, and language movements.

Yan (2006) notes: ‘Min is a short geographic term for the “Fujian Province” in China. It is named after the largest river, “Min Jiang” 閩江, in the province’ (p. 148), pointing to where the language originated. According to Yan (2006), the Fujian region’s mountainous landscape, lack of major rivers, and famine ensured Min’s heterogeneity, migration, and spread to the other parts not only of China but the whole region of Southeastern Asia. Therefore, the language is not only widely spoken in the provinces of Fujian, Guangdong, Zhejiang, Hainan, Jiangxi, and Taiwan, but its speakers can also be found in Thailand, Singapore, Malaysia, Philippines, and Indonesia. Although there is no exact number of speakers, the language is classified as one of 7 major Chinese languages – Mandarin, Wu, Gan, Yue, Hakka, Xiang, and Min.

Regarding its geographical location in several countries, the language is divided into further mutually intelligible subdivisions (Chappell, Lan, 2016). Yan (2006) notes that Min was initially divided into Southern Min (Minnan 閩南), represented by speakers from Xiamen, and Northern Min (Minbei 閩北), represented by speakers from Fuzhou. Studies conducted in the 1990s proposed further division into six groups: Northern Min,

Southern Min, Central Min, Eastern Min, Puxian, and Shaoning (Yan, 2006). The Southern Min group is considered the most numerous, but the number of speakers is not settled. Taiwanese Southern Min – the second most prominent language of Taiwan, is a variety of Southern Min.

2.2 Language Situation in Taiwan

To understand the current linguistic situation and position of Southern Min in Taiwan, it is necessary to trace the linguistic history of this multilingual island and the factors affecting it. The island with 23.5 million inhabitants is located on the junction of the East China Sea, South China Sea, and Philippine Sea. The official language of Taiwan is Mandarin Chinese – on the island referred to as 國語 *guóyǔ*, slightly different from the standardised version of mainland Mandarin Chinese (Cheng, 1985). Although the history of Mandarin Chinese as the island's official language can be traced back to the 17th century, the actual language practice was not as consistent.

2.2.1 Historical development

Taiwan was originally home to aboriginal tribes who inhabited the island at approximately 8000 BC and several aboriginal languages from the Austronesian language family (Lin, 2015).² 'Due to the rich linguistic diversity found among the aboriginal languages on the island, many scholars believe that Taiwan was indeed the birthplace of the Austronesian language family' (Lin, 2015, p.43). Furthermore, Taiwanese language practice remained almost solely devoted to these languages until the 17th century when Southern Min-speaking emigrants from Fujian started settling in Taiwan (Lin, 2015). The number of immigrants remains unknown, but Southern Min – locally referred to as Taiwanese 台語, Taiwanhua 台灣話, Taigi, Hokkien, Hoklo, or Holo, soon became the majority language of Taiwan.³ The 17th century is also remembered by the arrival of

² The Austronesian language family is the most prominent in the world, consisting of 1.200 members and approximately 270 million speakers. Austronesian languages spread across Southeast Asia (Philippines, Brunei, Malaysia, Singapore, Indonesia, Taiwan), Madagascar, Micronesia, Melanesia, Polynesia including Easter Island), and New Zealand. Speakers can also be found in Thailand, Hainan (PRC), Vietnam, Cambodia, Sri Lanka, and South Africa or Australia (Adelaar, Himmelmann, 2005).

³ The Southern Min spoken in Taiwan has no officially established name. For the purpose of this study, the Southern Min of Taiwan will be referred to as Taiwanese Southern Min (TSM).

the Dutch and Spanish colonists to the island and the Qing Dynasty's rise to power with the establishment of Mandarin Chinese as an official language. The extensive migration from South China provinces, colonization, and dynasty change caused a substantial change in Taiwan, which within one century became a multiethnic and multilingual society (Lin, 2015). However, a significant change was yet to come at the end of the 19th century when Taiwan became part of the Japanese empire after the First Sino-Japanese War in 1895.⁴ According to Tsurumi (1979), during the 50 years of the Japanese occupation of Taiwan (1895 – 1945), Japanese was declared the only official language – higher education or better work opportunities were available only to Japanese-speaking intellectuals, and restricting policies were issued, forbidding the use of local languages and Mandarin Chinese. Consequently, islanders chose to recognize Japanese as the primary language, and by the end of World War II, approximately 70% of Taiwanese inhabitants were fluent in Japanese (Sandel, 2003).

In 1945, after the defeat of Japan in World War II., Taiwan became a part of the Republic of China (ROC). However, this political change did not improve the position of local languages spoken in Taiwan. According to Kloter (2004), the new ROC administration proclaimed a prohibition of the Japanese language, and the initial efforts to promote Southern Min were abandoned due to the defeat of nationalists in the Civil War in mainland China. Nationalists led by Chiang Kai-shek fled to Taiwan, Mandarin Chinese was proclaimed the official language of the Republic of China, and local languages – Southern Min, Hakka, and Indigenous languages, were downgraded to dialects and subsequently restricted until the late 1980s (Sandel, 2003).⁵ These restricting policies and extensive immigration from mainland China caused rapid sinicization of the island and a substantial change in the perception and approach towards local languages.

⁴ The First Sino-Japanese War (1894-1895) was a war over the influence of the Korean peninsula. The defeat of China indicated a shift of power in Asia - from the Chinese Empire to Japan. The war ended with the signing of the Treaty of Shimonoseki. Taiwan, the Penghu Islands, and the Liaodong Peninsula were given to Japan and remained under Japanese occupation till 1945.

⁵ Chiang Kai-shek⁵ (*Jiang Jieshi* 蔣介石, 1887-1975) also called Generalissimo, was a Chinese military and political leader, leader of Kuomintang (KMT – Chinese Nationalist Party), and President of the Republic of China in Taiwan.

Mandarin Chinese soon became a symbol of a new era, modernity, and intelligence, while Taiwanese languages were considered a marker of aging and backwardness (Hsiau, 1997).

2.2.1.1 Impact of Restricting Policies

For almost 90 years, the native inhabitants had to officially abandon their language practice and obey policies of foreign rule under the threat of punishment for practicing their own culture. Moreover, the two rival rules forced Taiwanese inhabitants to abandon a learned language practice and acquire a new one, to repeat this process a few decades later. Scholars (Kloter, 2004; Hsiau, 1997) believe these actions of suppression resulted in codemixing Taiwanese languages (Taiwanese Southern Min, Hakka, and Indigenous languages), Japanese, and Mandarin Chinese, leading to lower and slower acquisition of local languages. Furthermore, these politics weakened the position of Taiwanese Southern Min, Hakka, and Indigenous languages and conditioned a gradual shift from the local languages to Japanese and Mandarin Chinese.

The almost century-long politics of Taiwanese Southern Min prohibition, contact with other languages, and the non-existence of an official writing system, ‘caused a gradual decrease in Taiwanese language (TSM) skills, with each successive generation losing bits of nuanced vocabulary and proper syntax. Since Mandarin Chinese became Taiwan’s official language after World War II, the Taiwanese language (TSM) has experienced persistent simplification and reduction’ (Hollo, 2019). Although Mandarin Chinese is believed to impact the Taiwanese Southern Min language development significantly, the role of Japanese should not be omitted. To this day, loanwords from Japanese represent a significant part of the Taiwanese Southern Min vocabulary (Lin, 2015). To this group belong words from medicine, technology, or imported goods. Provided examples are from Lin (2015): motorcycle (Japanese: オートバイ *ōtobai*, TSM: *ōo-too-bái*), chocolate (Japanese: チョコレート *chokorēto*, TSM: *chiōo-koo-lé-to*), beer (Japanese: ビール *bīru*, TSM: *bí-lu*), etc.⁶ The fusion of Taiwanese Indigenous languages, migration from South Chinese Fujian, European colonization, Ming and Qing dynasties, and Japanese rule caused Taiwanese Southern Min to differ from the other varieties of Southern Min and contain an extent of specifics for Taiwanese Southern Min only.

⁶ To transcribe Japanese writing into Latin, we use the official transcription system Romaji.

2.2.2 Language Renaissance

The 1980s in Taiwan brought a change in the form of democratisation and liberalisation, significantly impacting the society's stance on local languages. According to Kloter (2005, 2016), laws prohibiting local languages in public and schools were lifted, and TV stations started broadcasting in Taiwanese Southern Min. Moreover, the significance of Taiwanese Southern Min started to emerge as it became a rhetorical device in political speeches and a tool serving the idea of political independence from mainland China. These efforts led to the Taiyu Language Movement, which aimed to rejuvenate the language through bilingual education and establish Taiwanese Southern Min's writing and transcription system (Hsiau, 1997). However, education in Taiwan was provided only in Japanese and later in Mandarin Chinese. Thus, local languages were only spoken, not written, and although there were attempts to establish an official writing system for Taiwanese Southern Min (Kloter, 2016), the almost 90 years-long suppression and consequent code-mixing did not ease them. As a response, various organizations promoting Taiwanese Southern Min were established, and the government started promoting multiculturalism, trying to enforce cultural heritage via compulsory native language courses with a selection from Taiwanese Southern Min, Hakka, or Indigenous languages (Kloter, 2004, 2016). Consequently, local language revival led to opposition towards the term *fāngyán* 方言 (dialect) when referring to the regional languages. Therefore, the term 'dialect' was replaced by the term 'mǔyǔ' 母語 (Sandel, 2003), meaning mother/native language.

Regrettably, there is no statistical information about the ethnic or linguistic situation in Taiwan before the 20th century. However, the current ethnical situation may reflect the extent of 17th- and 20th-centuries migration. Based on the data gathered from Sandel (2003) and Shepherd (1993), the majority (73%) of current Taiwanese inhabitants are descendants of settlers from China's Fujian province – this astounding number manifests the extent of the 17th-century migration. 13% of Taiwanese are descendants of the mainland Chinese who came to Taiwan during or after the Civil War in the 1940s, and 12% are descendants of Hakka. The only native inhabitants of the island – aboriginal tribes – represent 2% of the actual population, and their base is on the island's East coast. The ethnic diversity and the trend of diminishing Aboriginal representation may also be observed in the current linguistic situation, as according to the Taiwanese National

Statistics (2020), only 1.1% of the total population speaks Indigenous languages. 5.5% of inhabitants speak Hakka, dominating the Northwest part of the island. Contrastingly, Taiwanese Southern Min is spoken by 80% of Taiwanese and Mandarin Chinese by 96.8%.

The situation of Taiwanese Indigenous languages is becoming critical, as 15 out of 26 already ceased (Lenker, 2021). Furthermore, six Indigenous languages are included in UNESCO's Atlas of Endangered Languages (2010), with the number of speakers ranging from one to over twenty. Although the future and preservation of Taiwanese Southern Min at first sight may not seem problematic, as 80% of the island's population speaks the language, there is no reference to speakers' command of the language. Yeh et al. (2004) unveil that the young descendants (<30) of aboriginal tribes, Hakka and Taiwanese Southern Min, are more fluent in Mandarin Chinese than their native languages. The same study shows that generational proficiency moves in the opposite direction than language policies. The older generation (>51) directly affected by Japanese rule and Chinese nationalist language policies holds the highest proficiency in the local languages, while the younger generation's proficiency is rapidly decreasing.⁷ This phenomenon might be caused by the growing importance of Mandarin Chinese and English as languages conditioning the future success of the younger generations, as well as the non-significance of local languages in the international market.

The Taiwanese government, aware of this situation, promotes linguistic diversity via numerous funds and establishing language and culture centers to elevate awareness of this issue. The year 2018 might be considered a milestone in saving linguistic heritage in Taiwan, as the government passed the National Languages Development Act to promote linguistic diversity, encourage local language studies, and preserve ethnical diversity and cultural heritage (Taiwan Today, 2018). Although Mandarin Chinese is the primary language of education, local language lessons have become mandatory and are offered in kindergartens and primary and elementary schools. Moreover, the media plays

⁷ Regarding my own experience while teaching English at the Affiliated High School of NCCU in Taipei, in a class of 12 students aged 16-17, only one student spoke the local language actively, and one student had a passive knowledge (comprehension, not speaking), while in a class of 11 students aged 12-13, only one student had a passive knowledge.

a significant role in promoting the language – Taiwanese TV channels dedicate several hours of air time to broadcast in regional languages, primarily in Taiwanese Southern Min and Hakka, and TV channel PTS Taigi broadcasts mainly in the Taiwanese Southern Min (Taiwan Broadcasting System, 2019). To promote Taiwanese Southern Min to the younger generation, various PC games and TSM language applications are available, making learning interactive and entertaining.

Japanese and Chinese nationalists' language policies had a significant impact on the acquisition and maintenance of Taiwanese Southern Min. However, the trend of internationalisation, globalisation, media, and the growing significance of the English language may significantly impact its future, especially as the English-Mandarin Chinese bilingual society is a goal of the new Bilingual 2030 policy. This policy aims to advance and promote Taiwan's position in the global market, attract international investors, explore business opportunities overseas, enter global markets, and ensure the ability of Taiwanese professionals to align with international standards (National Development Council, 2021). Bilingual 2030 divides public opinion; while some welcome this plan and see it as a visionary approach promoting Taiwan's international position, others consider it a token of cultural colonialism (Batchelor et al., 2020), weakening the position and slowing the acquisition of Taiwanese local languages, leading to the loss of language heritage.

2.3 Language Loss

The Cambridge Dictionary defines language as 'a system of communication by speaking, writing, or making signs in a way that can be understood, or any of the different systems of communication used in particular regions'. However, language, in a broader sense, is not only a tool of communication but also a carrier of one's cultural heritage and identity. Thus, language and speech reflect not only the speaker's thoughts and beliefs but also one's way of thinking, his world's perception, and cultural background. Language loss is a history-proven process primarily related to the extinction of culture due to natural disasters, famine, or wars, causing the whole community of speakers to cease (Dastgoshadeh & Jalilzadeh, 2011). Nevertheless, language may also cease as an outcome of political rule, abandonment of the small community language in favor of a more 'metropolitan' or prestigious language, and as an effect of integration or globalisation. Linguists believe 'that of the approximately 6.500 languages worldwide,

about half are endangered or on the brink of extinction. According to some linguists, the estimated rate of language extinction is one language lost in the world every two weeks' (Dastgoshadeh & Jalilzadeh, 2011, p.661). Globalisation, internationalisation, the boom of media, the rapid evolution of transportation, and endless opportunities to expand and explore significantly impact the growing significance of 'international languages', predominately English, and the weakening of smaller communities' language practice.

Regarding the language situation in Taiwan, according to the Taiwanese National Statistics language census data (2020), 88.6% of the younger Taiwanese (14 – 24 years old) stated Mandarin Chinese as a language of primary use, while 10.9% stated Taiwanese Southern Min. Contrastingly, 28.5% of the elderly people (>65 years old) stated Mandarin Chinese as a language of primary use and 65.9% stated Taiwanese Southern Min. These numbers show a significant shift (55%) in the primary used language from Taiwanese Southern Min to Mandarin Chinese within a 40 – 50-year-long period. The results concerning other languages spoken in Taiwan (Hakka, Indigenous languages) are correlative. Although the number of younger people who primarily use Taiwanese Southern Min is low (10.9%), 71.8% stated TSM as their second language, meaning a total of 82.7% of the younger generation speaks Taiwanese Southern Min. Even though these numbers represent a significant number of younger Taiwanese Southern Min speakers, they do not provide any information concerning their proficiency.

Proficiency became one of the subjects of Yeh et al.'s (2004) study, which unveiled significant disparities among various generations of Taiwanese Southern Min speakers. The results show that older (>51) and middle-aged (31 – 50) generations hold good Taiwanese Southern Min proficiency, but there is a sudden drop in the younger (<30) generation's proficiency and assimilation with Mandarin Chinese. Furthermore, this pattern is correlative with Hakka speakers. This outcome indicates misleading results of the Taiwanese 2020 national census, as they may imply a cross-generational vitality of Taiwanese Southern Min and not identify underlying problems.

Taiwanese Southern Min's declining proficiency across the generations raises questions concerning the future of the language. The loss of Taiwanese Southern Min, for Taiwanese society, means not only a loss of cultural heritage but also an identity loss and the loss of a tool for political independence from mainland China (Hollo, 2019), as

language plays a significant role in defining a nation and social identity. If language is to be a political tool for the pursuit of the island's sovereignty, diversion from Taiwanese local languages to Mandarin Chinese and English may cause a political shift. Thus, language preservation is becoming a crucial issue. According to Dastgoshadeh and Jalilzadeh (2011), there are two possible ways of preservation: (i) language preservation via linguistic study and compilation of dictionaries or textbooks, and (ii) direct passing from one generation to another. The disunity of Taiwanese Southern Min's writing system challenges these efforts, and although textbooks, grammar books, and dictionaries are undisputedly beneficial, their impact without an actual speaker remains limited. Hung (2013) supports this statement by revealing the actual language practice in Taiwanese schools, as there is no teaching guidance for the native languages, limited time for these lessons, and textbooks with disunited forms of writing. The remaining option is household language acquisition. This option is, however, limited, as according to Hung (2013), Taiwanese local languages are by the younger generation (<25) and their parents (25 – 50) regarded as having low market value with no contribution to career success. On account of this perspective, parental support and engagement in passing the language to their children is relatively low. Although the Taiwanese government provides extra funding for local languages revival (Hung, 2013), this incentive is contradicted by the efforts to become a Mandarin Chinese-English bilingual nation. The ability to speak English is promoted as a necessity for personal and societal success and a communication tool in developed countries. However, this bilingual plan does not consider the declining interest and proficiency of the Taiwanese junior generation in local languages.

Based on the previously mentioned, it is evident that the actual carriers of the Taiwanese Southern Min are members of the older generation, as the middle generation does not necessarily pass their language practice to the younger generation. Moreover, Taiwanese society has already witnessed the extinction of 11 out of 26 Indigenous languages due to language assimilation and integration (Lenker, 2021). A question concerning the Taiwanese Southern Min's future is arising. The trend of simplification, reduction, and lowering proficiency may indicate the future extinction of Taiwanese Southern Min. Linguistic books may serve as guidance during the learning process. Still, without a native speaker, their role in language acquisition is limited.

2.4 Taiwanese Southern Min

The non-existence of an official writing system for Taiwanese Southern Min is one of the biggest obstacles to language revival. Another essential task is language standardisation, as the regional varieties challenge the process of education. The most common way to transcribe Taiwanese Southern Min is the usage of Chinese characters script (*fǎntǐzì* 繁體字). However, this solution has limitations as the Chinese characters register does not entirely answer the complexity of Taiwanese Southern Min, leaving approximately 15% of words without a corresponding character, loanwords included (Lin, 2015). Thus, the Taiwanese Southern Min script is represented by an unofficial compound of traditional Chinese characters and a Romanised transcript. Furthermore, the TSM script widely uses archaic borrowings from Classical Chinese or creates new characters by combining radicals, for example: 走 (to walk) + 坐 (to sit) = 趔 (to crawl) (Lin, 2015).

The importance of the writing system for Taiwanese Southern Min started emerging at the end of the 20th century as the language became a political tool in Taiwan's struggle for independence (Hsiau, 1997). This laid a foundation for the compilation of Taiwanese Southern Min dictionaries and the proposal of various Taiwanese Southern Min scripts, including an idea of alphabetic orthographical standardisation. However, none of these proposals were approved, as they lacked official authorisation (Kloter, 2004; Hsiau, 1997). To this day, Taiwanese Southern Min uses traditional Chinese characters as a form of writing. The notation of some characters is not settled and varies across Taiwanese regions; examples: 支/枝 *tsi*, 穢/叢 *tsâng*. Furthermore, Taiwanese Southern Min disposes of several transcription methods. Mainland Mandarin Chinese pinyin⁸ inspired the idea of Latin alphabet romanization, leading to the construction of the Taiwanese

⁸ Pinyin (*Hanyu Pinyin* 汉语拼音) transcription uses 26 Latin alphabet letters and special diacritics marks as the tone indicators (Odinye, 2015). Pinyin was developed in the 1950s as a solution to the People's Republic of China government's efforts to connect China with the world, streamline the process of learning, and unify all the minorities living in the territory of the PRC through the same language practice (Wang, Andrews, 2021).

Language Phonetic Alphabet (TLPA). Besides TLPA, the most approved Romanizations are 白話字 Peh-ōe-jī (POJ) and 台羅 Tâi-lô (TL)⁹.

(3) 百科全書 (Encyclopedia)

TLPA: *pah⁴ kho¹ cuan⁵ su¹*

POJ: *pah-kho-cuân-su*

TL: *pah-kho-tsuân-su*

Although these transcriptions capture the phonetic specifics of Taiwanese Southern Min, they do not replace traditional Chinese script. They solely serve as indicators of character readings and should not be used as a substitution (Kloter, 2004). Their usage as character script replacements is unattainable as speakers are not accustomed to using them.

2.4.1 Phonological and Grammar Systems

Taiwanese Southern Min is a complex language with phonetical and grammatical specifics that cannot be found in any other branches of the Chinese language. These distinctions are caused by the derivation from the Old Chinese language (chapter 2.1) and the coexistence with Taiwanese Indigenous languages, colonization, Japanization, and Sinicization. Taiwanese Southern Min and Mandarin Chinese are both tonal languages. While Mandarin Chinese has four citation tones, Taiwanese Southern Min has seven tones with a complex system of tone sandhi. Moreover, the language has maintained nasal sounds (vowels, consonants, syllables) and stopped endings from Old Chinese (Lin, 2015). Maintaining these ancient features results in a vast syllable inventory – 2,200 possible combinations (Chappell, 2019).

Taiwanese Southern Min and Mandarin Chinese share a large number of Sinitic language features: tense indefiniteness, singular/plural indefiniteness, grammar categories, and the SVO (subject, verb, object) sentence order, with possible adjustments due to the direct object fronting (OSV).

(4) *SVO:* 我愛你。

OSV: 這本書，我很喜歡。

MC: *wǒ ài nǐ.*

MC: *zhè běn shū, wǒ hěn xǐhuān.*

⁹ Tâi-lô Romanization is the most widely used transcription method by the Taiwanese Ministry of Education. Thus, this thesis uses this transcription method.

TSM: *guá ài lí.* TSM: *tsit-pún tsu, ngóo hún hí huann.*
‘I love you.’ This-CL book, I very like. (‘I like this book.’)

Although most of the language features are shared, there is a certain measure of differences originating in the Altaic language heritage of Mandarin Chinese (MC) that are not present in Taiwanese Southern Min (TSM). Conversely, TSM contains many features that are not present in MC. According to Cheng (1985, p. 355), these include:

- a. use of preverbal auxiliary verbs,
- b. the contrast between habitual and future actions,
- c. distinguishing past simple and present continuous tenses,
- d. numerous negative particles in TSM.¹⁰

In this study, we focus on the different choices of classifiers between Mandarin Chinese and Taiwanese Southern Min.

2.5 Measure words

Measure words appear between a quantifier (numeral) and a noun, constructing a nominal phrase *Quantifier + Measure word + Noun* (Allan, 1977; Zhang, 2014; Song, 2017):

- (5) 五 本 書
wǔ běn shū
five CL book
‘five books’

What is nowadays in Mandarin Chinese and Taiwanese Southern Min referred to as the ‘measure word’ (量詞 *liàngcí*) came through an elaborate development. According to Zhang (2014), ancient Chinese numerals could directly modify nouns without the need for any supplementing grammatical particles. The current measure word structure originates from the initial structure *Noun + Quantifier + Noun* (玉十玉), where the numeral served as a head of construction, and the repeated noun served as an ancestor of today’s measure words. Measure words were first introduced during the Zhou Dynasty

¹⁰ This thesis’s character and size limitations do not allow us to embrace the complexity of Southern Min’s grammar; for more information, refer to Lin, 2015.

(1046BC – 256BC) – they replaced the noun in the post-quantifier position, creating the structure *Noun + Quantifier + Measure Word*. During the Han dynasty (202BC – 220AD), due to grammaticalisation and language evolution, measure words shifted from the position behind the noun to the central position between the numeral and the noun: *Quantifier + Measure word + Noun*. The era of Southern and Northern Dynasties (420AD – 589AD) led to the development of different types of measure words and their quantity expansion. The process was finalised during the Song (960AD – 1279AD) and Yuan Dynasties (1271AD – 1368AD) when the numeral structure became settled with the central position of the measure word.

The evolution of measure words is not the only elaborate process, as settling on terminology for this grammatical particle was and still is a subject of many disputes. Song (2017) mentions that the first reference to measure words from the 19th century describes them as alternative names to objects when counted. The term 量詞 *liàngcí* (lit. measure/quantity + word) was introduced in the 1920s. Other names introduced for this particle were 單位詞 (*dānwèicí* ‘unit word’), 副名詞 (*fùmíngcí* ‘supplementary word’), 助名詞 (*zhùmíngcí* ‘assisting word’), 數量詞 (*shùliàngcí* ‘quantity word’). Song (2017) notes that measure words as an independent word class was established in the 1960s. Due to different measure word types and properties, there is, to this date, ongoing debate concerning the name of this category. For the purpose of this study, we refer to this grammatical particle as the ‘measure words’ (量詞 *liàngcí*).

To understand the grammatical purpose and role of measure words, it is necessary to comprehend the complexity and limitations of Sinitic nouns – due to the inability of Mandarin Chinese and Taiwanese Southern Min nouns to modify their form to express plural and create direct compounds with numerals, there exists a shared belief that Sinitic nouns are mass/uncountable (Cheng & Sybesma, 1998). This statement is supported by the fact that the direct combination of a numeral and a noun is ungrammatical (Erbaugh, 2013). Therefore, an insertion of a monosyllabic grammatical particle – a measure word, is necessary. Measure words are a significant part of most Asian languages, but their occurrence is notable in several languages across Africa, Australia, America, and Oceania (Allan, 1977).

There are many different kinds of measure words (e.g., sortal classifiers, massifiers, etc.) This study focuses on the use of sortal classifiers. Sortal classifiers are a subject of many studies in the various fields of linguistics: grammar, syntax, semantics, lexicology, sociolinguistics, and cognitive psychology. In this study, we focus on their usage in Taiwanese Southern Min as a way to gauge intergenerational differences.

2.5.1 Classifiers

Classifiers are also called sortal classifiers (Her, Hsieh, 2010), numeratives, or individual measures (Chao, 1968). Sortal classifiers lack lexical meaning but they have meaning ‘in the sense that a classifier denotes some salient perceived or imputed characteristic of the entity to which an associated noun refers (or may refer)’ (Allan, 1977, p. 295). Tai and Wang (1990) clearly state the difference between classifiers and massifiers: ‘A classifier categorizes a class of nouns by picking out some salient perceptual properties, either physically or functionally based, which are permanently associated with entities named by the class of nouns; a measure word does not categorize but denotes the quantity of the entity named by the noun’ (p.38).¹¹

(6) Classifier: 一粒米飯
yí lì mǐfàn
one CL rice
‘a rice grain’ (a small round item)

(7) Massifier: 一碗米飯
yì wǎn mǐfàn
one MS-bowl rice
‘a bowl of rice’ (quantity of the item)

The total number of Taiwanese Southern Min or Mandarin Chinese sortal classifiers is not settled as various sources state non-identical numbers; Her and Lai (2012) state that the amount of classifiers in both languages is estimated to be over 100. Nonetheless, the

¹¹ Massifiers may be defined as units creating a measure for uncountable substances (e.g., water, sand, weight, length, temperature, etc.). These lexical items have an independent meaning while standing alone (Cheng & Sybesma, 1998), e.g., 杯 *bēi* (a glass), 碗 *wǎn* (a bowl), 班 *bān* (a class), 雙 *shuāng* (a pair), 米 *mǐ* (meter), 磅 *bàng* (pound), etc.

frequency of their use varies, and the number of commonly used classifiers is significantly lower. The most frequently used sortal classifier is 個 (MC: *ge*, TSM: *e/kóo*), also called a general or default classifier, and is assumed to be able to classify any noun. Regarding the ratio of classifiers to the total number of Mandarin Chinese/Taiwanese Southern Min's nominal units, it is evident that one classifier serves to classify several nouns. To describe this situation, Zhang (2014) uses the term ‘一量多物’ (p. 3) *yì liàng duō wù* – one classifier, many objects.

(8) 一量多物 *yì liàng duō wù* (one classifier, many objects):

- a) classifier 台 (MC: *tái*): fridge, airplane, car, etc.
- b) classifier 條 (MC: *tiáo*): road, trousers, fish, etc.
- c) classifier 張 (MC: *zhāng*): paper, table, air ticket

According to Zhang (2014), this fact, however, does not contradict the occurrence of the ‘一物多量’ (p. 4) *yì wù duō liàng* – one object, many classifiers case, when one noun can use several classifiers for reference without the shift of the meaning.

(9) 一物多量 *yì wù duō liàng* (one object, many classifiers):

- a) a fish: 一條魚 (MC: *yì tiáo yú*), 一尾魚 (MC: *yì wěi yú*)
- b) a car: 一輛車 (MC: *yì liàng chē*), 一台車 (MC: *yì tái chē*)
- c) a chair: 一把椅子 (MC: *yì bǎ yǐzi*), 一張椅子 (MC: *yì zhāng yǐzi*)

Given the salient characteristics of classifiers representing entities, these particles can be divided into several categories based on their shared prevalent features. Due to the diverging nature of these particles and the large scale at which they represented objects (concrete or abstract), categorising classifiers proved to be an uneasy task. Croft (1994) and Allan (1977) list three main categories of Mandarin Chinese classifiers based on semantic distinctions:

1. Shape: 張 (MC: *zhāng*; flat objects), 條 (MC: *tiáo*; long and slender objects), 根 (MC: *gēn*; long thin objects)
2. Animacy: 隻 (MC: *zhǐ*; animals), 尾 (MC: *wěi*; fish and shrimps)
3. Function: 台 (MC: *tái*; machinery, electronics), 件 (MC: *jiàn*; clothing)

Although this categorisation covers a large part of the classifiers, it is not entirely sufficient as a significant number of classifiers is left out of consideration. Chen et al. (2020) address this issue as part of their study on Taiwanese Southern Min measure words and provide a different categorisation solution for Taiwanese Southern Min sortal classifiers:

1. Part of the whole: 尾 (TSM: *bué*; fish), 領 (TSM: *niá*; clothes),
2. Shape: 粒 (TSM: *liáp*; round objects), 枝 (TSM: *tsi*; long cylindrical objects),
3. Arrangement: 儼 (TSM: *tsōng*; plants and trees), 枇 (TSM: *gî*; clusters)
4. Others: 个 (TSM: *e/kóo*; general classifier), 跤 (TSM: *kha*; people)

2.5.1.1 Etymology of classifiers

As pointed out in the previous chapter, classifiers, as part of the nominal phrase, do not carry meaning but provide speakers with salient perceptual properties of the objects. Nonetheless, various studies of the etymology of Sinitic words suggest that classifiers derived from concrete words and lost their initial meaning through grammaticalisation and metaphorical or metonymical extension (Zhang, 2014). These findings are supported by writings on oracle bones, tortoiseshells, bronze and changes in grammar structure. As Zhang (2014) states, classifiers are not the preexistent grammar category but evolved from concrete lexical units with a denotative meaning. The process of evolution can be explained on the classifier 張 (*zhāng*) with the initial meaning ‘to draw a bow.’ Throughout the grammaticalisation process, 張 (*zhāng*) lost its verbal character and became a modifier for bows, shifted to a modifier for all objects that could be drawn, and finally became a modifier for objects with flat surfaces. Classifier 條 (*tiáo*) is an example of metaphorical extension – the word’s original meaning is ‘a stick’ – a long, narrow object. Although the classifier lost its initial meaning, there is a noticeable correlation with the words it modifies, as it is a classifier for long and slender objects. Li and Tian (2015) address the default classifier 個 (*ge*) case, which evolved from the initial ‘bamboo’ to a modifier for items made of bamboo and, finally, completely lost its semantic function to the grammar function. 個 (*ge*) is a grammatical particle and does not represent any concrete nominal domain. Due to the insufficiently explored field of etymology and semantics of Southern Min classifiers and limited historical records, we cannot provide any examples concerning the grammaticalisation of TSM sortal classifiers.

Language and all its parts are constantly evolving, which, in the case of Mandarin Chinese, can be witnessed by comparing contemporary and previous (traditional) classifiers. Chen (1999) specifies numerous examples of classifier changes and addresses the problems of this shift. Some classifiers were specific for certain dynasties (朋 for the Zhou and Ming dynasties), and their use ended with the dynastical change and language shift. In other cases, the entity classifier initially referred to stopped being used, as it either ceased to exist or was replaced by an entity with different salient features.

Table 1: Comparison of contemporary and historical classifiers (Chen, 1999)

Item	Contemporary CL	Previous/ Traditional CL
Fish	條, 尾	枚, 頭, 朋, 鬥, 番
Pen	枝	枚, 管, 床
Vehicles	輛, 頂, 架, 台	乘, 量, 輪, 丙, 具, 輔, 枚, 兩, 抬
Clothes	件, 條	枚, 裁, 具, 緣, 腰, 領, 通

Nonetheless, language change is not a process strictly bound to the past – it is an unstoppable action, and modifications are to be noticed within a generation. According to a classifiers-focused study concluded by Zheng and Liu (2023), a 30-year-long period unveils significant differences in the classifiers’ use. A contemporary study (2023) compared to Erbaugh’s (1990) Pear story project demonstrates findings suggesting a variation in classifiers among young Mandarin Chinese speakers. A new generation of speakers prioritises using general classifier 個 *ge* with a declining use of specific classifiers. Moreover, the perception of the classifier system has changed, as ‘young people particularly, regarded speakers using only general CL as more attractive and optimistic; and those using mix CLs as meticulous and steadier’ (Zheng, Liu, 2023, p. 8). This trend and perception results in a diminishing volume of classifiers and opens up opportunities for further studies in cognition and sociolinguistics.

2.5.1.2 Classifier Choices in Mandarin Chinese and Taiwanese Southern Min

This chapter presents the differences between Mandarin Chinese and Taiwanese Southern Min classifiers. Different varieties of Chinese have different classifiers to express the same salient feature or idea – the same object pairs with different classifiers in various varieties of Chinese. A classifier choice may reveal unique properties the

speakers assign to the object and, thus, a different perception of objective reality. Simultaneously, varying registers reflect the individuality and unique properties of the Chinese language varieties. This statement can be supported by Erbaugh (2013), focused on comparing the classifier choices in several Chinese language varieties.

Table 2: Classifier choices throughout a variety of Chinese, Erbaugh (2013, p. 111)

Item	Mandarin	Gan	Xiang	Shanghai	S. Min	Hakka
Bike 單車	輛, 部	隻, 部	輛, 部, 隻	隻, 部, 個	頂, 把, 隻	架

In addition to an overview of classifier choices throughout the varieties of Chinese, a significant difference in the ratio of the general classifier and sortal classifiers was pointed out. While Mandarin Chinese speakers use a limited number of sortal classifiers, other varieties use a wider variety of classifiers.

According to Chappell (2019), the differences between Taiwanese Southern Min and Mandarin Chinese classifier registers can be noted even with the classifier 個 *ge* (TSM: *e/kóo*) serving as a general classifier in both languages. While in Mandarin Chinese, 個 is used to classify any object, concrete or abstract; in Taiwanese Southern Min, it is primarily ‘used with nouns for humans’ (p. 202). Regarding the classification of animal nouns, Mandarin Chinese has a variety of options (隻 *zhī*, 頭 *tóu*, 匹 *pǐ*, 條 *tiáo*, 尾 *wěi*). In Taiwanese Southern Min, all the animals, apart from sheep (架 *khè*), aquatic animals or reptiles (尾 *bué*), are classified with a sortal classifier 隻 *tsik*. Nonetheless, this fact does not imply any narrowness of the TSM classifiers. The tables below summarise and provide examples of the main differences in the classifier choices between Mandarin Chinese and Taiwanese Southern Min on the examples of various nouns.¹² Data in the tables was gathered based on the study of various textbooks, dictionaries, and academic papers: Erbaugh, 2013; Fang & Connelly, 2008; Fang, 2008; Chen et al., 2020; Chiu, 2007; Li et al., 1995; Lin, 2015; Tai, 1999; Yang, 1991.

Table 3: Comparison of classifier choices between TSM and MC – clothes

Object MC/TSM	MC	TSM
外套 <i>wàitào / guā-thò</i> (coat)	件 <i>jiàn</i>	領 <i>niá</i>
襯衫 <i>chènshān / tshàn sann</i> (shirt)	件 <i>jiàn</i>	領 <i>niá</i>

¹² For the study purposes, only classifiers with a corresponding Chinese character were chosen.

褲子 kùzi / khò tsí (trousers)	條 tiáo	領 niá
毛衣 máoyī / môo ui (sweater)	件 jiàn	領 niá

Table 4: Comparison of classifier choices between TSM and MC – nature

Object MC/TSM	MC	TSM
花 huā / hue (flower)	枝 zhī, 朵 duǒ, 株 zhū	蕊 luí
樹 shù / tshū (tree)	棵 kē, 株 zhū	叢 / 櫟 tsōng
蘋果 píngguǒ / phōng-kó (apple)	顆 kē	粒 liàp, 核 hik
魚 yú / hū (fish)	條 tiáo, 尾 wěi	尾 bué
龍 lóng / līng (dragon)	條 tiáo, 頭 tóu	尾 bué
羊 yáng / lūnn (sheep)	隻 zhī, 頭 tóu, 條 tiáo	隻 tsik, 架 khè
馬 mǎ / bé (horse)	匹 pǐ	隻 tsik, 匹 phit

Table 5: Comparison of classifier choices between TSM and MC – transportation

Object MC/TSM	MC	TSM
汽車 qìchē / khì-tshia (car)	輛 liàng, 部 bù	隻 tsik, 台 tâi, 架 khè
自行車 zìxíngchē / tsū hīng-tshia (bicycle)	輛 liàng, 部 bù	把 pá, 頂 tíng, 隻 tsik
飛機 fēijī / hui-ki (airplane)	架 jià	隻 tsik, 台 tâi, 架 khè
公車 gōngchē / kong-tshia (bus)	輛 liàng	台 tâi, 架 khè

Table 6: Comparison of classifier choices between TSM and MC – the human body

Object MC/TSM	MC	TSM
頭髮 tóufà / thau huat (hair)	根 gēn, 頭 tóu	條 liáu, 縉 liú
眼睛 yǎnjīng / gán tsing (eye)	顆 kē, 雙 shuāng, 隻 zhī	蕊 luí
手 shǒu / tshíu (arm)	隻 zhī	支 / 枝 tsi
嘴 zuǐ / tsuí (mouth)	張 zhāng	支 / 枝 tsi
腳 jiǎo / kioh (foot)	雙 shuāng, 隻 zhī	支 / 枝 tsi

Table 7: Comparison of classifier choices between TSM and MC – various objects

Object MC/TSM	MC	TSM
事 shì / sū (thing)	件 jiàn	項 tíng
刀 dāo / to (knife)	把 bǎ, 口 kǒu	支 / 枝 tsi
掃帚 sàozhou / sàu-tshíu (broom)	把 bǎ	支 / 枝 tsi, 叢 tsōng
蛋 dàn / tàn (egg)	顆 kē	粒 liàp
桌子 zhuōzi / toh tsí (table)	張 zhāng	埕 tiət, 桌 tó, 隻 tsik
針 zhēn / tsam (needle)	根 gēn, 支 / 枝 zhī	隻 tsik
橋 qiáo / kiô (bridge)	座 zuò	板 pán

Apart from the grammatical functions, these particles may be considered representatives of a relationship between language, cognition, and perception. If the special classifiers were to be omitted or substituted by Mandarin Chinese classifiers, language varieties would lose their unspoken but salient features, impacting perception and expression of day-to-day reality and shaping speakers' mentality. Thus, diversion from the classifier registers of a particular language variety would result in language uniformity and a change in perceiving reality and cultural loss. The 20th-century language politics and following decadence of Taiwanese languages practice escalated in language assimilation, simplification, and reduction (Hollo, 2019), which may result in the reduction and shift of the classifier choices in Taiwanese Southern Min and serve as an indicator of a language shift, grammar simplification, assimilation, and successive language loss.

3 Analytical part

3.1 Research Methodology

This chapter presents the methodology used to accomplish the aims of this study – to examine and compare language tendencies and practice among senior and junior generations of Taiwanese through the study of sortal classifiers, to compare the sortal classifier choices of these two generations, to analyse tendencies, the relationship between these two generations, and the influence of Mandarin Chinese on Taiwanese Southern Min in the field of sortal classifiers. In order to address these goals, an apparent time study in the form of a 2-part questionnaire was conducted.

In order to meet our goals, we considered several approaches to carry out our research. Initially, the idea of storytelling based on a series of pictures was considered following an example of a Pear Story experiment in Erbaugh (1990). This approach would, however, bring challenges in inconstancy, as participants could omit the use of classifiers when not referring to objects using quantitative (Q + CL + N) or determinative (Det. + CL + N) phrases. The study focuses on classifiers, and their use by participants during the research process is crucial. Furthermore, the method of using a picture showing several objects at a time was also excluded, as it could confuse participants and disturb their concentration. Therefore, the most suitable method using one object at a time was chosen.

The first step was the construction of a classifier inventory – a collection of different classifier choices between Mandarin Chinese and Taiwanese Southern Min. This inventory was based on studying specialised dictionaries, Taiwanese Southern Min textbooks, grammar books, and academic papers (Erbaugh, 2013; Fang & Connelly, 2008; Fang, 2008; Chen et al., 2020; Chiu, 2007; Li et al., 1995; Lin, 2015; Tai, 1999; Yang, 1991). Subsequently, a list of items associated with these classifiers was created, and afterward, it was examined and approved by a Taiwanese Southern Min native speaker. Eventually, a corpus with 74 pictures of various objects was conducted with an emphasis on the pictures' clarity and explicitness. Among these 74 chosen objects, 68 items are subject to the classifier difference between Mandarin Chinese and Taiwanese Southern Min, and six additional items serve as control tools as their classifiers remain the same in both languages. Items were chosen with an emphasis on a large scale of associated

classifiers (shape, animacy, function), easy comprehension by participants during the research process, and existing counterparts in the Chinese characters register, as approximately 15% of Taiwanese Southern Min words do not have corresponding counterparts in Chinese characters inventory. However, during the research process, one of the items (a picture of a CD) had to be excluded as the older generation could not identify the object displayed. Therefore, the total number of items settled on 73. Simultaneously, two questionnaires were created using traditional Chinese characters. The first questionnaire was focused on the participants' language background and practice, consisting of 15 questions. The second one served as an answer sheet during the classifier's research.

To avoid dialect differences, all participants chosen for the research come from the south of Taiwan – Gaoxiong and Tainan districts. The chosen participants are from senior (born in 1945 – 1957) and junior (born in 1998 – 2003) generations. As noted in the theoretical part of this study, finding participants among the junior generation was rather challenging due to their limited command of Taiwanese Southern Min. Three junior participants were excluded from the research as their proficiency was insufficient to participate in this study. Therefore, the total number of participants settled on 16 – 8 seniors and 8 juniors. The data was gathered during the field trip to the Longtian village (Tainan district), where 8 participants were examined in their homes, and Gaoxiong with 6 participants. Additionally, 2 junior participants from Tainan participated online via Zoom. All the participants were of Southern Min ancestry. Given the number of participants, statistical analysis was not required to analyse the research results. Instead, Excel tables were used, and information was further examined answer by answer and compared with participants' recordings.

Regarding the course of the study, participants were initially asked for consent to be consulted and interviewed on issues related to the use of classifiers in Taiwanese Southern Min, as their answers (classifier choices only) were also recorded. Participants were assured that their answers were used only for research purposes and their names would not be mentioned. The first part of the research was focused on the participants' language background in the form of a questionnaire. Participants were asked to provide information concerning their place of birth, age, native language, the highest obtained education, language of education, occupation, proficiency of their spoken languages,

and the primary language of daily communication. Subsequently, 73 items, one by one, were shown to the participants. The task was to use Taiwanese Southern Min to name the item/items in the picture using the nominal structure *Quantifier + Classifier + Noun* (Q + CL + N) and subsequently write it down on the answer sheet using traditional Chinese characters. Furthermore, a significant amount of time was required per participant, as the research itself was often accompanied by a discussion focusing on the participants' language practice, attitude towards the Taiwanese Southern Min, the life story of senior participants, and feedback.

Given the previous study of Taiwanese Southern Min language history, various language policies, tendencies, the current practice of globalization and internationalization, as well as personal observation of the junior generation's tendencies to shift the focus from Taiwanese local languages to other rather 'international' languages, primary English, our hypotheses are following:

1. The senior generation, despite the language policies during the early days of their lives, remains devoted to the Taiwanese Southern Min language practice – Taiwanese is the primary language of daily communication, and the primary language of the junior generation's daily communication is Mandarin Chinese with a notable shift towards English language.
2. Different patterns in classifier choices – the senior generation uses the accurate TSM classifiers. In contrast, the junior generation tends to code-mix classifiers and uses typical MC classifiers while speaking Taiwanese Southern Min.

3.2 Questionnaire Results and Discussion

The questionnaire contained 15 open-ended or select-choice questions concerning the age and gender of the participants, their place of birth and current address, native language, highest obtained education, the language of education, whether the schools they attended were offering Taiwanese Southern Min lessons, and whether they attended these lessons. The following questions were focused on their occupation, proficiency in Mandarin Chinese – in the survey referred to as *guóyǔ* 國語, and Taiwanese Southern Min, and eventually, other languages spoken. The last question concerned the language participants use daily for communication in all spheres of life.

Participants from the senior generation are 66 – 78 years old, and junior participants are 20 – 25 years old. Ten participants are females, and six participants are males. As noted in the previous chapter, eight participants (seven seniors and one junior) come from Longtian village in the Tainan district, where they were also examined in their homes and a local church. Six participants come from Gaoxiong (five juniors and one senior), and two from Tainan, both juniors. Additionally, three more juniors from Longtian were interested in contributing to the research but were excluded from this study due to insufficient command of Taiwanese Southern Min, as they were unable to name most of the shown items. This fact invalidated our expectancy of higher proficiency in the Taiwanese Southern Min in rural areas. Regarding the highest obtained education, all the junior participants and four seniors had a university education of BA or MA level; two senior participants graduated high school, one senior attended primary school, and one senior did not receive any formal education, bringing a challenge of illiteracy, solved with the assistance of another senior participant. Nonetheless, seniors' varying education levels did not affect the course of the study, as all the senior participants use Taiwanese Southern Min on a daily basis, and apart from one participant, all senior respondents are literate in Taiwanese Southern Min. Contrastingly, a few junior participants had difficulty transcribing Taiwanese Southern Min into Chinese characters, as they are accustomed to the spoken Taiwanese Southern Min, not to its written form. Furthermore, six of the junior participants are still students, and two juniors have full-time employment. Regarding the senior generation, six participants are retired, and two seniors are yet fully employed – a university professor and a priest.

3.2.1 Taiwanese Southern Min in The Process of Education

Both generations are subject to different language policies affecting their language acquisition, as explained in chapters 2.2.1 – 2.2.2. According to the survey results, all the respondents received their education in Mandarin Chinese. While only one respondent (66 y.) from the senior generation was unofficially provided with the Taiwanese Southern Min lessons in school, the other seven participants were not due to language policies. Contrastingly, seven out of eight junior participants were provided with the Taiwanese Southern Min language lessons, which they also attended.

Table 8: Did the school you attended provide TSM lessons?

Age	20	20	21	20	22	23	22	25
Answer	NO	YES	YES	YES	YES	YES	YES	YES

Age	70	66	67	66	78	66	74	76
Answer	NO	NO	NO	YES	NO	NO	X ¹³	NO

Table 9: Did you attend TSM lessons provided by the school?

Age	20	20	21	20	22	23	22	25
Answer	NO	YES	YES	YES	YES	YES	YES	YES

Age	70	66	67	66	78	66	74	76
Answer	NO	NO	NO	YES	NO	NO	X ¹⁴	NO

However, as noted by several junior participants, the school lessons did not affect their acquisition of Taiwanese Southern Min, as the lessons were primarily focused on grammar and not speaking skills. The learning process was also challenging due to the unstandardised form of writing, as Taiwanese Southern Min is a language spoken without written practice, learning to write in the language was not stipulated. The only real acquisition occurred in the grandparents' homes, as they prefer speaking Taiwanese Southern Min due to higher proficiency than Mandarin Chinese, while their parents speak primarily Mandarin Chinese. On the other hand, the older generation explained that the prohibition of Taiwanese Southern Min in schools or public places during their youth did not cause the abandonment of this language. Taiwanese Southern Min was the primary or the only language of most households. It was the language of their ancestors and often the only means of communication with their parents, with a limited knowledge of Mandarin Chinese.

3.2.2 Languages Proficiency

Although the responses from the previous tables, together with earlier explained policies, could give an impression that the junior generation's proficiency in Taiwanese Southern Min will be higher than the senior generation's, participants' personal opinions concerning the proficiency in Mandarin Chinese and Taiwanese Southern Min indicate

¹³ Participant did not attend school.

¹⁴ Participant did not attend school.

that the actual language situation moves in opposite directions.¹⁵ This trend is also observed by Yeh et al. (2004) in their study focused on proficiency and language use of Taiwanese Southern Min, Hakka, and Indigenous languages. As marked in the tables below, apart from one senior group member, both generations stated a fluency in Mandarin Chinese.

Table 10: Language proficiency - Mandarin Chinese

Age	20	20	21	20	22	23	22	25
MC	fluent	fluent	fluent	fluent	fluent	fluent	fluent	fluent

Age	70	66	67	66	78	66	74	76
MC	inter-mediate	fluent	fluent	fluent	fluent	fluent	fluent	fluent

Table 11: Language proficiency – Taiwanese Southern Min

Age	20	20	21	20	22	23	22	25
TSM	inter-mediate	inter-mediate	inter-mediate	inter-mediate	inter-mediate	fluent	inter-mediate	fluent

Age	70	66	67	66	78	66	74	76
TSM	fluent	fluent	fluent	fluent	fluent	fluent	fluent	fluent

The senior generation also stated complete fluency in Taiwanese Southern Min, while only two members from the junior generation gave the same statement. Six juniors believe their proficiency in the Taiwanese Southern Min is on the intermediate level. Although this statement indicates a big contrast between senior and junior generations, it may also be considered an exaggeration. After questioning the statement of an intermediate level of the TSM, respondents explained that they can communicate fluently in the Taiwanese Southern Min, as it is the only language they use to communicate with senior family members. Despite this, they feel that their proficiency does not reach the same volume as that of Mandarin Chinese, as they do not use the language in other spheres of life but only in grandparents' households. Given the course of the research on classifiers, junior participants proved to have a fair knowledge of Taiwanese Southern Min. Choosing the intermediate level gives an impression of an act of modesty and self-underestimation.

¹⁵ There is neither an official examination nor certification for the Taiwanese Southern Min proficiency levels. The data in the table reflects participants' personal opinions about their proficiency.

Simultaneously, it serves as an acknowledgment and expression of the contrast between their Taiwanese Southern Min and Mandarin Chinese levels.

Another contrast is noticeable with responses regarding other languages spoken. While senior respondents stated they do not speak other languages, seven participants from the junior generation speak a level of English. Additionally, three respondents speak Russian, and three respondents speak Hakka. This fact supports the 2030 Bilingual policy and demonstrates the move toward internationalisation and globalisation, possibly affecting Taiwanese Southern Min proficiency levels.

Table 12: Do you speak another language?

Age	20	20	21	20	22	23	22	25
Other languages	ENG	ENG, RUS, Hakka	ENG, Hakka	ENG, RUS	ENG	none	ENG, RUS, Hakka	ENG
Age	70	66	67	66	78	66	74	76
Other languages	none	none	none	none	none	none	none	none

3.2.3 Native Language

The notion of the native language and the speaker's perception of this notion is essential for understanding the current state of Taiwanese society. The answers of these two generations of Taiwanese present complete opposites, as all the junior participants stated Mandarin Chinese as their native language, while senior respondents named Taiwanese Southern Min. Additionally, one junior participant named Taiwanese Southern Min as his second native language, and one named both – Taiwanese Southern Min and Hakka. Regarding the older generation, only one participant considers Mandarin Chinese and Taiwanese Southern Min his native languages, the rest of the participants stated Taiwanese Southern Min. These answers manifest a contrast between these two generations and a significant shift in the language identity.

Table 13: Native language

Age	20	20	21	20	22	23	22	25
Answer	MC	MC	MC	MC	MC	1. MC 2. TSM	1. MC 2. TSM, Hakka	MC

Age	70	66	67	66	78	66	74	76
Answer	TSM	TSM	TSM	TSM	TSM	TSM	TSM	TSM, MC

If language is considered an indicator of identity and a carrier of culture, questions concerning Taiwanese Southern Min identity and cultural heritage arise. Although a sample of 16 participants cannot represent the whole of Taiwanese society, these diametrically different answers may indicate an ongoing change.

3.2.4 Language in Daily Life

The previous statement can be reinforced by the results concerning the language used daily in all spheres of life. The junior generation stated Mandarin Chinese as the primary language of their daily communication; additionally, five participants put Taiwanese Southern Min in the second position after Mandarin. Furthermore, they explained that while Mandarin Chinese is used in all aspects of life, Taiwanese Southern Min is used solely for communication with senior family members and profanity. Although their grandparents have a basic command of Mandarin Chinese, speaking Taiwanese Southern Min with them is considered an act of respect and a family custom. Seven respondents from the senior generation, on the other hand, stated Taiwanese Southern Min as the language of daily communication. Only one senior participant stated Mandarin Chinese as the primary communication medium, as his job (university Professor) requires him to speak Taiwan’s official language (*guóyǔ* 國語) to communicate with his students. Moreover, his wife is of Hakka origin and does not speak Taiwanese Southern Min. Although he considers Taiwanese Southern Min his native language and expressed a desire to have more opportunities to speak it, Mandarin Chinese has become the lingua franca of their household.

Table 14: Language of daily communication

Age	20	20	21	20	22	23	22	25
Answer	MC	1. MC, 2. TSM	1. MC, 2. TSM	1. MC, 2. TSM	MC	1. MC 2. TSM	1. MC, 2. TSM	MC

Age	70	66	67	66	78	66	74	76
Answer	TSM	MC	TSM	TSM	TSM	TSM	TSM	TSM

The initial purpose of the background questionnaire was to put research into a framework and to examine participants' stances toward language. However, these intentions and expectations were well exceeded as the questionnaire's results manifest diametrical differences between these two generations' stances towards Taiwanese Southern Min and Mandarin Chinese. The survey results show that education does not play any role in considering native or preferred language within the senior generation, as their education levels vary from a university level (BA, MA) to no formally obtained education, but language choice remains the same. Furthermore, the senior participants with a university degree stated a higher proficiency in Taiwanese Southern Min than in Mandarin Chinese. Additionally, the exclusion of junior participants from the rural area due to insufficient proficiency suggests that proficiency is not subject to rural/urban origin.

The survey results confirm our first hypothesis. Although the senior respondents hold a high command of Mandarin Chinese, they maintain the use of Taiwanese Southern Min as a primary medium of communication. Junior respondents, on the other hand, use Mandarin Chinese. The fact that almost every junior participant has a command of English, while the earlier-born generation does not, shows a significant shift in society toward internationalisation and globalisation. The move towards other, more international languages has the effect of causing a descending interest in local language studies. The difference in participants' statements and the approaching 2030 Bilingual policy present new occasions for sociolinguistical studies.

3.3 Classifiers Research Results and Discussion

The research focused on classifier choices composed of 73 items – 67 items with different classifiers in Taiwanese Southern Min and Mandarin Chinese and six items with identical classifiers in both languages to test the correctness of participants' answers. The items chosen for the comparative study can be divided into several categories: institutions, clothing, electric appliances, agriculture products, animals, furniture, transportation, and objects of various shapes and purposes. Items were one by one shown to participants; participants were asked to name the item/items in the picture using the nominal phrase Q + CL + N and followingly write the nominal phrase to the answer sheet using the standard script – traditional Chinese characters, as participants are not accustomed to Taiwanese Southern Min romanization methods.

(10) *a picture of three books*

三 本 書

sann pún tsu

three CL book

The answer sheet comprised 76 marked empty lines for answers, an example for easy comprehension, and a head section with tables designated for lucidity to process the data and pair the answer sheet with a background questionnaire, consent form, and recording. The recording served as additional material for analysis of the answers, further observation of participants' perception and choice making, and as a measuring reaction time tool. During the research process focused on classifiers, we faced the challenges of insufficient proficiency of declined participants and illiteracy of one of the participants who did not obtain any official form of education and whose answers were transcribed by her husband, also taking part in this study. Furthermore, the study lacks eight answers from the junior participants, as they could not name the displayed objects using Taiwanese Southern Min. Although the research focuses on classifiers, a few answers include measure words.

3.3.1 Mock Data

The study contained six items that paired with identical classifiers in both languages – Taiwanese Southern Min and Mandarin Chinese – and served as control tools for the accuracy of participants' statements. The items a book, a receipt, a bird, a spoon, a painting, and a briefcase were inserted into the list regardless of the category they could merge into, breaking the pattern. Clarifying that the classifier choices cannot be regarded as correct or incorrect is essential, as classifiers are directly related to perception, which is subjective. We may only classify choices as preferable or unpreferable, traditional Taiwanese Southern Min, or influenced by Mandarin Chinese. The mock dataset confirmed the accuracy of classifier choices, as both generations agreed on identical classifiers in five cases:

(11) 三 本 書

sann pún tsu

three CL book

'three books'

- (12) 一隻鳥¹⁶
tsit tsiah tsiáu
 one CL bird
 ‘one bird’
- (13) 一張發票
tsit-tiunn huat-phiò
 one CL air ticket
 ‘one air ticket’
- (14) 一支匙/一隻匙
tsit-ki sî / tsit tsiah sî
 one CL spoon
 ‘one spoon’
- (15) 兩幅圖 / 兩張圖 *
lióng pak tôo / lióng tiunn tôo
 two CL painting
 ‘two paintings’

Furthermore, in a few cases, the senior generation referred to a picture of two paintings with a measure word 副 *hù* used to classify sets or series. Thus, we consider 副 *hù* a collection massifier, not a sortal classifier. The sixth case is an exception, as seniors and juniors use different classifiers. The senior generation (SG) classes a briefcase with a sortal classifier 卡 *khah*, while the junior generation (JG) agrees on the general classifier 個 *e/kòo*. Interestingly, there is no reference to 卡 *khah* in any measure words dictionary of Taiwanese Southern Min or Mandarin Chinese; the word is in both languages classed as a noun with the meaning ‘a card.’ The discussion with senior participants clarified that 卡 *khah* might be used as a classifier for hollow and oblong objects that can be worn/carried on a hand, such as a ring, a bracelet, or serving as containers, such as a

¹⁶ Due to the unique tone sandhi system, each Taiwanese Southern Min word has multiple ways of pronunciation depending on whether the word stands alone (canonical form) or is paired with words in different tones. Thus, the different transcriptions of characters can be observed throughout the study.

bucket, a keg, or a briefcase. This case indicates the necessity for the actualisation of the Taiwanese Southern Min dictionaries.

- | | |
|--------------------------|------------------------|
| (16) SG: 一 卡 皮包 | JG: 一 個 皮包 |
| <i>tsit khah phê-pau</i> | <i>tsit kò phê-pau</i> |
| one CL briefcase | one CL briefcase |
| ‘one briefcase’ | ‘one briefcase’ |

3.3.2 Default Classifier

Mandarin Chinese and Taiwanese Southern Min share the identical default classifier 個 *ge/kòo, e*. Although the default classifier should in Taiwanese Southern Min be used primarily for the classification of humans, linguistic studies (Erbaugh, 2013; Zheng & Liu, 2023) imply a vast use of the general classifier in both – Mandarin Chinese and Taiwanese Southern Min, especially in the case of the junior generation. Our study results, however, contradict the results of previous studies. The general classifier 個 *kòo, e* was used in 11.6% of cases, with a significant difference between senior and junior generations. While seniors used the general classifier in only 7.7% of cases, primarily to classify a human being, juniors used the same classifier twice as much – in 15.1% of cases and on various occasions. Based on our study, the function of the general classifier in Taiwanese Southern Min has two main functions:

a) classifying people in general,

- (17) 一 個 人
tsit kò-lín
one CL person
‘one person’

b) classifying objects without a specific classifier or objects with which classifier the referee is not acquainted with.

- (18) 一 個 水壩
tsit kò tsuí-pà
one CL dam
‘one dam’

(19) 一個 電火

tsit kò tiān-hué

one CL lamp

‘one lamp’

Although the use of the default classifier 個 *kò/e* by both generations of participants is minor, our study indicates an occurrence of another Taiwanese Southern Min default classifier – 隻 *tsik*. There is a dispute concerning the notion of this classifier, as some scholars (Erbaugh, 2013; Myers & Tsay, 2000) classify this particle as a specified sortal classifier with a broad scope, while other scholars (Ahrens, 1994) believe the gradual process of neutralisation caused 隻 *tsik* has become a default classifier of Taiwanese Southern Min. According to the measure words dictionaries (Fang & Connely, 2008; Li et al., 1995) and proponents of the first stance (Erbaugh, 2013), the nouns the classifier refers to might be divided into several groups: one in a pair (with extension to arms and legs), animals, boats, and containers. Our study results, however, show a broader scope with the emerging use of the classifier 隻 *tsik* and, thus, incline to the second stance.

(20) 一隻 手指

tsit tsiah tshiú-tsí

one CL finger

‘one finger’

(21) 五隻 手機

gōo tsiah tshiú-ki

five CL phone

‘five phones’

(22) 一隻 馬

tsit tsiah bé

one CL horse

‘one horse’

(23) 一隻 刀

tsit tsiah to

one CL knife

‘one knife’

Furthermore, the classifier was also broadly used with all animals included in the research – insects, aquatic animals, large animals, animals with special classifiers (架 *khè* for a sheep, 匹 *phit* for a horse), limbs (arms, legs), and furniture (bed, table) but also occurred when referred to transportation (bicycle, car), eyeglasses, flowers, or elongated pointy items – chopsticks, popsicles, keys, floor brush, and syringe. The classifier had the highest occurrence in the research – 19.6%: 21.3% among senior participants and 18.2% among junior participants. If we consider 隻 *tsik* to be a default classifier, its occurrence, together with the 個 *e* classifier, marks a total of 31.2%.

Even though this fact supports the second stance – 隻 *tsik* serving as a default classifier, its vast use may be caused by homophony with classifiers 支 *tsi* and 枝 *tsi*.¹⁷ The nonexistence of an official form of writing and using Chinese characters based on community standards and intuition may result in confusion and replacement of special characters. This statement can be supported by further analysis of the noun categories paired with classifier 隻 *tsik* during the research process. 支 *tsi* and 枝 *tsi* are ‘synonymous and interchangeable’ (Fang, Connely, 2008, p.33) when referring to elongated and brush-shaped items or flowers. This classification correlates with objects used in the study and paired with the classifier 隻 *tsik* – flower, chopsticks, popsicles, keys, floor brush, knife, syringe, etc. Moreover, several participants from both generations also chose to refer to these objects using 支 *tsi* and 枝 *tsi* classifiers, leading to the conviction of a homophonic misuse of the classifier 隻 *tsik*.

(24) 四 支/枝 冰淇淋

sì ki ping kî lîng

four CL popsicle

‘four popsicles’

¹⁷ Classifiers 支, 枝, and 隻 are pronounced similarly in their canonical form: *tsi/tsi/tsik*. Their pronunciation is a subject of tone sandhi and subsequent changes when paired with other words.

- (25) 一支刀
tsit-ki to
 one CL knife
 ‘one knife’

3.3.3 Special Sortal Classifiers

This subsection discusses the classifier choices among the two Taiwanese generations of seniors and juniors and their tendencies and differences. The theoretical part of the study introduced the political background and language policies affecting the acquisition and grammar of Taiwanese Southern Min. Differences in classifier registers and the consequences of their omission were discussed in subchapter 2.4.3. This section provides examples of the shared points of the two generations and intergenerational differences. An analysis of participants’ answers shows both generations use a similar amount of classifiers with different varieties – the senior generation used 40 different measure words, and the junior generation used 36 different measure words. The most frequently used sortal classifiers by seniors include 隻 *tsik* (CL for animals, limbs, sharp items), 個 *e* (default CL), 粒 *liáp* (CL for round objects), 架 *khè* (CL for vehicles), 尾 *bué* (CL primarily for aquatic animals), 朵 *tó* (CL for flowers and eyes), and 件 *kiānn* (CL for clothing). Juniors frequently use 隻 *tsik*, 個 *e*, 件 *kiānn*, 顆 *khò* (CL for round objects), 張 *tng* (CL for flat items), and 台 *tâi* (CL for machinery and vehicles). Additionally, there is also a noticeable occurrence of massifiers 雙 *siang* (a pair), 對 *tui* (a pair), 串 *tshng* (a string, a cluster), 區 *oo* (an area), and 抱 *phō* (an armful). This subsection divides the examined cases into three groups based on the intergenerational comparison of classifier choices: cross-generation use of the accurate TSM classifiers, cross-generational abandonment of the true TSM classifiers, and their replacement by MC classifiers, and finally, intergenerational differences in classifier choices.

3.3.3.1 Cross-generational Use of The True TSM Classifiers

The Taiwanese Southern Min and Mandarin Chinese classifier registers dispose of different and unique classifiers when distinguishing the shape of the item and various groups of entities: animals, buildings and institutions, clothes, furniture, and various items: e.g., lamps, trees, peanuts, eyes, keys, flowers, etc. This section excludes the default

classifier 個 *e* and the classifier 隻 *tsik*, as their use in Mandarin Chinese and Taiwanese Southern Min is comparable and was discussed in the previous chapter.

The cross-generation devotion to the accurate Taiwanese Southern Min classifier was observed in two cases – institutions and trees. Mandarin Chinese disposes of particular classifiers 家 *jiā* and 所 *suǒ*, with a direct counterpart in the Taiwanese Southern Min – 間 *kainn*, for buildings and institutions. The research included institutions: a company, a restaurant, a university, and a bank, to examine the use of the Taiwanese Southern Min classifier 間 *kainn*. Answers’ analysis shows both generations use solely the special TSM classifier 間 *kainn* when referring to this category.

- | | |
|---------------------------|---------------------------|
| (26) SG: 一 間 銀行 | JG: 一 間 銀行 |
| <i>tsit-king gîn-hâng</i> | <i>tsit-king gîn-hâng</i> |
| one CL bank | one CL bank |
| ‘one bank’ | ‘one bank’ |
| (27) SG: 一 間 公司 | JG: 一 間 公司 |
| <i>tsit-king kong-si</i> | <i>tsit-king kong-si</i> |
| one CL company | one CL company |
| ‘one company’ | ‘one company’ |

The analysis of answer sheets and recordings brought to our attention a particular case of a tree. The item has a unique classifier in both languages – 櫟/叢 *tsōng* in Taiwanese Southern Min and 棵 *kē*¹⁸ in Mandarin Chinese. Based on the answer sheets analysis, the tree appeared to be a case of intergenerational difference – the senior generation maintains the use of the TSM classifier 櫟/叢 *tsōng*, while most of the junior participants prioritise the MC classifier 棵 *kē*.

- | | |
|-------------------------|----------------------|
| (28) SG: 一 櫟 樹 | JG: 一 棵 樹 |
| <i>tsit-tsâng-tshiū</i> | <i>tsit-kē-tshiū</i> |
| one CL tree | one CL tree |

¹⁸ The character does not have a reading in Taiwanese Southern Min. The provided reading is in Mandarin Chinese.

‘one tree’

‘one tree’

Despite this clear distinction, the analysis of recordings proved these results to be misleading and inaccurate as an outcome of the wrong character transcription, conditioned by an unsettled script for Taiwanese Southern Min, stressing the necessity of a codification. All the participants classified the tree with the word *tsōng* but used different characters to transcribe it. Analysis of the recordings proves a cross-generational use of the unique TSM classifier for trees – 櫟/叢 *tsōng*.

(29) SG: 一 櫟 樹

tsit-tsâng-tshiū

one CL tree

‘one tree’

JG: 一 櫟 樹

tsit- tsâng -tshiū

one CL tree

‘one tree’

3.3.3.2 Abandonment of The Taiwanese Southern Min Classifiers

The cross-generational abandonment of the unique Taiwanese Southern Min classifiers (領 *niá*, 葩 *pha*, 蕊 *luí*, 架 *khè*) and replacement by their Mandarin Chinese cognates (件 *jiàn* (TSM: *kiānn*), 條 *tiáo* (TSM: *liâu*), 盞 *zhàn* (TSM: *tsuánn*), 朵 *duǒ* (TSM: *tó*), 隻 *tsik*) was observed in several cases, indicating a cross-generational shift toward the Mandarin Chinese classifier register.

a) Clothing

The Taiwanese Southern Min register disposes of a unique classifier 領 *niá* for clothing regardless of the shape of the item or the body part the item is used for. Mandarin Chinese distinguishes between the upper part of the body – 件 *jiàn* (TSM: *kiānn*), and the lower part of the body – 條 *tiáo* (TSM: *liâu*, classifier for long and narrow items, such as trousers, skirts, scarfs, etc.). Both generations prioritised the Mandarin Chinese classifier 件 *kiānn* regardless of the shape or part of the body the clothing is used for. 條 *liâu* was used sporadically by one senior and two juniors when referring to trousers and skirts. Neither generation used the Taiwanese Southern Min classifier 領 *niá* during the research process, indicating its complete abandonment.

(30) SG: 一 件 襯衫

tsit kiānn tshàn sann

JG: 一 件 襯衫

tsit kiānn tshàn sann

one CL shirt
'one shirt'

one CL shirt
'one shirt'

(31) SG: 三 件 褲子
sann kiānn khò tsí
three CL trousers
'three trousers'

JG: 三 件 褲子
sann kiānn khò tsí
three CL trousers
'three trousers'

b) Lamp

Abandonment of a unique TSM classifier was also observed in the case of a lamp. The TSM classifier 葩 *pha* for lamps and flowers was replaced by the MC cognate 盞 *zhàn* (TSM: *tsuánn*) for lamps and the default classifier 個 *e* by both generations.

(32) SG: 三 盞/個 電火
sann tsuánn/kò tiān-hué
three CL lamp
'three lamps'

JG: 三 盞/個 電火
sann tsuánn/kò tiān-hué
three CL lamp
'three lamps'

c) Flower

The omission of the classifier 葩 *pha* also occurred when referring to a flower, indicating an abandonment of the particle. Besides the classifier 葩 *pha*, flowers in Taiwanese Southern Min can be referred to by a unique classifier 蕊 *luí*, neither used during the research. Instead, the participants widely used an MC classifier for flowers – 朵 *duǒ* (TSM: *tó*), and additionally, a classifier 隻 *tsik*, indicating a cross-generational shift toward the MC register.

(33) SG: 一 朵/隻 花
tsit tó/tsiah hue
one CL flower
'one flower'

JG: 一 朵/隻 花
tsit tó/tsiah hue
one CL flower
'one flower'

d) Eye

Classifier 蕊 *luí* serves not only to classify flowers but also eyes. The case of a single eye became a subject of a significant disparity of answers – the senior generation

used the MC classifier for eyes 朵 *tó*, in combination with the TSM classifier for round objects 粒 *liáp*, and the classifier 隻 *tsik* commonly used to classify one of a pair. The junior participants selected a more extensive variety of classifiers: the MC classifier for round objects 顆 *kē* (TSM: *khò*), the default classifier 個 *e*, the MC classifier for eyes 朵 *tó*, the TSM classifier for round objects 粒 *liáp*, and the classifier 隻 *tsik*. None of the participants classified the object with a unique TSM classifier. 蕊 *luí* was omitted in both cases – flowers and eyes, indicating its complete abandonment and replacement by the Mandarin Chinese 朵 *tó*.

- | | | | |
|---------------------------|------------------|----------------------------------|------------------|
| (33) SG: 一 朵/粒/隻 | 眼睛 | JG: 一 顆/個/朵/粒/隻 | 眼睛 |
| <i>tsit tó/liáp/tsiah</i> | <i>gán tsing</i> | <i>tsit khò/kò/tó/liáp/tsiah</i> | <i>gán tsing</i> |
| one CL | eye | one CL | eye |
| ‘one eye’ | | ‘one eye’ | |

e) Sheep

Although the TSM register contains a particular classifier for sheep – 架 *khè*, neither generation used this particle. Instead, respondents referred to sheep by the classifier 隻 *tsik*, commonly used in both Sinitic languages when referring to larger animals.

- | | |
|------------------------|------------------------|
| (34) SG: 三 隻 羊 | JG: 三 隻 羊 |
| <i>sann tsiah iông</i> | <i>sann tsiah iông</i> |
| three CL sheep | three CL sheep |
| ‘three sheep’ | ‘three sheep’ |

3.3.3.3 Intergenerational Differences in Classifier Choices

The previous section suggested a cross-generational shift toward the Mandarin Chinese classifier register in various cases. Nevertheless, the study has also confirmed intergenerational differences in classifier registers in approximately 40% of the cases. Certain cases show an absolute difference in the participants’ responses, while others indicate a gradual language shift tendency, as they present a compound of various sortal classifiers – default and unique. This section presents the primary distinctions in a series of examples with explanations. The intergenerational disparity is explicit in the cases of

shape classifiers, classifiers for aquatic animals, furniture, and unique classifiers that classify solely one particular item.

a) Shape

The shape of the item has become the most distinguishing feature of the intergenerational disparity, especially in the case of round objects. The two classifiers used to classify round objects in our study are 顆 *khò* and 粒 *liáp*. Both of these classifiers occur in the Mandarin Chinese register and are interchangeable in a few cases. 顆 *kē* (TSM: *khò*) refers to small round items, like balls, grapes, or pearls, 粒 *lì* (TSM: *liáp*) is used to classify even smaller round items, such as rice, peppercorns, etc. The Taiwanese Southern Min register does not recognize 顆 *khò* as a classifier. The classifier 粒 *liáp* serves as its counterpart and the only classifier for round objects in the Taiwanese Southern Min language (Li, Rong, 1995), and thus, senior and junior participants should use only the second classifier during our research process. However, the analysis showed that both generations use the Mandarin Chinese classifier 顆 *khò* when speaking Taiwanese Southern Min, although with significant distinctions in the number of cases.

Comparing the preference between the two classifiers,¹⁹ senior participants prioritised the TSM classifier 粒 *liáp* in 88.6% and the MC classifier 顆 *khò* in 11.4% of cases. Contrastingly, the junior participants chose 粒 *liáp* in 31.9%, while in 68.1% of cases prioritised the use of the Mandarin Chinese classifier 顆 *khò*. These figures indicate the progressive abandonment of the traditional Taiwanese Southern Min classifier and the junior generation's shift towards a Mandarin Chinese particle.

(35) SG: 一 粒 球	JG: 一 顆 球 ²⁰
<i>tsit-liáp kiû</i>	<i>tsit khò kiû</i>
one CL ball	one CL ball
'one ball'	'one ball'

¹⁹ Figures indicate a preference between the two classifiers, not the percentage of classifier choices when referring to round objects, as several factors must be considered (shape – round/oblong, length, part of the whole, etc.)

²⁰ Examples demonstrating classifier choices of the majority of the group are provided.

- | | |
|--|--|
| <p>(36) SG: 三 粒 蛋
 <i>sann-liáp tàn</i>
 three CL egg
 ‘three eggs’</p> | <p>JG: 三 顆 蛋
 <i>sann khò tàn</i>
 three CL egg
 ‘three eggs’</p> |
| <p>(37) SG: 兩 粒 梨子
 <i>n̄ng-liáp lâi tsí</i>
 two CL pear
 ‘two pears’</p> | <p>JG: 兩 顆 梨子
 <i>n̄ng khò lâi tsí</i>
 two CL pear
 ‘two pears’</p> |

Apart from the different preferences of the classifiers among the participants, the changing nature of the participant’s classifier choices is noticeable. Two senior and two junior participants were codeswitching between the classifiers, following an uncertain pattern. A junior participant would refer to an apple using the classifier 粒 *liáp* and subsequently refer to an egg, a stone, or a pear with a classifier 顆 *khò*. Similarly, a senior respondent would refer to an egg using the Mandarin Chinese classifier 顆 *khò* and, eventually, adopt the Taiwanese Southern Min classifier 粒 *liáp* to refer to a peanut, a pear, or a stone.

Besides round objects, the study unveiled a dissimilarity between the two generations when referring to a sharp item – a knife. While all the senior participants chose classifiers 支 *tsi* or 隻 *tsik* when referring to the item, junior respondents, besides choosing a classifier 支 *tsi*, also used a Mandarin Chinese classifier 把 *bǎ* (TSM: *bá*) (CL for objects with a handle), not usual in the Taiwanese Southern Min register.

- | | |
|---|---|
| <p>(38) SG: 一 支/隻 刀
 <i>tsit-ki/tsiah to</i>
 one CL knife
 ‘one knife’</p> | <p>JG: 一 支/把 刀
 <i>tsit-ki/pé to</i>
 one CL knife
 ‘one knife’</p> |
|---|---|

b) Animals

The largest group of the study – the animal group – contained 11 cases: a fish, a snake, a dragon, a shrimp, a dolphin, a centipede, a bird (mock data), a cow, a sheep, a dog, and a horse. Both generations settled on the same classifier 隻 *tsik* for larger

animals – cows, sheep, dogs, and horses. Only two participants (a senior and a junior) referred to the horse using a shared TSM and MC classifier for horses 匹 *phit*.

The intergenerational difference was observed among classifiers for animals and insects with longer bodies – a snake, a centipede, a dragon, and aquatic animals – a fish, a shrimp, and a dolphin. While both generations widely used the 隻 *tsik* classifier, the senior generation also tended to use a TSM classifier 尾 *bué*, used by only one junior participant. 尾 *bué* in both languages has the meaning of ‘a tail.’ In Mandarin Chinese, the word may be used as a classifier for a fish; its function in Taiwanese Southern Min is extended to various aquatic animals or insects with a tail (Tai, 1999). Moreover, one junior participant used the MC classifier 條 *liâu* on several occasions (a dragon, a dolphin).

- | | |
|----------------------------|------------------------|
| (39) SG: 四 尾/隻 魚 | JG: 四 隻 魚 |
| <i>sì bué/tsiah hî</i> | <i>sì tsiah hî</i> |
| four CL fish | four CL fish |
| ‘four fish’ | ‘four fish’ |
| | |
| (40) SG: 一 尾/隻 龍 | JG: 一 隻 龍 |
| <i>tsit bué/tsiah lîng</i> | <i>tsit tsiah lîng</i> |
| one CL dragon | one CL dragon |
| ‘one dragon’ | ‘one dragon’ |

Significant intergenerational disparity appeared in the case of a snake. Although a number of respondents from both generations used the same classifier 隻 *tsik*, the senior generation also referred to the snake with the TSM classifier 尾 *bué*. The junior generation settled on the MC classifier for a snake – 條 *liâu*.

- | | |
|----------------------|-----------------------|
| (41) SG: 一 尾 蛇 | JG: 一 條 蛇 |
| <i>tsit bué tsuâ</i> | <i>tsit tiâu tsuâ</i> |
| one CL snake | one CL snake |
| ‘one snake’ | ‘one snake’ |

c) Furniture

Similarly, the difference was also observed in the case of furniture – mainly in the case of a table and a chair. The junior generation classified these objects with either

a general classifier 個 *e* or a typical MC classifier 張 *zhāng* (TSM: *tng*) for flat objects, commonly used in Mandarin Chinese for furniture (beds, tables). The senior generation classified the table with 張 *tng* and 塊 *khuài*. Although 張 *tng* is used in Taiwanese Southern Min to classify flat items, the combination with a table is uncommon, as the language disposes of its unique classifier 塊 *khuài*. The classifiers senior participants used to refer to a chair differ entirely from the ones used for a table, as they use the particular TSM classifier for chairs – 條 *liâu* in combination with 支 *tsi*. However, while the junior generation is determined by their classifier choice, the senior generation shows a disparity. Besides the most frequent answers, respondents also specified these items with classifiers 個 *e* and 隻 *tsik*.

- | | |
|---|--|
| <p>(42) SG: 一 張/塊 桌子
 <i>tsit-tiunn/tè toh tsí</i>
 one CL table
 ‘one table’</p> | <p>JG: 一 張/個 桌子
 <i>tsit-tiunn/kò toh tsí</i>
 one CL table
 ‘one table’</p> |
| <p>(43) SG: 两 條/支 椅子
 <i>lióng tiâu/ki í tsí</i>
 two CL chair
 ‘two chairs’</p> | <p>JG: 两 張/個 椅子
 <i>lióng tiunn/kò í tsí</i>
 two CL chair
 ‘two chairs’</p> |

Significant intergenerational disparities appeared when referring to the items with unique TSM classifiers that classify solely one item. The results indicate a senior generation’s devotion to the Taiwanese Southern Min classifier register, while the junior generation shifted towards Mandarin Chinese classifiers and massifiers. This disparity can be observed in the case of a peanut, eyes, and keys.

d) A Peanut

Classifier choices in the case of a peanut unveiled similar disparities as in the previous cases. Although both groups of participants widely referred to the item based on its shape (junior generation by the MC classifier 顆 *khò*, senior generation by the TSM variant 粒 *liáp*), the senior generation also included a special TSM classifier 莢 *ngueh* for leguminous plants and pods. The junior generation completely omitted the use of the special TSM classifier.

- | | |
|------------------------------|------------------------|
| (44) SG: 四 莢/粒 花生 | JG: 四 顆 花生 |
| <i>sì ngeh/liáp hue senn</i> | <i>sì khò hue senn</i> |
| four CL peanut | four CL peanut |
| ‘four peanuts’ | ‘four peanuts’ |

e) Eyes

Eyes became a subject of two cases: a) *a pair of eyes* and b) *a single eye*. The case of a single eye was discussed in the previous subsection as a case of the true TSM classifier abandonment. Eyes as a pair are the subject of intergenerational difference, however, not in the field of classifiers but collective massifiers. The linguistic studies (Yang, 1991; Chiu, 2007) focused on Taiwanese Southern Min observed that while items coming in a pair, such as chopsticks or shoes, are classified by the collection massifier 雙 *siang*, eyes are an exception and instead, classified by the collection massifier 對 *tuì*. To test this statement, participants were asked to refer to a pair of eyes and followingly to a single eye, leading to a disparity between generations and even disparity among participants of one generational group. Four members of the senior generation classified a pair of eyes with the massifier 對 *tuì*, not used by junior participants. Two seniors used the Mandarin Chinese classifier for eyes – 朵 *tó*, and the rest used the Taiwanese Southern Min classifier for round objects 粒 *liáp*. Contrastingly, the junior participants classified a pair of eyes with a massifier 雙 *siang* and the MC classifier for round objects 顆 *khò*.

- | | |
|---------------------------|-----------------------------|
| (45) SG: 一 對 眼睛 | JG: 一 雙 眼睛 |
| <i>tsit tuì gán tsing</i> | <i>tsit siang-gán tsing</i> |
| one MW eye | one MW eye |
| ‘a pair of eyes’ | ‘a pair of eyes’ |
-
- | | |
|--------------------------------|----------------------------|
| (46) SG: 两 朵/粒 眼睛 | JG: 两 顆 眼睛 |
| <i>lióng tó/liáp gán tsing</i> | <i>lióng khò gán tsing</i> |
| two CL eye | two CL eye |
| ‘two eyes’ | ‘two eyes’ |

f) Keys

An identical test was performed in the case of keys. Keys became the subject of two case studies: a) *a single key* and b) *three keys on a string*. Regarding the single key, both generations primarily used classifiers 隻 *tsik* and 支 *tsi* for longer brush-shaped items. The issues resulting from the homophony of the two classifiers were explained in the subchapter 3.3.2. Using these classifiers might be caused by character misuse or emerging neutralization of the classifier 隻 *tsik*. Furthermore, the junior generation has also tended to use the MC classifier 把 *bǎ* (TSM: *bá*) for objects with handles (Fang, Connelly, 2008), uncommon in Taiwanese Southern Min.

(47) SG: 一 隻/支 鑰匙	JG: 一 隻/支/把 鑰匙
<i>tsit tsiah/ki iák sî</i>	<i>tsit tsiah/ki/pé iák sî</i>
one CL key	one CL key
‘one key’	‘one key’

A significant intergenerational difference was observed when referring to three keys on a string. The senior generation maintained the use of sortal classifiers 隻 *tsik* and 支 *tsi* and treated this case the same way as the case of a single key, only modifying the number of items. Contrastingly, the junior participants, apart from using classifiers 支 *tsi* and 把 *bá*, showed a tendency to use MC collective massifier 串 *chuàn* (TSM: *tshng*) for a cluster or string of items not commonly used in the Taiwanese Southern Min. Although these results demonstrate a difference between the two generations, the selection of sortal classifiers and massifiers might be conditioned by different dominating features of the item in the referee’s perception.

(48) SG: 三 隻/支 鑰匙	JG: 一 串 鑰匙
<i>sann tsiah/ki iák sî</i>	<i>tsit tshng iák sî</i>
three CL key	one MW key
‘three keys’	‘a bunch of keys’

g) Means of transport

Comparison of classifier choices of the means of transport unveiled another intergenerational difference. This category included an airplane, a car, and a bus. Mandarin Chinese classifier register disposes of two particles to class these nouns:

輛 *liàng* (TSM: *lióng*) for cars, motorbikes, or bicycles, and 架 *jià* (TSM: *khè*) for airplanes and helicopters. Taiwanese Southern Min, however, is missing this clear distinction. Furthermore, grammar books and dictionaries vary in specifying classifiers for these entities, possibly generated from the regional varieties. Thus, some scholars (Li et al., 1995) class 架 *khè* as the only classifier for the means of transport, while other scholarly works (Lin, 2015; Chiu, 2007) and the Taiwanese Ministry of Education identify 台 *tâi* as the accurate classifier for this entity. This difference was noticeable in the participants' responses – the junior generation referred to all the means of transport in our study by the classifier 台 *tâi*. The senior participants' answers vary – a bus and a car were classified by a compound of 台 *tâi* and 架 *khè* classifiers and an airplane was almost solely classified by 架, as in the case of Mandarin Chinese. Both classifier choices may be classed as accurate TSM classifiers, and the difference may originate in the regional varieties, different language practices, or language evolution.

- | | |
|---|--|
| <p>(49) SG: 一 架 飛機
 <i>tsit khuè hui-ki</i>
 one CL plane
 'one plane'</p> | <p>JG: 一 台 飛機
 <i>tsit tâi hui-ki</i>
 one CL plane
 'one plane'</p> |
| <p>(50) SG: 一 架/台 汽車
 <i>tsit khuè/tâi khi-tshia</i>
 one CL car
 'one car'</p> | <p>JG: 一 台 汽車
 <i>tsit tâi khi-tshia</i>
 one CL car
 'one car'</p> |

h) Electrical Appliances

The above-mentioned classifier 台 *tâi* also has electrical appliances and machinery classifying functions in Taiwanese Southern Min and Mandarin Chinese. This statement was confirmed by corresponding classifier choices by both generations of respondents in the case of a washing machine. Seniors and juniors classified the item by specialized classifier 台 *tâi* and default classifier 個 *e/kò*:

- | | |
|---|--|
| <p>(51) SG: 一 台/個 洗衣機
 <i>tsit tâi/kò sé-i-ki</i></p> | <p>JG: 一 台/個 洗衣機
 <i>tsit tâi/kò sé-i-ki</i></p> |
|---|--|

one CL	washing machine	one CL	washing machine
	‘one washing machine’		‘one washing machine’

The intergenerational difference was observed in the case of a fridge. The junior generation classified the item with a classifier 台 *tâi* or a default classifier 個 *e*. Although the fridge is an electrical appliance, the senior generation classified the item with a default classifier 個 *e/kòo* and a unique TSM classifier 卡 *khah* for hollow items. Thus, the senior generation notes a distinction between a fridge (卡 *khah*) and a washing machine (台 *tâi*) – two hollow items, opening an opportunity for perception-cognition-focused research.

(52) SG:	两	卡/個	冰箱	JG:	两	台/個	冰箱
			<i>lióng khah/kò ping-siunn</i>				<i>lióng tâi/kò ping-siunn</i>
	two	CL	fridge		two	CL	fridge
			‘two fridges’				‘two fridges’

To sum up, this section presented the Taiwanese Southern Min cross-generational classifiers’ abandonment, intergenerational differences, and shared perspectives towards the stances of Taiwanese senior and junior generations on classifiers’ use in Taiwanese Southern Min. Although the study of 16 participants cannot conclude the whole linguistic situation in Taiwan, it may serve as a probe into this problematic. The analysis of classifier choices unveiled an impact of Mandarin Chinese on both generations, primarily the junior generation’s classifier choices in the Taiwanese Southern Min language practice. Furthermore, the study results revealed Taiwanese Southern Min as the subject of language obsolescence.²¹ Both examined generations show a level of diversion from the Taiwanese Southern Min classifier register, although the senior generation still maintains a high degree of devotion. This is supported by a cross-generational abandonment of the specialized Taiwanese Southern Min classifiers and their replacement with Mandarin Chinese cognates.

²¹ Language obsolescence is a ‘process by which a language, which at one time was normally used as a vernacular language within a linguistic community, loses (part of) its range of uses within the community, mostly owing to pressure from one or more competitor languages, or to massive migration or decimation of the native speech society. The decay of the recessive language affects the speech community as a whole; however, from the demographical and social points of view, the loss is increasingly manifested from the older to the younger generations’ (Swiggers, 2007, p.22).

3.3.4 Reaction time

Recordings of participants' answers served as evidence and additional material for results analysis, as a source for the study of further intergenerational disparities and participants' observation. Recordings' analysis manifested a significant difference in the reaction time – the time difference between viewing the projected item (stimulus) and an initial reaction. Given the age difference and the advanced age of the senior participants, it was expected that the junior generation would react faster to the stimulus. Contrastingly, the results show that the senior generation had faster reactions. The average reaction time per senior participant is 0.75 seconds. The average reaction time per junior participant is 1.76 seconds, marking the intergenerational difference as one second.

The senior generation's rapid reaction resulted from focusing on the projected item and often disregarding the number of items. The senior participants reacted instantaneously, often stating the singular number of the item, regardless of the actual amount, and corrected the number of items they referred to afterward. Furthermore, the senior generation showed absolute certainty in their answers, spoken and written.

Junior participants showed a high degree of hesitation, pausing to recall the names of the items in Taiwanese Southern Min, correcting the initial answers, and questioning their statements. The junior respondents also hesitated while writing the answers, unsure of the Chinese script for Taiwanese Southern Min. While the seniors' reaction time was steady without significant differences, the juniors' reaction time ranged from 0.2 seconds to 17 seconds. Furthermore, the junior participants showed high levels of stress, discomfort, and embarrassment when they could not recall the item's name, despite the relaxed atmosphere during the research process and the assurance of the sole research purposes of the study without any consequences.

4 Conclusion

This thesis discussed intergenerational differences in using sortal classifiers in the Taiwanese Southern Min. Previous studies identified differences in the Taiwanese Southern Min and Mandarin Chinese classifier registers (Erbaugh, 2013). However, the influence of Mandarin Chinese prevalence on Taiwanese Southern Min resulting in lowering proficiency, slower acquisition of the Taiwanese Southern Min (Yeh et al., 2004), grammar simplification, and vocabulary reduction (Hollo, 2019) may result in the reduction of the Taiwanese Southern Min's sortal classifier register, omission of the unique classifiers and assimilation with Mandarin Chinese. Although the Taiwanese National Statistics (2020) states that Taiwanese Southern Min is spoken by 80% of the Taiwanese inhabitants, these results do not consider speakers' proficiency nor question the actual vitality of the language. The thesis aimed to analyse the influence of Mandarin Chinese on Taiwanese Southern Min's classifiers and to examine the intergenerational disparities within the register.

The theoretical part of the thesis aimed to introduce and define the grounds of the possible intergenerational disparities and unveil the factors having an impact on the Taiwanese Southern Min's development. The theoretical part discussed Taiwanese Southern Min's historical background and Taiwanese past, current, and future language policies directly affecting the language situation and the possibility of language loss. Furthermore, the theoretical part introduced measure words, sortal classifiers especially, and the difference in Taiwanese Southern Min and Mandarin Chinese classifier registers. The analytical part was based on the apparent time quantitative study composed of a background questionnaire focused on participants' background and language stances, and an answer sheet for participants' classifier choices.

The background and language stance questionnaire results showed diametrical differences between the two generations' stances towards Taiwanese Southern Min. The background questionnaire proved our hypothesis to be correct – although both generations hold a high command of Mandarin Chinese, the senior generation remains devoted to the Taiwanese Southern Min language practice. Seniors consider Taiwanese Southern Min to be their native language and the main medium of day-to-day communication. Contrastingly, the junior generation considers Mandarin Chinese their native language and the main language of communication. Taiwanese Southern Min is

solely dedicated to being the medium of communication with the senior generation. Furthermore, almost all junior participants have a command of English, indicating a shift of focus from the native languages to more internationally prominent ones. This shift has the effect of decreasing interest in local language studies. Additionally, the background survey results showed that education and urban/rural origin do not affect the perception of native language or language prominence.

The research focused on the intergenerational classifier choices unveiled the existence of intergenerational differences – the senior generation maintains a higher degree of devotion to the Taiwanese Southern Min classifiers, while the junior generation tends to code-mix Mandarin Chinese and Taiwanese Southern Min classifiers. The main intergenerational differences were noted in the following cases, in which the senior generation maintains the use of the true Taiwanese Southern Min classifiers and massifiers, while the junior generation opts for their Mandarin Chinese cognates:

1. round objects: TSM: 粒 *liáp* vs. MC: 顆 *khò*
2. aquatic animals or snakes: TSM: 尾 *bué* vs. MC: 條 *liâu*
3. furniture: TSM: 塊 *khuài*, 條 *liâu* vs. MC: 張 *tng*
4. brush-like items with a handle: TSM: 支 *tsi* vs. MC: 把 *bǎ*
5. peanuts: TSM: 莢 *ngueh*, 粒 *liáp* vs. MC: 顆 *khò*
6. hollow items: TSM: 卡 *khah* vs. MC: 個 *kò*
7. a pair of eyes: TSM: 對 *tui* vs. MC: 雙 *siang*

The results of the classifiers-focused research correlate with Yeh et al. (2004) study stating that the intergenerational Taiwanese Southern Min practice moves in the opposite direction that the language policies – the senior generation directly affected by the restricting language policies maintains a higher degree of devotion to the Taiwanese Southern Min classifiers, than the junior generation supported in the acquisition of their native languages. Although the notable differences in the two generations' classifier choices support our initial hypothesis of the senior generation's devotion to the Taiwanese Southern Min classifiers and the junior generation's code-mixing Mandarin Chinese and Taiwanese Southern Min classifiers, the study also revealed the senior generation to be the subject of Mandarin Chinese prevalence. The senior generation shows a level of diversion, though not in as advanced stage as the junior generation. This statement is

supported by a cross-generational abandonment of the unique Taiwanese Southern Min classifiers and their replacement by Mandarin Chinese cognates:

1. clothing: TSM 領 *niá* → MC 件 *jiàn* (TSM: *kiānn*), 條 *tiáo* (TSM: *liâu*)
2. sheep: TSM 架 *khè* → MC 隻 *zhī* (TSM: *tsik*), 頭 *tóu* (TSM: *thâu*)
3. lamp: TSM 葩 *pha* → MC 盞 *zhàn* (TSM: *tsuánn*)
4. flower, eye: TSM: 蕊 *luí* → MC 朶 *duǒ* (TSM: *tó*)

Although the study of 16 participants cannot judge the whole of Taiwanese society, nor can the focus on one grammatical category draw conclusions about the entire vitality of the language, the cross-generational abandonment of the unique Taiwanese Southern Min classifiers and a gradual shift toward Mandarin Chinese classifier register suggest dialect levelling of the Taiwanese Southern Min.²² Furthermore, the abandonment of the unique Taiwanese Southern Min classifiers, intergenerational differences in classifier choices, and stance toward the notion of the native language also suggest Taiwanese Southern Min obsolescence, where the Taiwanese bilingual society has gradually shifted from the primary use of the Taiwanese local languages (used by the senior generation) to Mandarin Chinese (used by the junior generation). The levelling and obsolescence of Taiwanese Southern Min caused by the 20th-century language policies, Mandarin Chinese prevalence and growing prominence, internationalisation, globalisation, and no international recognition of the Taiwanese local languages, resulting in generationally decreasing proficiency, indicate the potential future abandonment and language loss of the Taiwanese Southern Min. The new Bilingual 2030 promoting English as another official language and the government's approach towards local languages will play a vital role in Taiwanese Southern Min language preservation.

The study unveiled intergenerational disparities in the perception of native language and choice of language used as a medium of daily communication. The research also discovered intergenerational disparities in the field of classifiers in Taiwanese Southern Min and a cross-generational abandonment of the unique Taiwanese Southern Min classifiers and their replacement by Mandarin Chinese cognates, providing new information in the field of grammar and sociolinguistics and a better understanding of the

²² Dialect levelling is characterized as 'the gradual erasure or loss of the differences that have traditionally distinguished very local or highly regionalized varieties of a language' (Meyerhoff, 2006, p. 239).

current Taiwanese linguistic situation. The study revealed opportunities for further research on the impact of Mandarin Chinese prevalence on Taiwanese Southern Min and other Taiwanese native languages, language obsolescence, language shift, and the teaching process of native languages in Taiwan. Furthermore, the research could be used on a bigger sample of participants, as the number of our participants was limited to 16, and eventually extended to all three generations and various grammatical categories to examine the intergenerational differences and language development.

5 Resumé

The thesis dealt with intergenerational differences in the use of sortal classifiers in Taiwanese Southern Min. The aim was to analyse the impact of Mandarin Chinese prevalence on Taiwanese Southern Min's classifier register and to examine the intergenerational disparities within the register. The theoretical part of the study introduced Taiwanese Southern Min, factors having an impact on its development, namely language policies, and the current Taiwanese linguistic situation. Furthermore, the theoretical part introduced measure words, sortal classifiers, and the disparities in the choices of Mandarin Chinese and Taiwanese Southern Min with respect to specific nouns. The analytical part of the thesis presented the results of the research study composed of a language background survey and a questionnaire focused on participants' classifier choices.

The analysis of the background survey showed disparities between the senior and junior generations of Taiwanese in their stances towards native language, the choice of language as a main medium of communication, as well as the growing significance of English language. The classifier study unveiled significant intergenerational differences in classifier choices, namely the impact of Mandarin Chinese prevalence on the junior generation's Taiwanese Southern Min classifier choices, but also a cross-generational abandonment of unique Taiwanese Southern Min classifiers, suggesting gradual language obsolescence. The study unveiled new information in the field of grammar, sociolinguistics and Taiwanese linguistic situation. However, the limited sample of participants must be taken into the account.

6 Bibliography

Adelaar, K.A. Himmelmann, N. (2005). *The Austronesian languages of Asia and Madagascar*. London; New York: Routledge.

Ahrens, K. (1994). Classifier Production in Normals and Aphasics. In: *Journal of Chinese Linguistics*, 22(2), pp. 202–247. Available at:

https://www.jstor.org/stable/pdf/23753922.pdf?refreqid=fastly-default%3A1457310775e942acc5fd7a006de033c4&ab_segments=&origin=&initiator=&acceptTC=1 [Accessed 29 May 2024].

Allan, K. (1977). Classifiers. In: *Language*, 53(2), pp. 285–311. doi: <https://doi.org/10.1353/lan.1977.0043>.

Batchelor, T. Renn Lin Y.-Ch. (2020). *Taiwan's 2030 Bilingual Nation Policy Is Well Intended, but Reflects Cultural Colonialism*. Available at:

<https://newbloommag.net/2020/11/30/2030-bilingual-nation-policy/> [Accessed 11 Mar. 2024].

Cambridge University Press (2019). *Cambridge Free English Dictionary and Thesaurus*. Available at: <https://dictionary.cambridge.org/dictionary/>. [Accessed 23 Mar. 2024].

Croft, W. (1994) Semantic universals in classifier systems. In: *Word*, 45 (2), pp. 145-171, doi: <https://doi.org/10.1080/00437956.1994.11435922>

Dastgoshadeh, A. Jalilzadeh, K. (2011). Language Loss, Identity, and English as an International Language. In: *European Journal of Social Sciences*, 21(4), pp. 659–665.

Available at: https://www.researchgate.net/profile/Kaveh-Jalilzadeh/publication/289304322_Language_loss_identity_and_English_as_an_international_language/links/5ce3d43e299bf14d95abeec6/Language-loss-identity-and-English-as-an-international-language.pdf [Accessed 11 Feb. 2024].

Erbaugh, M.S. (1990). Mandarin Oral Narratives Compared with English. In: *Journal of the Chinese Language Teachers Association*, 25(2), pp. 21-42. Available at:

https://www.academia.edu/23543774/Mandarin_oral_narratives_compared_with_English [Accessed 5 Mar. 2024].

Erbaugh, M.S. (2006). Chinese Classifiers: Their Use and Acquisition. In: Li et al. eds., *Handbook of East Asian Psycholinguistics: Chinese*. Cambridge University Press, pp. 39-51.

Erbaugh, M.S. (2013). Classifier choices in discourse across the seven main Chinese dialects. In: *Studies in Chinese Language and Discourse*, pp. 101–126. Available at: https://www.academia.edu/23543794/Classifier_choices_in_discourse_across_the_seven_main_Chinese_dialects. [Accessed 11 Mar. 2024].

Fang, J. Connelly, M. (2008). *Chinese Measure Word Dictionary*. Boston: Cheng&Tsui Company.

Fang, Y. Q. (2008). *Shiyong hanyu yufa* [A Practical Chinese Grammar], Beijing: Beijing Language and Culture University Press

Handel, Z. (2010). *Old Chinese and Min*. Available at: https://www.academia.edu/3500703/2010_Old_Chinese_and_Min [Accessed 16 May 2024].

Her, O.-S. Hsieh, Ch.-T. (2010). On the Semantic Distinction between Classifiers and Measure Words in Chinese. In: *Language and Linguistics*. 11(3), pp. 527-551. doi: [2010-0-011-003-000291-1](https://doi.org/10.1017/S002226810000291)

Her, O.-S. Lai, W.-J. (2012). Classifiers: The Many Ways to Profile ‘One’ - A Case Study of Taiwan Mandarin. In: *International Journal of Computer Processing of Languages*, 24(01), pp. 79–94. doi: <https://doi.org/10.1142/s1793840612400053>.

Hollo, J.Z. (2019). *As Taiwan’s Identity Shifts, Can the Taiwanese Language Return to Prominence?* Available at: <https://ketagalanmedia.com/2019/08/27/as-taiwans-identity-shifts-can-the-taiwanese-language-return-to-prominence/>. [Accessed 16 Apr. 2024].

Hsiau, A.-C. (1997). Language Ideology in Taiwan: The KMT's Language Policy, the Tai-yu Language Movement, and Ethnic Politics. In: *Journal of Multilingual and Multicultural Development*, 18(4), pp. 302–315, doi: [10.1080/01434639708666322](https://doi.org/10.1080/01434639708666322)

Hung, W.-J. (2013). A Macro and Micro Contexts, Forces and Challenges for Indigenous Language Education at Elementary Schools in Taiwan. In: *Asia Pacific Journal of Educational Development*, 2(2), pp. 13-22, doi: <https://doi.org/10.6228/APJED.02.02.02>.

Chao, Y.R. (1968). *A grammar of spoken Chinese*. Berkeley; Los Angeles: University Of California Press.

Chappell, H. (2019). A sketch of Southern Min grammar. In: A. Vittrant, J. Watkins, eds., *The Mainland Southeast Asia linguistic area*. Berlin: Mouton de Gruyter, pp. 176-233. doi: <https://doi.org/10.1515/9783110401981-005>.

Chappell, H. and Lan, L. (2016). *MANDARIN AND OTHER SINITIC LANGUAGES*. Available at: <https://hal.science/hal-03817990v1/file/Mandarin%20and%20other%20Sinitic%20languages%20CHAPPELL%20&LI%20LAN%20pre-publication2016.pdf> [Accessed 11 Mar. 2024].

Chen, et al. (2020). Distinguishing classifiers in Taiwanese Southern Min. In: *Language and Linguistics*, 21(3), pp.375–407. doi: <https://doi.org/10.1075/lali.00065.che>.

Chen, R.A. (1999). *Zhongwen liangci de yuyi yu gujin yongfa zhi duibi* [The semantics of Chinese classifiers - a historical perspective], Taipei: Wénhè chūbǎn yǒuxiàn gōngsī

Chen, W. (2020). *A Grammar of Southern Min: The Hui'an Dialect*. Boston/Berlin: De Gruyter Mouton.

Cheng, L.L.-S. Sybesma, R. (1998). Bare and Not-So-Bare Nouns and the Structure of NP. In: *Linguistic Inquiry*, 30(4), pp. 509–542. doi: <https://doi.org/10.1162/002438999554192>.

Cheng, R.L. (1985). A Comparison of Taiwanese, Taiwan Mandarin, and Peking Mandarin. In: *Language*, 61(2), pp. 352-377. doi: <https://doi.org/10.2307/414149>.

Chiu, H.-Y. (2007). *Minnanyu he kejiatia de [liangci] – yu guoyu bijiao* [Measure words in the Southern Min and Hakka – Comparison with Mandarin], Hsinchu: Xuán zàng rénwén xuébào. Available at: <http://ir.ncue.edu.tw/ir/bitstream/987654321/12069/1/2040900410010.pdf> [Accessed 2 Apr. 2024].

Klöter, H. (2004). Language Policy in the KMT and DPP eras. In: *China Perspectives*, (56), pp.56-63. Available at:

https://www.jstor.org/stable/24051941?saml_data=eyJzYW1sVG9rZW4iOiJlNmYxZTRlYS00MmIwLTQ0MzUtOWFiNS03MjQ4MDk2ZDZlNiNwYiLCJlbWFpbCI6ImRhbmlldGEuZnJhbmVrb3ZhMDFAAdXBvbC5jeiIsImIuc3RpdHV0aW9uSWRzIjpbImVlODBmMGE2LTE0ZDktNDBiZS1hMmNmLTVMNzI5OTFiNjhlMSJdfQ [Accessed 12 Mar. 2024].

Klöter, H. (2005). *Written Taiwanese*. Wiesbaden: Harrassowitz Verlag.

Kloter, H. (2016) Taiwan: Language Situation. In: Sybesma, Rint, et al. eds. *Encyclopedia of Chinese Language and Linguistics*, vol.4. Leiden, Boston: Brill, pp. 263-267. Available at: https://www.academia.edu/38138351/Taiwan_Language_Situation [Accessed 3 Feb. 2024].

Le Pesant, T. (2011). Generational Change and Ethnicity among 1980s-born Taiwanese. In: *Journal of Current Chinese Affairs*, 40(1), pp.133-157. Available at: https://www.researchgate.net/publication/227439438_Generational_Change_and_Ethnicity_among_1980s-born_Taiwanese [Accessed 2 June 2024].

Lenker, E. (2021). *Indigenous Legacy: The Formosan Languages of Taiwan*. Available at: <https://www.stearthinktank.com/post/indigenous-linguistic-legacy-taiwan#:~:text=The%20indigenous%20languages%20of%20the%20island%20form%20Owhat> [Accessed 17 May 2024].

Li, et al. (1995). *Fuzhou fangyan cidian* [A Dictionary of The Fuzhou Dialect], Nanjing: Jiangsu jiaoyu chubanshe.

Li, Y. Tian, J. (2015). Evolution of the Chinese Classifiers That Modify the Tree Name Nouns. In: *Studies in Literature and Language*, 11(3), pp. 62-65. Available at: <https://core.ac.uk/reader/236304047>. [Accessed 21 Mar. 2024].

Lin, P.T. (2015). *Taiwanese grammar: a concise reference*. Leipzig: Greenhorn Media.

Liua, Y.-C., Gijnsena, J. and Tsaib, C.-Y. (2013). An empirical evaluation of ethnolinguistic vitality and language loss: The case of Southern Min in Taiwan. In: *Folia Linguistica*, 47(2), pp. 425-447. doi: <https://doi.org/10.1515/flin.2013.016>.

Meyerhoff, M. (2006). *Introducing Sociolinguistics*. New York: Routledge.

MOE. (no date). *Shuci, liangci – fenlei suoyin – jiaoyubu taiwan minanyu changyongci cidian* [Numeral and Classifiers – Categorical Index – Ministry of Education’s Dictionary of Common Words in Taiwanese Southern Min], Available at: <https://sutian.moe.edu.tw/zh-hant/hunlui/100/?iahbe=1> [Accessed 4 Jun. 2024].

Myers, J. Tsay, J. (2000). *The Acquisition of the Default Classifier in Taiwanese*. Available at: <http://lngproc.ccu.edu.tw/lngmyers/MyersTsay-classacq.pdf> [Accessed 14 May 2024].

National Development Council (2021). *Bilingual 2030*. Available at: <https://ws.ndc.gov.tw/Download.ashx?u=LzAwMS9hZG1pbmlzdHJhdG9yLzExL3JlbGZpbGUvMC8xNDUzNC9hODg1MTBkMC04YmQxLTQxZGZEtYTgzZC1jOTg0NDM5Y2U3ZmMucGRm&> [Accessed 11 Mar. 2024].

National Statistics. (2020). *Statistical abstract analysis*. Available at: <https://ws.dgbas.gov.tw/001/Upload/464/refile/11716/231359/ddf056e3-20c7-4ec8-8548-50e5e242b14c.pdf> [Accessed 11 Mar. 2024].

Odiye, S.I. (2015). PHONOLOGY OF MANDARIN CHINESE: A COMPARISON OF PINYIN AND IPA. In: *Quarterly Journal of Chinese Studies*, 4(2), pp.51–58. Available at: https://www.nigerianjournalonline.com/index.php/published_Articles/article/view/2790 [Accessed 12 Mar. 2024].

Sandel, T.L. (2003). Linguistic Capital in Taiwan: The KMT’s Mandarin Language Policy and Its Perceived Impact on Language Practices of Bilingual Mandarin and Tai-gi Speakers. In: *Language in Society*, 32(4), pp. 523–551. Available at: <https://www.jstor.org/stable/4169285>. [Accessed 15 Mar. 2024].

Shepherd J. R. (1993). *Statecraft and political economy on the Taiwan frontier, 1600-1800*. Taipei: Smc Publishing Inc.

Song, J. (2017). *The Semantics of Chinese Classifiers and Linguistic Relativity*. New York: Routledge.

Swiggers, P. (2007). Two Key Concepts of Language Endangerment: Language Obsolescence and Language Death. In: *Linguistica*, 47(1), pp. 21-33. doi: [10.4312/linguistica.47.1.21-33](https://doi.org/10.4312/linguistica.47.1.21-33)

Švarný, O. (1998). *Učební slovník jazyka čínského 1* [Learning Dictionary of Modern Chinese 1], Olomouc: Palacký University

Tai, J. H.-Y. (1992). Variation in Classifier Systems Across Chinese Dialects: Towards a Cognition-Based Semantic Approach. In: *Zhongguo jingnei yuyan ji yuyanxue* 1, pp. 587-608

Tai, J. H.-Y., Wang L. (1990). A Semantic Approach of the Classifier ‘tiao’. In: *Journal of the Chinese Language Teachers Association*, 25(1), pp. 35-56

Tai, J.-Y. (1999). A Note on the Classifier Bue53 尾 in Southern Min. In: *Journal of Chinese Linguistics Monograph Series*, 14, pp. 225–228. Available at: <https://www.jstor.org/stable/23833468>. [Accessed 11 Mar. 2024].

Taiwan Broadcasting System. (2019). *Public Television Service Foundation Annual Report 2019*. Available at: <https://about.pts.org.tw/en/wp-content/uploads/2021/09/2019-PTS-Annual-Report.pdf> [Accessed 14 May 2024].

Taiwan Today (2018). *National languages development act passed the Legislature*. Available at: <https://taiwantoday.tw/news.php?unit=2&post=147829&unitname=Politics-Top-News&postname=National-languages-development-act-passed-by-Legislature>. [Accessed 7 Mar. 2024].

Tsurumi, E.P. (1979). Education and Assimilation in Taiwan under Japanese Rule, 1895—1945. In: *Modern Asian Studies*, 13(04), pp. 617-641. doi: <https://doi.org/10.1017/s0026749x00008489>.

Wang, Q. & Andrews, J.F. (2021). Chinese Pinyin: Overview, History and Use in Language Learning for Young Deaf and Hard of Hearing Students in China. In: *American Annals of the Deaf*, 166(4), pp.446–461. Available at:

https://www.jstor.org/stable/27113321?saml_data=eyJzYW1sVG9rZW4iOiI1NTQ4NmFmZC1mOTg2LTQ3Y2EtYTY0ZS01NjNhNjk0YTRlOTQiLCJlbWFpbCI6ImRhbmllbGEuZnJhbmVrb3ZhMDFAdXBvbC5jeiIsImIuc3RpdHV0aW9uSWRzIjpbImVlODBmMGE2LTE0ZDktNDBiZS1hMmNmLTVmNzI5OTFiNjhlMSJdfQ&seq=1 [Accessed 12 Mar. 2024].

UNESCO (2010). *Atlas of the World's Languages in Danger*. Available at: <https://unesdoc.unesco.org/ark:/48223/pf0000187026>. [Accessed 14 May 2024].

Yan, M. M. (2006). *Introduction to Chinese Dialectology*. Munich: LINCOM Europa.

Yang, H.-F. (1991). *Taiwan minnanyu yufagao* [Taiwanese Hokkien grammar manuscript], New Taipei: Da'an chūbǎnshè

Yeh et.al. (2004). Language Use in Taiwan: Language Proficiency and Domain Analysis. In: *Journal of Taiwan Normal University: Humanities & Social Sciences*, 49(1), pp. 75–107. doi: <https://doi.org/10.6210/jntnull>

Zhang, L. (2014). *Hanyu liangci de renzhi fenxi* [The Cognitive Analysis of Chinese Classifiers], Available at: <https://www.sinoss.net/c/2015-05-08/556667.shtml> [Accessed 4 Mar. 2024].

Zheng, M. Liu, J. (2023). The Mandarin classifier is changing: How and why. In: *Proceedings of the Linguistic Society of America*, 8(1), pp. 54–98. doi: <https://doi.org/10.3765/plsa.v8i1.5498>.

VISUAL MATERIALS

Aapsky. (2022). *Bus*. Available at: <https://www.istockphoto.com/photo/blue-bus-moving-on-the-road-in-city-in-early-morning-gm1371319562-440686125> [Accessed 5 Mar. 2024].

Aloph. (2013). *Zongzi*. Available at: <https://www.istockphoto.com/photo/rice-dumplings-gm177774637-24316413> [Accessed 9 Mar. 2024].

Antoniotruzzi. (2016). *Zucchini*. Available at: <https://www.istockphoto.com/photo/zucchini-gm604014530-103731325> [Accessed 10 Mar. 2024].

Anyanuchoil. (2016). *Lamps*. Available at: <https://www.istockphoto.com/photo/lamps-gm519357756-90489345> [Accessed 12 Mar. 2024].

Arkela. (2015). *Mosquito Net*. Available at: <https://www.istockphoto.com/vector/mosquito-net-gm475338324-65590303> [Accessed 12 Mar. 2024].

Bayerlein, R. (2020). *Brooms*. Available at: <https://www.istockphoto.com/photo/large-broom-framed-by-two-childrens-brooms-with-colored-bristles-leaning-against-a-gm1216294988-354612503> [Accessed 14 May 2024].

Benjavisa. (2022). *Paintings*. Available at: <https://www.istockphoto.com/photo/chakra-mandala-abstract-orchid-mind-art-spiritual-watercolor-painting-illustration-gm1402097982-455117863> [Accessed 12 May 2024].

Bergamont. (2019). *Apples*. Available at: <https://www.istockphoto.com/photo/red-apples-gm1141708425-305978217> [Accessed 5 Mar. 2024].

Blueringmedia. (2015). *Bicycles*. Available at: <https://www.istockphoto.com/vector/sets-of-pedal-bikes-gm535339011-57165318> [Accessed 7 Mar. 2024].

Bortonia. (2021). *Dragon*. Available at: <https://www.istockphoto.com/vector/welsh-dragon-symbol-gm1341561078-421263178> [Accessed 12 Mar. 2024].

Buriy. (2012). *Pears*. Available at: <https://www.istockphoto.com/photo/two-ripe-gm148336249-19801194> [Accessed 12 Mar. 2024].

Burrell, M. (2017). *Ball*. Available at: <https://www.istockphoto.com/photo/basketball-gm864713834-144164173> [Accessed 11 May 2024].

Clairevis. (2016). *Fish*. Available at: <https://www.istockphoto.com/vector/coral-reef-fish-theme-image-5-gm522639330-91723829> [Accessed 12 Mar. 2024].

Coldimages. (2015). *Tree*. Available at: <https://www.istockphoto.com/photo/apple-tree-without-flowers-or-fruit-isolated-on-white-gm470604022-62232356> [Accessed 12 Mar. 2024].

Dacian, G. (2017). *Restaurant*. Available at: <https://www.istockphoto.com/vector/facade-of-restaurant-vector-flat-design-gm857744820-141487769> [Accessed 5 Mar. 2024].

Dageldog. (2007). *Dogs*. Available at: <https://www.istockphoto.com/photo/three-beautiful-dogs-sitting-adorably-in-a-line-gm172195312-2860901> [Accessed 12 Mar. 2024].

Demidoffaleks. (2015). *Bags*. Available at: <https://www.istockphoto.com/photo/woman-handbag-gm536217507-57524146> [Accessed 12 Mar. 2024].

Doomu. (2017). *Washing Machine*. Available at: <https://www.istockphoto.com/photo/modern-metallic-washing-machine-3d-rendering-gm689602644-126960655> [Accessed 10 Mar. 2024].

Dudchak, I. (2023). *Peanuts*. Available at: <https://www.istockphoto.com/photo/peanuts-roasted-isolated-on-white-background-gm1460916783-494997575> [Accessed 8 Mar. 2024].

Farinosa. (2015). *Snake*. Available at: <https://www.istockphoto.com/photo/small-red-bamboo-snake-isolated-on-white-gm538703637-58310790> [Accessed 10 Mar. 2024].

Fbxx. (2018). *Fields*. Available at: <https://www.istockphoto.com/photo/rice-paddies-flooded-cultivated-fields-farmland-rural-italian-countryside-agriculture-gm967836444-263967481> [Accessed 12 Mar. 2024].

GavinD. (2018). *Dam*. Available at: <https://www.istockphoto.com/photo/lake-kariba-dam-wall-zimbabwe-and-zambia-hydroelectric-power-gm944805062-258077773> [Accessed 12 Mar. 2024].

Gbrundin. (2014). *Stones*. Available at: <https://www.istockphoto.com/photo/pebble-stones-gm508203045-46099112> [Accessed 11 Mar. 2024].

GMint. (2013). *A Pair of Eyes*. Available at: <https://www.istockphoto.com/photo/beautiful-eyes-gm183609019-27047603> [Accessed 9 Mar. 2024].

GMint. (2013). *An Eye*. Available at: <https://www.istockphoto.com/photo/closeup-of-human-eye-gm186989465-28623928> [Accessed 9 Mar. 2024].

Gofotograf. (2014). *Shirt*. Available at: <https://www.istockphoto.com/photo/mens-shirt-gm488160041-39435494> [Accessed 9 Mar. 2024].

Gonzalo, C.A. (2019). *Trousers*. Available at: <https://www.istockphoto.com/photo/fashion-three-pants-of-different-color-for-children-photo-on-neutral-background-gm1186127286-334543990> [Accessed 9 Mar. 2024].

Grape_vein. (2016). *Sweater*. Available at: <https://www.istockphoto.com/photo/red-knitted-sweater-gm515313726-88487491> [Accessed 9 Mar. 2024].

Grotelueschen, G. (2018). *Mountain*. Available at: <https://www.istockphoto.com/photo/volcano-osorno-in-national-park-vicente-perez-rosales-chile-copy-space-for-text-gm1028502020-275699155> [Accessed 12 Mar. 2024].

Henvry. (2015). *Chairs*. Available at: <https://www.istockphoto.com/photo/wood-dining-chair-gm530907371-54929460> [Accessed 12 Mar. 2024].

Huang et. al. (2018). *Receipt*. In: Efficient QR code authentication mechanism based on Sudoku. Available at: doi: [10.1007/s11042-019-07795-8](https://doi.org/10.1007/s11042-019-07795-8) [Accessed 12 Mar. 2024].

Chang Gung University. *Chang Gung University*. Available at: <https://www2.epochtimes.com/gb/21/6/3/n12995351.htm> [Accessed 6 Mar. 2024].

Chelysheva, E. (2023). *Duvet*. Available at: <https://www.istockphoto.com/photo/bed-linen-pillow-and-blanket-made-of-quilted-fabric-gm1472562415-502876899> [Accessed 12 Apr. 2023].

Chernetska, L. (2022). *Dolphins*. Available at: <https://www.istockphoto.com/photo/beautiful-bottlenose-dolphins-jumping-out-of-sea-with-clear-blue-water-on-sunny-day-gm1397685044-452036356> [Accessed 10 Mar. 2024].

Ivanova, E. (2020). *Cow*. Available at: <https://www.istockphoto.com/photo/the-ginger-animal-grazes-in-the-pasture-bull-calf-cow-livestock-symbol-of-2021-gm1263652131-369913874> [Accessed 10 Mar. 2024].

JGregorySF. (2018). *Shoes*. Available at: <https://www.istockphoto.com/photo/retail-shoes-hanging-on-display-in-a-store-in-italy-multi-colored-shoes-retail-gm1071191258-286655253> [Accessed 11 Mar. 2024].

Kanmu. (2013). *Eggs*. Available at: <https://www.istockphoto.com/photo/three-eggs-gm181045606-25353839> [Accessed 12 Mar. 2024].

Kasiman, K. (2019). *Bird*. Available at: <https://www.istockphoto.com/vector/happy-blue-bird-cartoon-flying-gm1149823240-311035704> [Accessed 9 Mar. 2024].

Kharlamova, I. (2021). *Refrigerators*. Available at: <https://www.istockphoto.com/vector/set-of-realistic-refrigerator-with-open-and-closed-door-vector-illustration-gm1347107273-424684874> [Accessed 12 Mar. 2024].

- Khruscheva, A. (2008). *Horse*. Available at: <https://www.istockphoto.com/photo/bay-stallion-running-in-field-gm147656306-8026250> [Accessed 9 Mar. 2024].
- Kocasian, S. (2011). *Key*. Available at: <https://www.istockphoto.com/photo/used-classic-key-gm184923544-18601678> [Accessed 12 May 2023].
- Kopyltsova, N. (2022). *Glasses*. Available at: <https://www.istockphoto.com/photo/several-fashionable-stylish-glasses-on-a-beige-background-place-copy-top-view-optics-gm1395574993-450635146> [Accessed 11 Mar. 2024].
- Krakowiak, M. (2011). *Airplane*. Available at: <https://www.istockphoto.com/photo/side-of-passenger-jet-airplane-easy-to-cut-out-gm166006960-17698415> [Accessed 11 Mar. 2024].
- Krasyuk. (2011). *Suitcase*. Available at: <https://www.istockphoto.com/photo/aluminum-suitcase-gm155246201-16790231> [Accessed 12 May 2023].
- Kumkrong, P. (2020). *Centipede*. Available at: <https://www.istockphoto.com/photo/centipede-giant-centipede-isolated-on-white-background-the-top-view-of-a-living-gm1216315170-354621331> [Accessed 9 Mar. 2024].
- Kurbatova, O. (2021). *Watches*. Available at: <https://www.istockphoto.com/vector/watch-wrist-mens-and-womens-mechanical-watches-with-different-bracelets-and-straps-gm1323485077-409118713> [Accessed 11 Mar. 2024].
- Kurylo, N. (2022). *Chopsticks*. Available at: <https://www.istockphoto.com/vector/wooden-chopsticks-on-white-background-gm1411410836-461256328> [Accessed 11 Mar. 2024].
- Kyue001. (2009). *Moon Cakes*. Available at: <https://www.istockphoto.com/photo/moon-cakes-on-a-plate-gm151515630-10575183> [Accessed 12 Mar. 2024].

Laboko. (2016). *Hair*. Available at: <https://www.istockphoto.com/photo/gorgeous-wavy-hair-flowing-her-back-close-up-isolated-on-gm531070144-93655273> [Accessed 12 Mar. 2024].

Larryrains. (2013). *Foot*. Available at: <https://www.istockphoto.com/vector/outside-foot-gm453311067-30912124> [Accessed 12 Mar. 2024].

Lemba, J. (2020). *Key Chain*. Available at: <https://www.istockphoto.com/vector/bunch-of-keys-gm1263447798-369819451> [Accessed 10 May 2023].

Magone. (2016). *Shrimp*. Available at: <https://www.istockphoto.com/photo/roasted-prawn-on-white-background-gm592674802-101783589> [Accessed 9 Mar. 2024].

Marzovillo, F. (2023). *Spoon*. Available at: <https://www.istockphoto.com/photo/shiny-metal-spoon-gm1482359838-509355400> [Accessed 12 May 2023].

Matike. (2019). *Table*. Available at: <https://www.istockphoto.com/photo/coffe-table-wooden-table-gm1167965549-322303805> [Accessed 12 Mar. 2024].

Mawielobob. (2017). *Skirt*. Available at: <https://www.istockphoto.com/photo/red-elegant-skirt-with-ribbon-bow-isolated-on-white-gm882157056-245516024> [Accessed 9 Mar. 2024].

Moser, U. (2019). *Sheep*. Available at: <https://www.istockphoto.com/photo/sheep-farming-in-new-zealand-gm1147794072-309752510> [Accessed 0 Mar. 2024].

Musabirov, M. (2022). *Sugar Cube*. Available at: <https://www.istockphoto.com/photo/white-sugar-cube-close-up-on-white-gm1366049178-436708830> [Accessed 12 Mar. 2024].

Niadvetskaya, A. (2022). *Bank Building*. Available at: <https://www.istockphoto.com/vector/bank-building-on-a-white-background-bank-financing-money-exchange-financial-gm1444926605-483493617> [Accessed 6 Mar. 2024].

Ramos, G. (2017). *Human*. Available at: <https://www.istockphoto.com/vector/cute-man-with-hairstyle-design-gm804234876-130497323> [Accessed 10 Mar. 2024].

RapidEye. (2017). *Finger*. Available at: <https://www.istockphoto.com/photo/backview-of-hand-with-one-raised-finger-on-white-gm882168956-245517949> [Accessed 10 Mar. 2024].

Robuart. (2021). *Cars*. Available at: <https://www.istockphoto.com/vector/set-of-modes-of-transport-and-shapes-cartoon-characters-in-transport-isolated-on-gm1324699293-409951469> [Accessed 12 Mar. 2024].

Rumyantsev, I. (2019). *Syringes*. Available at: <https://www.istockphoto.com/vector/vector-syringe-with-needle-on-plain-background-gm1129089786-298136436> [Accessed 12 Mar. 2024].

Severyn, V. (2019). *Company*. Available at: <https://www.istockphoto.com/vector/company-and-people-at-work-competitor-analysis-office-workers-girls-and-men-gm1151330321-311989890> [Accessed 6 Mar. 2024].

Spiderplay. (2009). *Books*. Available at: <https://www.istockphoto.com/photo/blank-law-books-gm157443874-9194968> [Accessed 6 Mar. 2024].

Suljo. (2007). *Woman coats*. Available at: <https://www.istockphoto.com/photo/three-woman-fall-coats-cut-out-gm144721576-4660353> [Accessed 9 Mar. 2024].

Sumetho. (2022). *Bed*. Available at: <https://www.istockphoto.com/photo/3d-furniture-brown-green-fabric-double-bed-isolated-on-a-white-background-decoration-gm1414989512-463519890> [Accessed 12 Mar. 2024].

Tarzhanova. (2015). *CDs*. Available at: <https://www.istockphoto.com/photo/three-cd-on-white-gm491977128-76062887> [Accessed 6 Mar. 2024].

TiSanti. (2022). *Mobile Phones*. Available at: <https://www.istockphoto.com/photo/old-and-obsolete-mobile-phone-on-white-gm1453001580-489144938> [Accessed 10 Mar. 2024].

Tribalium. (2021). *Flower*. Available at: <https://www.istockphoto.com/vector/red-rose-gm1332865934-415586453> [Accessed 12 Mar. 2024].

Valengilda. (2016). *Hand*. Available at: <https://www.istockphoto.com/photo/female-woman-hand-gm588975396-101132495> [Accessed 10 Mar. 2024].

Venusphoto. (2015). *Floor Mop*. Available at: <https://www.istockphoto.com/photo/cloth-mop-for-cleaning-floor-gm474171318-64425255> [Accessed 12 May 2023].

Verges, G. (2022). *Knife*. Available at: <https://www.istockphoto.com/photo/professional-kitchen-knife-on-white-background-gm1394373263-449873830> [Accessed 12 Mar. 2024].

Volgutova, T. (2017). *Popsicles*. Available at: <https://www.istockphoto.com/photo/popsicles-from-fruits-top-view-gm636924078-113302837> [Accessed 11 Mar. 2024].

Zvukmedia. (2017). *Light Bulbs*. Available at: <https://www.istockphoto.com/vector/three-incandescent-lamps-gm888797276-246494604> [Accessed 12 Mar. 2024].

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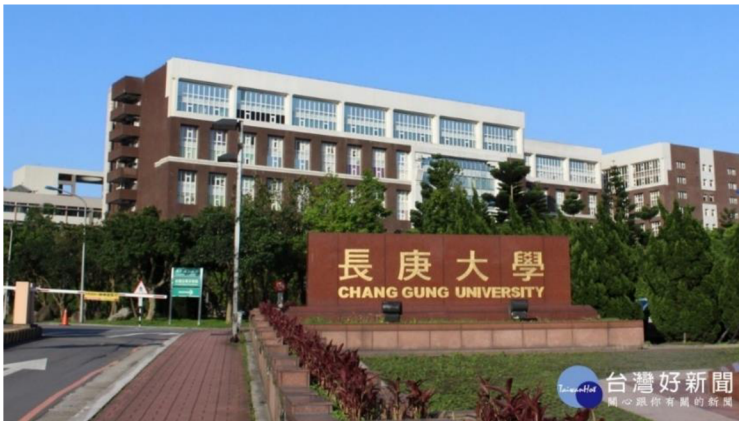
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Attachment 2: Answer sheet



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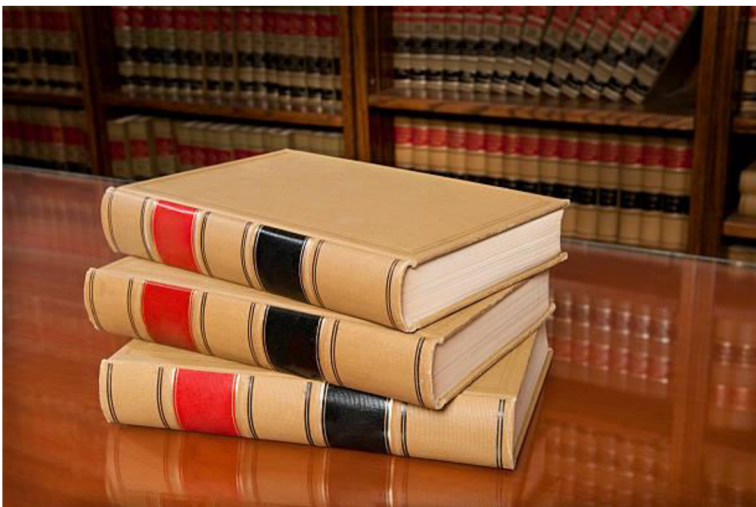
Attachment 17: Refrigerators (Kharlamova, 2021)



Attachment 18: Washing Machine (Doomu, 2017)



Attachment 19: Mobile Phones (TiSanti, 2022)



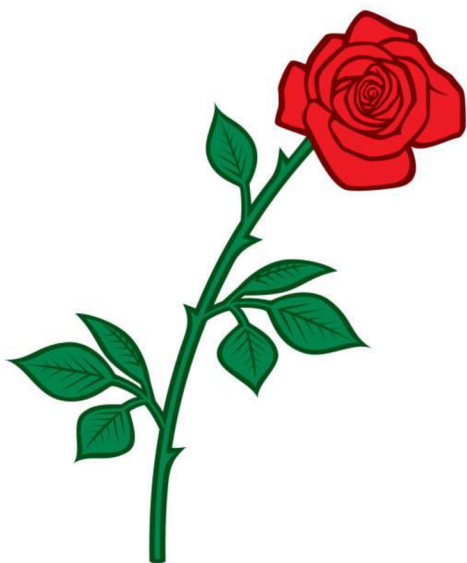
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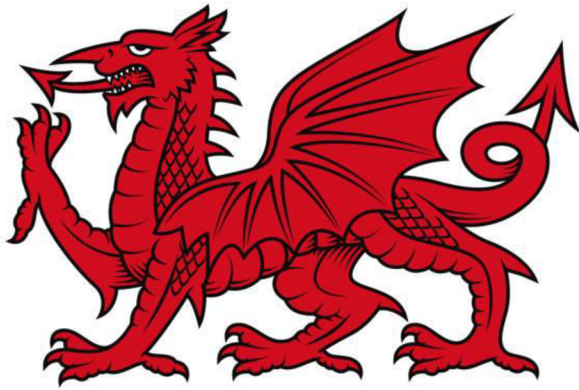
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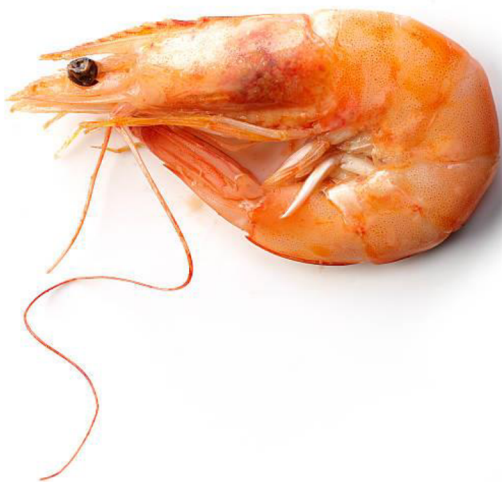
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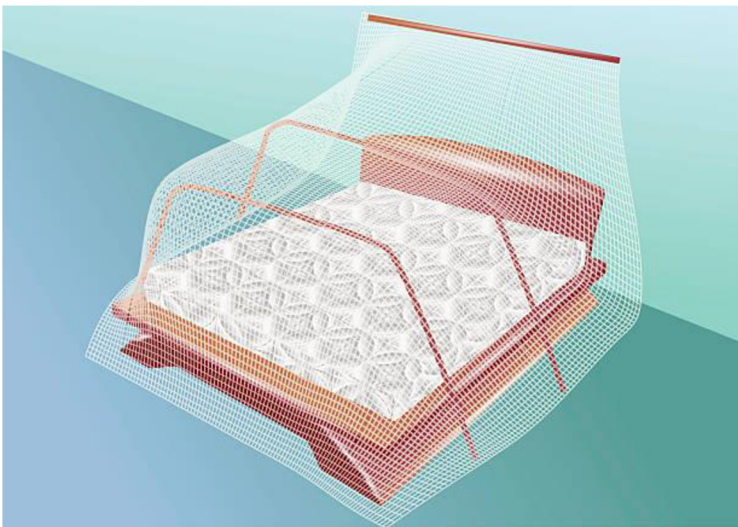
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