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NANYANG TECHNOLOGICAL UNIVERSITY

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

The Aspectual System in Singapore Hokkien

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Supervisor: PROFESSOR RANDY JOHN LA POLLA

A Final Year Project submitted to the School of Humanities and Social Sciences, Nanyang Technological University in partial fulfillment of the requirements for the Degree of Bachelor of Arts in Linguistics & Multilingual Studies

2014
Declaration of Authorship

I declare that this assignment is my own original work, unless otherwise referenced, as defined by the NTU policy on plagiarism. I have read the NTU Honour Code and Pledge.

No part of this Final Year Project has been or is being concurrently submitted for any other qualification at any other university.

I certify that the data collected for this project is authentic. I fully understand that falsification of data will result in the failure of the project and/or failure of the course.

Name  Signature  Date
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Thank you LMS. It’s been a blast.
ABSTRACT

This study is an in-depth analysis of the aspectual system of Singapore Hokkien, a language variety that is becoming increasingly endangered. With the aid of four native speakers, natural Singapore Hokkien speech was recorded, transcribed and analysed. The following types of grammatical marking of viewpoint aspect are discussed in this paper: Perfective, Completive, Perfect, Experiential, (Past) Habitual, Prospective, Iterative, Delimitative and Tentative. Previous literature on Singapore Hokkien and other varieties of Hokkien were also compared and contrasted against the data that have been collected for the purpose of this study. It is shown that there might be phonological and syntactical differences between Singapore Hokkien and Taiwanese. A heavy emphasis was placed on the analysis of the pat33 and ke51 particles, which were initially hypothesized to be experiential particles. However, Chappell (2001) claimed that these particles should be considered as evidential particles instead. This paper attempts to address these conflicting analyses. Verbal reduplication in Singapore Hokkien is also discussed at length, as it was observed to be a pervasive structure in Singapore Hokkien speech. It was discovered that the type of aspectual sense derived from these reduplicated structures is influenced by how extended the action associated with the verb is in time.
1. INTRODUCTION

1.1 AIMS & MOTIVATION

The aim of this study is to analyze the aspectual system of Singapore Hokkien (SH). Hokkien is claimed to be dying out quickly in Singapore, where individuals below twenty-five years old only have a basic knowledge of it (Chua, 2012). Thus far, little effort has gone into studying it (Hong, 2012). This paper is written in hopes that it will contribute to the conservation of this language.

A majority of the younger Singaporeans do not fully acquire ‘dialects’ (including SH) while the older Singaporeans remain proficient in ‘dialects’ but not in English, the working language of Singapore today (Gupta & Siew, 2010). This creates a language gap between the young and old (Goh, 2006). Furthermore, Singapore has an aging population. In the most recent population trend study conducted by the Department of Statistics, it was claimed that the percentage of residents aged 65 years and above has risen from 9.9% in 2012 to 11% in 2013 (Department of Statistics, 2013). This has severe implications for the medical industry as the young service providers will be unable to communicate with their elderly patients effectively. This is in addition to an increasing demand for healthcare (Goh, 2006). A study of this language variety can potentially help in resolving the communication barriers that exists between the two age groups.

Sinitic languages are generally tenseless but have rich aspectual and modal systems (Chappell, 1991). Thus, it is an important area of investigation for this language. Aspect refers to ‘the internal temporal constituency of the situation’ (Comrie, 1976: 4) and does not relate the time of the event to another time-point like tense does. It is commonly split into two categories: perfective and imperfective.

Perfective aspect refers to viewing the situation as ‘a single whole’ (Comrie, 1976: 16) while imperfective aspect makes references to the ‘internal structure of the situation (Comrie, 1976: 16). There are various types of aspects within each category and the ones that will be discussed in this paper are as follows:
The perfect ‘indicates the continuing present relevance of a past situation’ (Comrie, 1976: 52). While unlike other aspects, it has traditionally been grouped together with them. In this paper, we shall see that a particle in SH takes on both perfect and past habitual aspect qualities.

The experiential (perfect) ‘indicates that a given situation has held at least once during some time in the past leading up to the present’ (Comrie, 1976: 67). In the analysis section, this aspect will be discussed concurrently with evidentiality. Although the latter is not a category of aspect, the same particle has been identified to be either an experiential marker (Zhou & Zhou, 2000) or an evidential marker (Chappell, 2001). Evidentiality is narrowly defined as marking the source of the information. The broader definition of it includes the speaker’s attitude towards the knowledge (Chafe, 1986).

The completive aspect, one that is commonly associated with the perfective, ‘is to do something thoroughly and completely’ (Bybee, Perkins & Pagliuca, 1994: 57).

The progressive aspect was defined as ‘an action as ongoing at reference time’ (Bybee et al., 1994: 126), while the habitual aspect is described as ‘a situation which is characteristic of a period of time, so extended in fact that the situation is referred to as is not as an incidental property of the moment but a characteristic property of the whole period.’ (Comrie, 1976: 27-28). Comrie distinguished this type of aspect from the iterative, which describes ‘the repetition of a situation, the successive occurrence of several instances of the given situation.’ (Comrie, 1976: 27).

A lesser known aspect type is the delimitative. According to Li and Thompson (1981), it refers to doing an action for ‘a little bit’ or for a short period of time (Li & Thompson, 1981: 232). It is associated with the ‘tentative aspect’ (Chao, 1968: 204), which refers to trying something out. They argued that this aspect is marked by the reduplication of verbs in Mandarin Chinese.

1.2 HOKKIEN & ITS SPEAKERS

1.2.1 GENETIC AFFILIATION OF HOKKIEN

According to Thurgood (2003), Hokkien falls under the Min Nan (Southern Min) grouping. There are four other Min varieties: Pu-Xian, Min Dong, Min Bei and Min Zhong (Stranzy, 2005). The Min dialect family is one of the six dialect families that form the Chinese subgroup of
the Sino-Tibetan language family (Thurgood, 2003). Figure 1 illustrates a combination of Thurgood (2003) and Stranzy’s (2005) groupings of Sino-Tibetan languages.

![Sino-Tibetan Language Family Tree](image)

**Figure 1: Sino-Tibetan Language Family Tree**

Hokkien is also known as Fujian, Fujianese or Amoy (Ratte, 2009).

According to the *Ethnologue* (Lewis, Gary & Charles, 2013), there are a total of approximately 46 million speakers of Min Nan in the world. It is spoken in the following countries: China, Taiwan, Hong Kong, Malaysia, Singapore and many others. Its language status is classified as ‘vigorous’, which means that this language is used for ‘face-to-face communication by all generations and the situation is sustainable’. However, this does not seem to apply in Singapore.

**1.2.2 SINGAPORE HOKKIEN**

According to Census of Population 2010 (Singapore Department of Statistics, 2010), 1.1 million out of 2.5 million Chinese individuals belong to the Hokkien dialect group. However, it was reported that approximately 240,000 residents speak Hokkien most frequently at home. This is less than 22% of the Chinese Singaporeans that belong to the Hokkien dialect group. In the Census of Population 2000 (Singapore Department of Statistics, 2001), it was reported that 330,000 residents spoke Hokkien most frequently at home. The total number of Chinese individuals then was 2.3 million. The number of Chinese residents in the Hokkien dialect group
was unreported. From these numbers, it is clear that the use of Hokkien is decreasing in Singapore and as a result, the language is unlikely to be passed on to future generations.

This is possibly the result of the Speak Mandarin Campaign and education policy that has been carried out in Singapore. In the 1970s, the Singapore government was concerned about how the use of different Chinese dialects contributes to divisions within the Chinese ethnic group. The Speak Mandarin Campaign was carried out to encourage the use of Mandarin as the lingua franca among the Chinese. The success of the campaign led to the consequence where the use of dialects decreased with each subsequent generation. Furthermore, the (bilingual) education policy in Singapore, which posits an ‘English and Mother Tongue (Mandarin for Chinese Singaporeans)’ rule, reinforces the importance of mastery of English over other languages, including Hokkien (Kirkpatrick, 2010).

The extent of differences between SH and other variants of Hokkien has yet to be determined. This is most likely due to insufficient research on the former. While highlighting the differences between different Hokkien variants is not the aim of this paper, it can potentially help by providing readers with a deeper understanding of the lexico-syntactic structure of SH. For example, recent research by Tien (2012) provides some evidence of how the lexicon of SH differs from other variants of Hokkien, such as Taiwanese Hokkien.

1.3 LITERATURE REVIEW

1.3.1 BODMAN (1987)

The most extensive publication on this language, or on the variant closest to it, is a two-volume long textbook series written by Nicholas Bodman first in 1955 and then republished in 1987 (Hong, 2012). It is written for the purpose of teaching the language to Malayan Government officers in the 1950s and therefore focuses on conversational techniques and structuring basic sentences (Bodman, 1987). It seems that, to make his work reader-friendly, Bodman did not fully adopt linguistic terms to explain his views. Table 1 briefly introduces the lexical and syntactic strategies that were highlighted.
**Table 1: Bodman’s (1987) Interpretation of Aspectual Particles**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Translation</th>
<th>It expresses…</th>
</tr>
</thead>
<tbody>
<tr>
<td>liau</td>
<td>already</td>
<td>Completion of the verbal action</td>
</tr>
<tr>
<td>(tǐ) tēq</td>
<td>-</td>
<td>Continuing of action; Occurring at time of speaking</td>
</tr>
<tr>
<td>bāt</td>
<td>to know, be acquainted with</td>
<td>to have experienced</td>
</tr>
<tr>
<td>verbal reduplication</td>
<td></td>
<td>adds a casual note; indeterminate</td>
</tr>
</tbody>
</table>

1.3.2 ZHOU & ZHOU (2000)

Zhou and Zhou 2000 is a book written in Chinese which provides a brief analysis of the syntax of SH. It described ways in which SH denotes ‘时态’ <tense>. Despite the use of this word, it is clear that they were referring to aspectual particles or words with aspectual properties. The following table illustrates a summary of the particles listed in Zhou and Zhou 2000.

**Table 2: Zhou and Zhou’s (2000) Interpretation of Aspectual Particles**

<table>
<thead>
<tr>
<th>Particle</th>
<th>Translation</th>
<th>It expresses…</th>
</tr>
</thead>
<tbody>
<tr>
<td>ti leh; -leh; -tiau</td>
<td>-</td>
<td>持续或进行 &lt;durative or progressive&gt;</td>
</tr>
<tr>
<td>liau; u; khi</td>
<td>-</td>
<td>完成 &lt;completion&gt;</td>
</tr>
<tr>
<td>pat/bat; ke/kue/kə; pat(verb)ke</td>
<td>-</td>
<td>表示曾经做过或经历过的行为动作 &lt;it expresses an action that has been done before or experienced&gt;</td>
</tr>
</tbody>
</table>

It is interesting to note that Zhou and Zhou 2000 has several more permutations of the aspectual particles that were not listed by other sources. This issue will be briefly discussed in the analysis section of this paper.

1.3.3 CHAPPELL (1989; 2001)

In Chappell 2001, the author argued for a different interpretation of the bāt particle. She argued that bāt should be interpreted as an evidential marker based on semantic reasons such as how
‘the marker expresses the speaker’s attitude towards the truth of the proposition’ (Chappell, 2001: 81) and how the ‘subject’ does not have to be animate, among others. She claimed that experiential markers are generally rare and that the bāt marker encodes more than just aspect and that it also encodes epistemic modality. Her arguments for the other aspectual particles in Southern Min are similar to Bodman’s (1987) analysis and these can be found in Chappell (1989). Table 3 illustrates a summary of Chappell’s interpretation of the aspectual particles in Southern Min.

<table>
<thead>
<tr>
<th>Particle</th>
<th>Translation</th>
<th>Aspect</th>
</tr>
</thead>
<tbody>
<tr>
<td>liau; û</td>
<td>already; have</td>
<td>Perfective</td>
</tr>
<tr>
<td>bāt, - kè; bāt V- kè</td>
<td>know; to pass through</td>
<td>Evidential</td>
</tr>
<tr>
<td>tī + léʔ</td>
<td>wait + ahere</td>
<td>Progressive</td>
</tr>
<tr>
<td>V-V (Reduplication)</td>
<td>-</td>
<td>Tentative action; No definite beginning or endpoint of event.; unbounded aspectually</td>
</tr>
</tbody>
</table>

*Table 3: Chappell’s (1989; 2001) Interpretation of Aspectual Particles*

### 1.3.4 MISCELLANEOUS

Examples and respective arguments for the various aspectual particles that were discussed above will be detailed in the analysis section of this paper. They will be compared with empirical data collected for this project. Then, interpretations of aspectual particles in the SH data will be made while reviewing the arguments made in the literature mentioned above.

It should be also noted that the three/four papers above based their analyses on various Southern Min varieties. Although Bodman neglected to mention the source of his language data, it seems likely that the data had been provided by the locals in Malaya as he was working there in 1951-52. Chappell based her analysis on Amoy Hokkien (Malaysia) and Taiwanese Southern Min in Chappell (1987) and (2001) respectively. Zhou and Zhou (2000) is the only source in which SH data was used.
2. METHODOLOGY

2.1 BACKGROUND OF PARTICIPANTS

4 participants were recruited for the data collection process. They are all female Singaporeans and spent the majority of their lifetimes in Singapore. The primary consultant, who will henceforth be known as P1, is the sole translator of the SH data collected for the purpose of this paper. The secondary consultants (henceforth known as S1, S2, etc.) are individuals who provided monologue/discourse data for the project. P1 also provided some of the discourse data. The sociolinguistic data of the participants are provided in Table 4 below.

<table>
<thead>
<tr>
<th>Consultant</th>
<th>Age/Gender</th>
<th>Education</th>
<th>Occupation</th>
<th>Languages Spoken/Written in order of Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>52/F</td>
<td>O Level</td>
<td>Homemaker</td>
<td>Hokkien Mandarin English</td>
</tr>
<tr>
<td>S1</td>
<td>55/F</td>
<td>Diploma in Business Administration</td>
<td>Salesperson</td>
<td>Hokkien Mandarin English</td>
</tr>
<tr>
<td>S2</td>
<td>56/F</td>
<td>O Level</td>
<td>Homemaker</td>
<td>Hokkien/Teochew Mandarin/English Japanese</td>
</tr>
<tr>
<td>S3</td>
<td>57/F</td>
<td>Degree in Accounting</td>
<td>Property Agent</td>
<td>Hokkien/Teochew Mandarin/English Cantonese/Hainanese</td>
</tr>
</tbody>
</table>

*Table 4: Sociolinguistic Background of Participants*

2.2 TOOLS & DATA COLLECTION PROCESS

An Olympus Digital Voice Recorder WS-813 was used to record all the sessions with primary and secondary consultants. The files were recorded in the following format/mode: WAV format, 44.1kHz/16 bit, Low Cut Filter.

The process of data collection was split into rounds. Figure 2 depicts what each round consists of.
2.2.1 COLLECTION OF RECORDED DATA

Verbal consent and sociolinguistic data were procured from each consultant before they were recorded speaking SH. The following sections describe the different types of data that have been collected for this project. In all forms of recorded data, code-switching is expected to occur as it is a common strategy used in the speech of Singaporean speakers.

2.2.1.1 MONOLOGUES

The monologue was recorded with the aid of *The Pear Story* film. The secondary consultant (S2) was allowed to watch the clip once before she was then asked to narrate the events that occurred within the material.

2.2.1.2 DIALOGUES

Dialogues were recorded by pairing two consultants up. They were given a few topics to choose from but were informed that they do not have to stay within the boundaries of the topics. These topics included Chinese New Year celebrations (in the past), vacations, property, childhood stories, gym services and hobbies. The dialogues were provided by P1 & S1, P1 & S2 and P1 & S3.

2.2.1.3 ELICITATION SESSIONS

Elicitation sessions came in two forms:

The first type (complementary) was held in conjunction with translation sessions. I attempted to elicit data while using the recorded data as a source. An example of the types of questions asked is as follows: ‘Can you give me another sentence that uses this word?’. This ‘word’ would have occurred naturally within the recorded data.
The second type is probing. I will ask open-ended questions that can potentially solve the problems/issues that surfaced in previous rounds. An example of the types of questions asked is as follows: ‘Does this sentence sound alright to you in Hokkien?’

### 2.2.2 TRANSCRIPTION

The Hokkien words were transcribed using IPA. Two digit numbers will be used to indicate tone. Broad transcription will be employed. The following figures describe the phonemes and tones that are found in SH. These are adapted from Hong’s (2012) study on the phonology of SH.

<table>
<thead>
<tr>
<th>Plosive</th>
<th>Bilabial</th>
<th>Alveolar</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voiceless, unaspirated</td>
<td>p</td>
<td>t</td>
<td>k</td>
<td>?</td>
</tr>
<tr>
<td>Voiceless, aspirated</td>
<td>pʰ</td>
<td>tʰ</td>
<td>kʰ</td>
<td></td>
</tr>
<tr>
<td>Voiced</td>
<td>b</td>
<td></td>
<td></td>
<td>g</td>
</tr>
<tr>
<td>Nasal</td>
<td>m</td>
<td>n</td>
<td>η</td>
<td></td>
</tr>
<tr>
<td>Fricative</td>
<td>s</td>
<td></td>
<td></td>
<td>h</td>
</tr>
<tr>
<td>Affricate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voiceless, unaspirated</td>
<td>ts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voiceless, aspirated</td>
<td>tsʰ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voiced</td>
<td>dz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximant</td>
<td>l</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Table 5: Hong’s (2012) SH consonants*

<table>
<thead>
<tr>
<th>Monophthongs</th>
<th>Diphthongs</th>
<th>Triphthongs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front</td>
<td>Central</td>
<td>Back</td>
</tr>
<tr>
<td>High</td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>Mid</td>
<td>e</td>
<td>ɔ</td>
</tr>
<tr>
<td>Low</td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

*Table 6: Hong’s (2012) SH Vowels (Inclusive of Diphthongs and Triphthongs)*

<table>
<thead>
<tr>
<th>Tone</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>55</td>
</tr>
<tr>
<td>Mid</td>
<td>33</td>
</tr>
<tr>
<td>Low</td>
<td>11</td>
</tr>
<tr>
<td>High-Falling</td>
<td>51</td>
</tr>
<tr>
<td>Mid-Falling</td>
<td>31</td>
</tr>
<tr>
<td>Rising</td>
<td>24</td>
</tr>
</tbody>
</table>

*Table 7: Hong’s (2012) SH Tones*
Words that have been code-switched into predominantly Hokkien speech was tagged with a language gloss. The following table describes the various languages (and their corresponding glosses) that have been found in the data that was collected.

<table>
<thead>
<tr>
<th>Language</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teochew</td>
<td>TCW</td>
</tr>
<tr>
<td>Chinese</td>
<td>CHN</td>
</tr>
<tr>
<td>English</td>
<td>ENG</td>
</tr>
</tbody>
</table>

*Table 8: Language Glosses*

Some Hokkien examples in the paper are from Bodman and Chappell 2001. The following table describes how Bodman represented certain sounds/suprasegmental features in his transcriptions.

<table>
<thead>
<tr>
<th>IPA/Tone</th>
<th>Bodman’s Representation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ts</td>
<td>c</td>
</tr>
<tr>
<td>ŋ</td>
<td>ng</td>
</tr>
<tr>
<td>tsʰ, kʰ, pʰ, tʰ</td>
<td>ch, kh, ph, th</td>
</tr>
<tr>
<td>High</td>
<td>cià</td>
</tr>
<tr>
<td>Rising</td>
<td>ciá</td>
</tr>
<tr>
<td>Falling</td>
<td>ciâ</td>
</tr>
<tr>
<td>Low</td>
<td>ciâ</td>
</tr>
<tr>
<td>Mid</td>
<td>ciä</td>
</tr>
</tbody>
</table>

*Table 9: Bodman’s (1987) Transcription System*

Chappell (2001) utilized the Church Romanization system for her Southern Min examples.

### 2.2.3 ANALYSIS & IDENTIFICATION OF PROBLEMS/ISSUES

At the end of each round, problems and issues were collated. If I was unable to solve the problems with the current data, more data was collected and transcribed. These problems and issues are fully detailed in the analysis section of this paper.
3. RESULTS & ANALYSIS

It should be reiterated that with the exception of Zhou & Zhou, the arguments made by Bodman and Chappell were based on other Hokkien varieties and not on SH. Hence, the differences in observations and interpretations of the data could be due to this circumstance. The exceptions are Chappell’s (2001) arguments for a Sinitic evidential, as her claim was made across Sinitic languages as a whole. Instead of claiming that the analyses of these authors were erroneous if conflicts arose, the arguments this paper presented should be seen as possible differences (or similarities) between varieties.

Examples will be marked in the following format to indicate their source:

**Non-elicted**: RECORDING-TYPE,PEOPLE-INVOLVED,TOPIC  E.g. DIALOGUE.P1S1.(TOPIC)

**Elicited**: unmarked

Due to the overlapping/multiple usages or arguments of the aspectual markers in SH, each section describes the usage(s) of a single particle/associated particles instead of a particular aspectual type.

3.1 liau51/ hou51

The perfective liau51 is found post-verbally, as shown in example (1) below

(1) am1 kun33 ts3it33 liau51 ar33 ko31 paŋ33 to33-təŋ31
   towel.TCW wipe PERF PART then put return
   ‘(After using the) towel to wipe (the pear), (he) put it back…’

PEARSTORY.S2.

In this example, the event of wiping the pear is seen as a whole instead of an event that can be broken down into smaller parts.
Another usage of the *liau51* particle is change of state.

(2) tsit⁵¹ mei²⁴tsa⁵¹ **liau51** ə³³ kue⁵⁵ leʔ⁵¹ kio¹¹ la¹¹

early morning.TCW COS PART chicken PROG call PART

‘It’s early morning. The rooster is crowing.’

PEARSTORY.S2.

In Example (2), the COS particle is marking the event of ‘(it is) early morning’. The speaker is trying to express that the time of day was not ‘in the early morning’ before she uttered the sentence. This particle is usually found in clause-final position but can be followed by a sentence-final particle. It is easily confused with the perfective *liau51*, especially when the post-verbal position coincides with the clause-final position, as shown in Example (3).

(3) ua⁵¹ tsa¹¹ me²⁴ book **liau51** leh³³

1SG last night book.ENG PERF/COS PART

‘Last night, I booked (my tickets).’

DIALOGUE.P1S3.VACATION

In these examples, it is not possible to determine which function *liau51* is expressing. The next example shows how *liau51* can be interpreted in two possible ways. To completely understand the next example, one should refer to the scenes depicted in the Pear Story¹ from 2:58 to 3:19.

(4) ta⁵⁵ **liau51** i⁵⁵ kʰuā¹¹ tui²⁴-bin¹¹ e²⁴ u¹¹ ke³³ tsit⁵¹ kʰs¹¹

step ? 3SG see opposite MOD have more one CLF

tsa³³-bo³¹ la¹¹…

woman PART…

‘He drove (cycled) and sees that there is one more woman at the opposite side…’

PEARSTORY.S2.

Example (4) was produced during the scene where the pear thief in the clip was cycling towards a girl. It is clear that during the event of ‘seeing the girl’, the pear thief was still stepping/cycling.

¹ https://www.youtube.com/watch?v=bRNSTxTpG7U
The action of ‘cycling’ only ended when the pear thief bumped into a stone, which occurred later on. Despite this, the particle liau51 was found to follow the verb ta55 ‘step’.

**PERF interpretation:** Although the action of ‘stepping’ is ongoing, the speaker is putting this action ‘aside’ as she wished to emphasize on the action of ‘seeing’ the girl. liau51 is therefore marking the action of ‘stepping’ as a whole.

**COS interpretation:** The action of ‘seeing the girl’ can be interpreted as marking a change in state in the event of ‘stepping’ as the event of ‘seeing’ had occurred after the event of stepping had been established.

Both interpretations are possible and show how liau51 can be ambiguous. However, the difference between the usages of the two particles is clearly shown in an example where the change of state liau51 co-occurs with the perfective liau51, such as in (5).

(5) kʰi31 kʰau33-to55 ə33, un33-naŋ24 kʰuã11 liau51 liau51, ai31
go reach.there PART IPL see PERF COS want
təŋ31 lai11 liau51
return come COS

‘When we reached there, we saw everything already [and we] want to come back.’

**DIALOGUE.P1S1.VACATION**

The change of state liau51 marks the entire predicate while the perfective liau51 follows the verb. Bodman (1987:203) reported that the liau51 liau51 construction has a ‘completely, exhaustively’ sense. This was confirmed by P1.

Other associated particles that have been noted by Bodman (1987) and Zhou and Zhou (2000) include the resultatives hou51 ‘successful completion/done well’ and kʰə31 ‘go’. However, I argue that these particles mark completion and not perfectivity. My data did not contain a resultative kʰə31 ‘go’, but an example of the resultative hou51 was present.
Bodman claimed that *hou51* has a similar meaning to *liau51* and marks completion but has the added sense of ‘done well’. I echo this claim but would like to point out the difference between *hou51* and *liau51*. *hou51* only marks actions that have been completed while *liau51* can mark actions that are still ongoing, as shown earlier. Also, another piece of evidence that they are expressing different aspects is that they can co-occur in a clause, as shown above.

Perfectives and Completives are often confused (Harley, 2008). To reiterate, the perfective denotes ‘a situation viewed in its entirety without regard to internal temporal constituency.’ (Comrie, 1976:12). Semantically, the resultatives (completive) expresses a state (end result) that has been reached while the perfective does not. There is thus a distinction between the two. At this point, one of Bodman’s interpretations of the post-verbal *liau51* should be mentioned. He claimed that *liau51* is the ‘resultative suffix’ and ‘the completion of the verbal action is emphasized’ (Bodman, 1987: 202). For SH, I argue that these statements do not apply. We have disproved the latter and must now tackle the former. According to Nedjalkov and Jaxontov (1988: 6), resultatives are ‘verb forms that express a state implying a previous action’. If we adopt Nedjalkov and Jaxontov’s (1988) definition of resultatives, we realize that it does not apply to *liau51*. While the origin of *liau51* is a verb that means ‘finish’ (Chappell, 1989), it does not mark a state that has been reached but rather, how the speaker views the situation. Therefore, *liau51*, is not a resultative in SH.

### 3.2 *u11*

One other particle of interest is *u11* ‘have’. Both Zhou and Zhou (2000) and Chappell (1987) have highlighted this particle. The former had classified it as a particle that expresses completion and was grouped with *liau51*. Interestingly, this alternative strategy is pre-verbal. However, Bodman (1987) claimed that the preverbal *u11* is to mark assertion or affirmation and failed to ascertain whether *u11* has perfective qualities or not. My data presents a different story.
Example (7) shows how \textit{u11} can act as a perfect marker.

\begin{verbatim}
(7) ua51 u11 kʰɔ31 compare
1SG PRF go compare.ENG
‘I have gone to compare (the prices).’
\end{verbatim}

\textsc{Dialogue.P1s2.gym}

P1 and S2 were discussing about the possibility of P1 switching gyms. Preceding example (7), P1 informed S2 that the gym treatment prices of the gym she is patronizing are cheaper. She then went on to utter (7). This statement is a completed action that has current relevance as it has direct implications of the possibility of P1 switching gyms. Therefore, \textit{u11} can act as a perfect marker. Now refer to example (8).

\begin{verbatim}
(8) u11 tsiŋ31 tsai31 bo24?
have plant vegetable QNS
‘Did (you) plant vegetables?’
\end{verbatim}

\textsc{Dialogue.P1s1.childhood}

The statement form of this example (or a possible answer to the question in this context) was elicited.

\begin{verbatim}
(9) ua51 u11 tsiŋ31 tsai31
1SG have plant vegetable
‘I have planted vegetables.’
\end{verbatim}

In this example, note that the particle \textit{u11} is used to mark the event of ‘planting’. From the context (childhood), it is understood that the event is no longer happening and that the event has occurred more than once across a period of time. Compare this to example (7), where the event of ‘going to compare’ only happened once. This seems to imply that the \textit{u11} particle can mark both the perfect and habitual past. My data do not include examples where \textit{u11} was used in a non-past habitual or perfective situation. While I was unable to test \textit{u11} for assertion, \textit{u11} seems to be often used for affirmation. For example, the answer that was recorded for example (8) was a simple ‘\textit{u11}’. Further research is required to ascertain the other functions of \textit{u11} in SH.
3.3 *pat33*/kui55 & ke51

The particles of interest here are pre-verbal *pat33* and post-verbal *ke51*. They are also commonly transcribed as *bāt* and *koē/kē* in other sources. The latter (which is elaborated on below in 3.3.1) is often seen as an optional postverbal particle when constructing sentences involving *pat33*. The former, when used as a verb, has the meaning of ‘know’. This is shown in example (10) below.

(10) i55 bo24 sə24mi51 **pat33** i55-naŋ24 e33

3SG NEG really know 3PL MOD

‘She does not really know them.’

DIALOGUE.P1S3.VACATION

It should be noted that in the SH variety, devoicing of the bilabial consonant seems to have occurred, an observation echoed in Zhou and Zhou. In pre-verbal position, it has been argued to be both an experiential and evidential particle. While Bodman and Zhou & Zhou simply stated that pre-verbal *bāt* marks the experiential, Chappell (2001) makes a different case. It should be mentioned that she based her argument on eight Sinitic languages, not just one. Only the arguments that relate to the particle *bāt* (in Taiwanese Southern Min) will be mentioned here, however. A summary of her arguments is as follows:

She argued that experiential markers are generally rare and seem to be chiefly represented in Sinitic languages or in the Asian and African regions. She claimed that the conceptualization of the experiential is problematic because the experiential sense is only accessible for animate subjects. Therefore, it does not explain why the experiential particle can be used with non-animate referents. The verb ‘know’ is also a plausible source for the evidential. She then went on to argue for how the ‘evidential’ in Sinitic languages should operate.

The ‘evidential’ in Sinitic languages can mark two possible sources of information: inferential and immediate. These are the definitions that Chappell (2001) provided:

(i) Inferential type: the speaker infers a prior causing action from an observable result state and codes this as evidence for the truth of the assertion in clauses with non-first person subjects.
(ii) Immediate type: the speaker has personally witnessed a situation and codes this as evidence for the truth of the assertion. In the case of first person subjects, the personal witnessing involves directly experiencing, that is, undergoing, the event. This subtype accounts for the traditional label of ‘experiential’ aspect in Chinese linguistics.

(Chappell, 2001: 68)

Lastly, the strongest argument for the existence of an evidential in Southern Min was that it acts as a ‘peripheral operator’, which modifies an entire clause instead of just the verb. The examples in question are as follows:

(11) guá bat m khi thak chheh.
1SG EVD NEG go study book
‘Once there was a stage when I didn’t want to go to school.’

(12) i m bat siū koè goá ê khi koè
3SG NEG EVD receive EVD 1SG L anger EVD
‘She has never before borne the brunt of my anger.’

(Chappell, 2001: 80)

With regards to the second example, she claimed that the koè particle is marking the entire clause, as it is in clause-final position. This seems to imply that as long as one evidential particle is before or after the clause, it can be argued that the evidential(s) is/are acting as peripheral operator(s). This argument is with reference to Foley and Van Valin’s (1984) theory of Role and Reference Grammar (RRG) and an important component of it, the Layered Structure of the Clause (LSC) (see also Van Valin & LaPolla 1997).
The nucleus is the predicate, or the verb. Operators (Nuclear, Core, Clausal) are elements that are not part of the constituent projection yet form an important part of the clause. Different operators operate at different levels of the clause. Aspect operates at the nuclear level (closest to the verb) as it tells us something about the internal temporal structure of the event. Evidentiality operates at the clausal (peripheral) level because it is concerned with marking the source of the information and the latter usually makes up the entire proposition. Because of this it is often manifested as morphology which grammaticalises furthest away from the verb relative to morphology marking nuclear and core operators. Therefore, as Chappell’s examples show that bât/koè seems to operate at the peripheral/clausal level, she argued that they are evidential markers and not experiential (aspect) markers.

I argue that the bât/koè particles are not evidential markers in SH.

Firstly, while not one of her main arguments, claiming that the prevalence of evidential markers is higher compared to experientials is not a strong reason to argue that a particle is more likely to express an evidential rather than experiential sense.

Another point of contention is whether animacy is an integral component of the experiential aspect or not. The experiential ‘indicates that a given situation has held at least once during some time in the past leading up to the present’ (Comrie, 1976: 67). This definition does not refer to the animacy of the subject. While it might seem more rational that only animate referents can ‘experience’ something, it does not rule out how inanimate referents can ‘undergo’ certain events, such as being broken or fixed. These meanings can be extended and considered
‘experiences’ as well, albeit in an unconventional sense. Next, her arguments for the Sinitic evidential should be reviewed.

Prior to example (13), the speaker was describing the scenery and tourist spots found in Australia. The ‘there’ in example (13) refers to a place called the Pinacles in Western Australia.

(13) ua51 pat33 kʰə31 ke51. ua51 husband m11 pat33 kʰə31 ke51.
    1SG ? go ? 1SG husband.ENG NEG ? go ?
    ‘I went (there) before. My husband did not go (there) before.’

These are parallel syntactical structures and elicit similar interpretations. The only differences between them are the ‘subjects’ and the presence of the negation particle in the second clause. Note that Chappell (2001) made ‘subjects’ a critical factor in her definitions for the prototypical Sinitic evidential earlier on. If it is a ‘first person subject’, the evidential is the ‘immediate’ type. If it is a ‘non-first person subject’, the evidential is the ‘inferred’ type. However, example (13) shows that the type of ‘subject’ does not matter when it comes to interpreting the particle pat33. In the second clause, the speaker is simply making a declarative statement and is not making an inference from ‘an observable result state’. Or rather, the change in the ‘subject’ does not result in the expected change in interpretation (from ‘immediate’ to ‘inferred’) that would have been expected if Chappell’s theories were accurate.

I would also like to question what was meant by the phrase ‘observable result state’ in Chappell 2001. From the listed examples in Chappell’s paper, it seems that she was mainly referring to visual ‘evidence’. If that is the case, the evidential interpretation of the second clause in (13) would be odd, as that would mean the sentence was formed on the basis of a lack of visual evidence. Can the absence of (visual) evidence allow the use of an inferential particle? It seems unlikely in this particular context. According to S3, she made this claim while assuming that she knew which tourist spots her husband (of many years) had been to whenever he visited Australia. Could this be considered as an ‘observable result state’?

The examples in Chappell 2001 showed that the position of the negative particle varied: it was found both after and before the ‘evidential’ particle. In my data, pat33 always occurs after the
negative particle. The structure where pat33 occurs before the negative particle did not appear in my data. When consulted, P1 does not think that it occurs in SH. Therefore, this section will only focus on the clauses where pat33 occurs after the negative particle.

First, we shall assume that pat33 is an evidential. This means that, in example (13), the evidential is within the scope of the negative. The expected interpretation, loosely translated into English, would then be ‘I did not infer that my husband has been there’. However, we can see that this was not the interpretation that was achieved. Now, we return to the original hypothesis and assume that pat33 is an experiential/aspectual marker. We know that pat33 is originally a verb. If we assume that pat33 retains some of its verbal identity, then the negative particle in (13) would be negating pat33. The interpretation, loosely translated into English would be ‘My husband did not experience going there.’. We see that this is the interpretation that was achieved.

Finally, Chappell argued that pat33/ke51 seem like peripheral/clausal operators, which is expected of evidentials. Conversely, aspect is a nuclear operator and the marking of such is expected to be closer to the verb.

In my paper, we see that there is a possibility of pat33 retaining its verbal identity. If this is the case, then the issue of where pat33 is relative to the verb is inconsequential. Ke51 necessitates a difference argument.

In (12), we saw that the first koè (ke51) follows the verb and the second ke51 follows the entire clause. The latter could be argued to be a clausal operator.

Example (13) does not prove or disprove this as the ke51 particles can be argued to be either a clausal or nuclear operator. This is because the position of ke51 is both postverbal and clause-final. However, if a destination is added, that is no longer the case.

(14)  ua51  pat33  kʰə31  ke51  au31 tsiu55.
    1SG  ?  go  ?  Australia
    ‘I went to Australia before.’

(15)  *ua51  pat33  kʰə31  au31 tsiu55  ke51
    1SG  ?  go  Australia  ?
    ‘I went to Australia before.’
Examples (14) and (15) show that *ke51* does not operate as a clausal operator but as a nuclear operator. In other words, *ke51* does not seem to be able to take a clause in its scope. However, it should be noted that this observation was made using limited data.

But even if we assume that *ke51* can take a clause in its scope, I argue that we cannot use the LSC to claim the existence of a Sinitic/SH evidential. This is because the LSC is a theoretical framework that was constructed based on linguistic evidence. Linguistic evidence should be used to test a theory and not the other way around.

In conclusion, there is insufficient evidence to claim that *pat33* and *ke51* are evidentials in SH. I argue that the original hypothesis, where *pat33* (and *ke51*) is an experiential, should be maintained.

3.3.1 Influences from Mandarin

One interesting observation that Chappell (2001) made was that ‘In many of the Min dialects, however, the Northern suffixing strategy has also been adopted and is used side by side with the preverbal marker in a hybrid structure’ (Chappell, 2001: 59). This was with reference to the particle *ke51*, which was claimed to be cognate with Mandarin (a Northern variety) *guò*. It means ‘to pass’. In the above examples, it can be seen that *ke51* commonly co-occurs with *pat33* in SH (this is true in Taiwanese Southern Min as well). Interestingly, a Southern Min speaker from the Philippines claimed that *ke51* is not used in their variety. (LaPolla, personal communication, April 16, 2014). This shows that this particle did not originate from Southern Min. Now refer to the following examples.

(16)  ua51 kʰɔ31 kui55 au31tsiu55.
1SG go EXP Australia
‘I went to Australia before.’

DIALOGUE.P1S3.VACATION

(17)  ua51 kʰɔ31 ke51 au31tsiu55.
1SG go EXP Australia
‘I went to Australia before.’
Chappell (2001) claimed that the coding strategy for Taiwanese Southern Min is \textit{bat} \textsc{verb} (X) - (\textit{koè}), implying that \textit{bat} is obligatory while \textit{koè} is optional. However, it can be seen that SH is different. Both particles can be optional. In other words, the following three coding strategies are allowed:

(i) \textit{pat33 \textsc{verb}}
(ii) \textit{pat33 \textsc{verb} ke51/kui55}
(iii) \textsc{verb} ke51/kui55

This observation was also made by Zhou and Zhou. It was also noted that these three strategies are allowed in the Hokkien variety spoken in Malaysia (Chappell, 1989). This is probably proof of strong Mandarin influence. This is not unexpected since most of the SH speakers, including the ones in my participant pool, learnt Mandarin in school and use Mandarin on a daily basis.

\textbf{3.4 \textit{ti11- eʔ31}}

The literature suggests that the progressive marker has several possible pronunciations. This paper provides further evidence for this. For P1, it is \textit{ti11-eʔ31} (which will henceforth be used to represent). However, S2 pronounced it as simply \textit{(i11)-leʔ31}. Examples (20) and (21) illustrate this. Despite the variation between speakers, it is clear that two particles are present. However, in conversations, the progressive marker is often shortened to \textit{ti e31}, implying that blending has occurred. According to Xiamen 1982, \textit{ti11} means ‘wait’ or ‘stand around a long time’. The etymology of \textit{leʔ31} is controversial/undetermined, but it is clearly locative in origin, as it is still used with a locative sense in certain contexts, as shown in example (19).

(19) \textsc{ua51 pat33 kʰə31 au31tsiu55.}
\hspace{1cm} \textsc{exp go Australia}
\hspace{1cm} ‘I went to Australia before.’

Example (20) shows how \textit{ti11-eʔ31} can be used as a progressive marker.
Bodman (1987:151) argues that the difference between *ti11-leʔ31* and *(le)ʔ31* is that the former can only be used if the action is still in progress at the time of speaking while the progressive *(le)ʔ31* can be used for past and present events.

The adverb *tʰau11-tsîŋ24* places the action of looking in the past. However, it can co-occur with *ti11 eʔ31*. Thus, this shows that the action need not be in progress at the time of speaking for the particle *ti11 eʔ31* to be used in SH. I was unable to discern the difference between *ti11 eʔ31* and *eʔ31* from the available data. More research will be required in this area.

### 3.5 *tiam33*tiam33/ *ti33ti33*

According to Bodman (1989:151), ‘no verbal auxiliary is necessary in cases dealing with customary or habitual actions.’ The example he presented as evidence is (22).

(22)  
\[
\begin{array}{llllll}
\text{ciǎ+} & \text{tǎk} & \text{zît+} & \text{loûq hō.} \\
\text{here} & \text{everyday} & \text{fall} & \text{rain}
\end{array}
\]

‘It rains here every day.’

(Bodman, 1987: 151)

A similar utterance was found in my data.

(23)  
\[
\begin{array}{lllllll}
\text{tak11lit31} & \text{tsai24kʰi51} & \text{tio11} & \text{ai31} & \text{practice}
\end{array}
\]

‘Every morning, (I) must practice (table tennis).’
Take note that this example was with reference to the speaker’s childhood. Interestingly, habitual actions that no longer apply can also be phrased in such a way. However, my data also revealed that there is an alternative strategy for expressing the habitual in SH. The pre-verbal particle *tiam33tiam33* can be used to express habitual actions. This is shown below.

(24)  a24 m51  *tiam33tiam33* bue51 min2p^b^ai2 huo4  
first auntie HAB buy branded.CHN goods.CHN  
‘First auntie often buys branded goods.’  
OVERHEARD.P1

In example (24), the event of ‘buying’ occurs frequently over an extended period of time. The same particle can also be used to express iterative actions, as shown in (25). The type of aspect derived can only be determined from the context. Both uses are pre-verbal.

(25)  i55 *tiam33tiam33* ka11 ua51 tso51 tso51 ka33 tsin33 su1-fu2  
3SG ITR PREP 1SG do  do arrive very comfortable.CHN  
‘She always does it for me, (and when she does it) she makes me feel very comfortable.’  
DIALOGUE.P1S3.VACATION

This utterance was produced in the context where the speaker was attempting to express the masseuse’s repetitive motions during the massage session. The speaker had only patronized the masseuse once and therefore the habitual interpretation is not applicable here. Another variant, *ti33ti33* was also found in the data. There does not seem to be any discernable difference between the variants. *ti33ti33* can be used in both a habitual and an iterative sense.

(26)  hi31 k^b^a51 *ti33ti33* koŋ24 ue11  
that CLF ITR say word  
‘That one kept taking.’  
DIALOGUE.P1S3.VACATION
(27) towel ti33ti33 bo24 kʰə31.
   towel.ENG HAB NEG go
   ‘The towel(s) habitually go missing (because people keep stealing them).’

Animacy does not seem to be a concern when constructing habitual and iterative sentences in SH. It is unclear whether these particles can be used to mark the past habitual or not. The usage of tiam33tiam33/ti33ti33 does not seem to be obligatory in expressing habitual/iterative aspects.

3.6 ai31

The verb ai31 ‘want’ can be used to express prospective aspect when it is in pre-verbal position. In example (28) there are two possible interpretations.

(28) ua51 ai31 pʰau4 ko11-pi55 liau51
    1SG want pour.CHN coffee COS
    ‘I want to make coffee/I am going to make coffee.’

When this sentence was uttered, the speaker was going to start making coffee right after she put the phone down. In this context, the same sentence cannot be uttered if the action was intended to be carried out on the next day. This seems to imply that the prospective action must occur in the immediate future. However, example (29) disproves this theory. It also shows a clear distinction between ‘want’ ai31 and prospective ai31.
(29) Q: าะ51 book liau51. าะ51 kʰə31 to11tao31?
  2SG book.ENG PERF. 2SG go where
  ‘You booked your tickets. Where are you going?’

ANS: ua51 ka11 ua51 e33 lao3kəŋl ai31 kʰə31 au31tsiu55
  1SG and 1SG POSS husband.CHN PRSP go Australia
  kʰuā11 ua51 tsa55bo55kiā51
  see 1SG daughter
  ‘My husband and I are going to go Australia to see my daughter.’

DIALOGUE.P1S3.VACATION

From the context, it was understood that the event of going to Australia is not going to occur immediately. Thus, it seems that the immediacy of the prospective action that is to be taken is determined by the context.

The grammaticalization of the verb ‘want’ into prospective aspect marking or a construction that expresses the future is a common finding across languages. This is confirmed in Heine and Kuteva 2002, where it was shown that the same change is found in unrelated languages, such as Latin and Swahili (Heine & Kuteva, 2002: 310-311).

3.7 Verbal Reduplication

Verbal reduplication occurs frequently in the data. It can mark tentative, delimitative and iterative aspect. The construction can be used in past, present and future contexts. The following example is one occurrence:

(30) un33-naŋ24 ai31 kʰə31 Market River  kïā24-kïā24
  1PL PRSP go Market River walk-REDUP
  ‘We want to go to the Market River to take a walk (tentative).’

DIALOGUE.P1S3.VACATION

Bodman claimed that reduplicated verbs add a casual note to the clause while Chappell (1992) claimed that the two types of aspect associated with verbal reduplication in Sinitic languages are
the delimitative and tentative. She also claimed they can be considered unbounded aspectually (atelic). I argue that this construction is more complicated than it seems.

(31) to33 liau51 paŋ33-paŋ33 i55 e33 nā24 lai33-bin24
    pick   PERF   put-REDUP   3SG   POSS   basket inside

    ‘(After they) picked up (the pears), (they) put them (again and again) inside the basket.’

Refer to the pear story clip at approximately 3:56. This utterance was produced when the scene depicted the action of ‘putting’ being repeated again and again. It is important to note that there is no element of ‘tentativeness’ to the action. However, it can be considered to express the delimitative aspect since the action was only carried out for a short period of time. It is also possible to interpret the reduplication as expressing the iterative aspect. Compare this to the example given by Bodman.

(32) guà+ bèq chút-khi khuà:-khuã.
    1SG  PRSP  go.out-go look-REDUP

    ‘I’ll go out to take a look.’

(Bodman, 1987: 118)

This pattern is also found in SH. Unlike the previous example, the reduplication of khuã ‘look’ does not seem to evoke the iterative sense. Instead, the sense evoked is strikingly similar to the delimitative aspect and the tentative aspect. This seems to fall into the same category as example (30). The following table can be constructed based on the senses that have been elicited when verbal reduplication occurred in the data.

<table>
<thead>
<tr>
<th>Tentative/Delimitative</th>
<th>Iterative</th>
</tr>
</thead>
<tbody>
<tr>
<td>kiā24-kiā24 ‘walk-walk’</td>
<td>paŋ33-paŋ33 ‘put-put’</td>
</tr>
<tr>
<td>kʰuā11- kʰuā11 ‘look-look’</td>
<td>pʰaʔ31- pʰaʔ31 ‘hit-hit’</td>
</tr>
<tr>
<td>tsiaŋ31- tsiaŋ31 ‘rinse-rinse’</td>
<td>tsʰit33-tsʰit33 ‘wipe-wipe’</td>
</tr>
</tbody>
</table>

Table 10: Reduplicated Verbs
Li and Thompson claimed that the verbs that undergo verbal reduplication in Mandarin Chinese have to be action and volitional verbs. This seems to be the same in SH. Based on the context in which these reduplicated verbs were used, the following table can be constructed.

<table>
<thead>
<tr>
<th>Verbs</th>
<th>Duration of Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>kiã24-kiã24 ‘walk-walk’</td>
<td>Extended</td>
</tr>
<tr>
<td>kʰuã11- kʰuã11 ‘look-look’</td>
<td>Extended</td>
</tr>
<tr>
<td>tsiãŋ31-tsiãŋ31 ‘rinse-rinse’</td>
<td>Extended</td>
</tr>
<tr>
<td>panj33-panj33 ‘put-put’</td>
<td>Minimal/Instantaneous</td>
</tr>
<tr>
<td>pʰaʔ31- pʰaʔ31 ‘hit-hit’</td>
<td>Minimal/Instantaneous</td>
</tr>
<tr>
<td>tsʰit33-tsʰit33 ‘wipe-wipe’</td>
<td>Minimal/Instantaneous</td>
</tr>
</tbody>
</table>

**Table 11: Reduplicated Verbs-Duration of Action Pairs**

Although there is insufficient data to come to a concrete conclusion, it seems that the length of time in which the action is carried out can affect what kind of interpretation the reduplicated verb takes on when used in an utterance. Tentative/Delimitative interpretations are associated with contexts where the duration of action is extended, while iterative interpretations are associated with contexts where the duration of action is minimal. This seems to make sense. The iterative interpretation is only accessible with minimal duration verb types because repeating an extended duration verb type in a short frame of time seems unlikely. Similarly, the tentative interpretation is only accessible to extended duration verb types because carrying out a minimal duration verb type tentatively in the associated contexts seems odd.

Interestingly, my data also revealed that there is a way to limit such interpretations. This can be done by placing an adverbial construction after the reduplicated verb, as shown below.

(33) …kʰa55 ka11 i55 **pʰaʔ31-pʰaʔ31 lσŋ11-e11**...

   leg PREP 3SG hit-REDUP twice

   ‘…(his) leg got brushed (clean) twice….’

In this example, the end point of the action of ‘brushing’ (which is done twice) is clear. Not all verbs are able to take on the lσŋ11-e11 adverbial expression. According to P1, the verbs in Table 11 are able to take on lσŋ11-e11 with the exception of panj33-panj33 ‘put-put’ and kiã24-kiã24 ‘walk-walk’. There is insufficient data to confirm why this is so but it could possibly be due to
the semantic nature of the verbs. ‘Walk-walk’ twice is semantically odd. Conversely, ‘putting’ something twice seems alright. However, the construction panŋ33-panŋ33 lŋη11-e11 is not allowed. This could be a sign that there are some syntactic restrictions. The construction VV lŋη11-e11 is always in clause-final position. Since an ‘object’ is necessary when using the verb ‘put’, it cannot take on the clause-final lŋη11-e11.

More research is required to determine the validity of this observation. Despite these differences, however, verbal reduplication in SH can still be considered as a type of imperfective aspect/unbounded aspect.

3.7.1 Double reduplication

Some verbs can be reduplicated twice, such as ta55 ‘step’ and kiu31 ‘call’.

(34) … tsut55 lat31 e33 ta55-ta55-ta55…
go.out strength MOD step-REDUP-REDUP
‘(He) puts strength and step step step….’

(35) bo11 sio55 tsui51 lŋ24zŋ51 si11 lŋ24 tsui51 taeLH2 kiu31-kiu31-kiu31
NEG hot water everything AUX cold water everyone call-REDUP-REDUP
‘(There is) no hot water, everything is cold water, everyone keeps complaining.

Both examples elicit iterative interpretations. Example (35) occurred over an extended period of time. At the time of utterance, the event of ‘complaining’ had been occurring repeatedly for two weeks and was done by different individuals. It is not interpreted as habitual aspect because the instances of ‘complaining’ happened a limited number of times. Also, it is an incidental property of the moment and not characteristic of the whole period.

Due to insufficient data, I was unable to determine if double reduplication is able to elicit the tentative aspect sense that single (verb) reduplication is capable of.

2 Originally, this has two syllables (ta-ke) but P1 seems to have lost the distinction between them. There is a rising pitch.
4. SUMMARY

<table>
<thead>
<tr>
<th>Aspect</th>
<th>liau51</th>
<th>hou51</th>
<th>u11</th>
<th>pat33</th>
<th>ke51</th>
<th>ti11-e31</th>
<th>tiam33tiam33</th>
<th>ai31</th>
<th>VV(V)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfective</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Perfect</td>
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<td>✔</td>
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</tr>
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<td>Completive</td>
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<td></td>
</tr>
<tr>
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<td>✔</td>
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<tr>
<td>Past Habitual</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iterative/ (Delimitative)</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Tentative/ Delimitative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Prospective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
</tbody>
</table>

Table 12: Summary of Aspectual Particles/Structure in SH

It should be noted that the habitual sense can also be derived from time adverbials such as ‘every night/day’. Table 12 lists the particles that have been investigated in this paper. There are more pre-verbal aspectual particles (black) than post-verbal particles (grey). Interestingly, those that are in the post-verbal category seem to fall into the perfective category while those in the pre-verbal category fall into the imperfective category. The exceptions are pat33 and u11. This table also shows how there may be more than one way to express some types of aspect in SH. For example, the iterative can be represented by both the pre-verbal particles tiam33tiam33/ti33ti33 and verbal reduplication. As far as I know, there is no discernable difference between the strategies. For example, there is no difference in interpretation between ti33ti33 V and VV for the iterative aspect. Brief elicitation sessions also revealed that some verbs, like pʰaʔ31 ‘hit’, can be used with both strategies.

We also saw how there is much phonological variation within SH. For example, there are various ways to pronounce the progressive particle ti11-e31. During the course of the study, I noticed that there are other words in SH that have phonological variants. This is probably due to language contact with Mandarin and other Chinese varieties here in Singapore. There are also
some hints of phonological and syntactical differences between SH and other varieties of Hokkien, like Taiwanese Hokkien.

A large portion of this paper was dedicated to examining the particle pat33 in Hokkien. It was first proposed to be an experiential aspect marker. Later on, it was argued to be an evidential marker. The data and arguments provided in this paper, such as how this particle interacts with negative particles, showed that it is more likely to be an experiential (aspectual) marker, and how there was insufficient proof to claim that it is an evidential marker.

The particle ke51, possibly borrowed from Mandarin, was also proposed to be an evidential marker. I argued that it should not be considered as such due to syntactic reasons, among others.

Therefore, I support the argument that pat33 and ke51 are experiential markers.

Verbal reduplication seems to be very productive in SH. Various aspectual interpretations, depending on verb and context, seem to be accessible for this structure. At this point, it seems as though verbs (depending on the context provided) fall into two possible categories. These categories are dependent on how extended these actions are in time. Double reduplication is also possible in SH.
5. LIMITATIONS & RESEARCH OPPORTUNITIES

The participant pool of this study was limited. Given that there seems to be a large amount of variation within this language variety, more data from a larger number of participants would be preferable for any study in SH.

While some aspectual particles and structures are commonly used, such as liau51 and verbal reduplication, other particles, such as pat33 and the preverbal u11, are rarer. The amount of audio data, in monologue and dialogue forms, collected for this study was approximately 1 hr 10 mins. Due to the lack of data, it is almost certain that there are alternative aspectual uses of certain particles and other aspectual particles that were not discovered in this study. For example, Chappell (1989) reported that u11 has a perfective usage. Similarly, the bèq particle, identified by Bodman as a prospective marker in example (32), was not found in my data and therefore not discussed. Also, Zhou & Zhou (2000) reported an alternative durative marker, -tiau. These were not found in my data.

There are several avenues for further research on this language variety. Aside from other areas of the language’s grammar, more research can be conducted on its aspectual system. SH’s verbal reduplication system shows much promise. Also, due to several overlapping aspectual strategies, one might ask what the differences between these strategies are. More research on pat33 and ke51 should also be conducted. Other possible areas of research include differences between SH and other variants of Hokkien, particularly Taiwanese.
6. CONCLUDING REMARKS

While this study is not the first of its kind, it has allowed a more in-depth look into the aspectual system of Singapore Hokkien. Several studies and their arguments on the language variety were reviewed. This paper has also highlighted other possible aspectual particles in the language variety. Like many languages, it is shown that Singapore Hokkien is incredibly discourse-driven and any further studies should take this into account.

There is much more to discover about Singapore Hokkien. In the face of its decreasing usage and increasing importance in the medical industry, more research should be conducted as soon as possible before this language variety is completely lost.
**ABBREVIATIONS**

<table>
<thead>
<tr>
<th>1SG</th>
<th>First Person Singular</th>
<th>L</th>
<th>Low Register</th>
</tr>
</thead>
<tbody>
<tr>
<td>2SG</td>
<td>Second Person Singular</td>
<td>LOC</td>
<td>Locative</td>
</tr>
<tr>
<td>3SG</td>
<td>Third Person Singular</td>
<td>MOD</td>
<td>Modifier</td>
</tr>
<tr>
<td>1PL</td>
<td>First Person Plural</td>
<td>NEG</td>
<td>Negative</td>
</tr>
<tr>
<td>3PL</td>
<td>Third Person Plural</td>
<td>PART</td>
<td>Particle</td>
</tr>
<tr>
<td>AUX</td>
<td>Auxiliary</td>
<td>PERF</td>
<td>Perfective</td>
</tr>
<tr>
<td>CLF</td>
<td>Classifier</td>
<td>POSS</td>
<td>Possessive</td>
</tr>
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<td>Completive</td>
<td>PROG</td>
<td>Progressive</td>
</tr>
<tr>
<td>COS</td>
<td>Change of State</td>
<td>PREP</td>
<td>Preposition</td>
</tr>
<tr>
<td>EVD</td>
<td>Evidential</td>
<td>PRF</td>
<td>Perfect</td>
</tr>
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<td>EXP</td>
<td>Experiential</td>
<td>PRSP</td>
<td>Prospective</td>
</tr>
<tr>
<td>HAB</td>
<td>Habitual</td>
<td>QNS</td>
<td>Question Particle</td>
</tr>
<tr>
<td>ITR</td>
<td>Iterative</td>
<td>REDUP</td>
<td>Reduplication</td>
</tr>
</tbody>
</table>
REFERENCES


