

## Temporal information in sentence-final particles: *Tse* and *keh* in Modern Shanghai Wu

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### Abstract

This paper scrutinizes the claim that modern Shanghainese has sentence-final particles *tse* and *keh* that have tense-marking functions. We review works by Qian (2006; 2009), Chao (1926) and Li, Thompson & Thompson (1982) and analyse Shanghainese missionary texts on the use of these SFPs. Through a functional-discoursal investigation, we identify the IN-cluster use and the END-cluster use of *tse*. We take the temporal marking function of *tse* as a consequence of its discourse function, which introduces a current reference time in the discourse. On the other hand, we take *keh* as an assertion particle, whose occasional sense of recent past comes from its confirmation of a completed event.

*Keywords: tense, aspect, sentence-final particle, Shanghainese, missionary linguistics*

### 1. Modern Shanghai Wu

Modern Shanghai Wu is a language that used to be spoken in the urban region of Shanghai and its surrounding suburban areas as recorded in written works by missionaries in the years from early 1840s to early 1950s. The language is standardly referred to as Shanghai vernacular (上海土白) in those earlier works. In contrast, contemporary Shanghai Wu denotes the Shanghai Wu used since the 1950s and is subdivided into three variants: the old (老派), the middle (中派), and the new (新派). The old variant overlaps a lot with modern Shanghai Wu and is used in the suburban areas with a declining number of speakers. The middle variant is now commonly referred to as the standard variant, used by the middle-aged and senior people in the city. The new variant, mostly used by young people in the urban area, has some distinct phonetic and lexical features but overlaps a lot with the middle variant and is often code-mixed with Mandarin.<sup>1</sup>

Modern Shanghai Wu turns out to be the most recorded in published form, accumulating a rich archive of biblical writings and translations, textbooks and grammar books, magazines and informal releases such as church pamphlets. Writings in modern Shanghai Wu far exceed writings published in any other modern non-Mandarin Chinese languages. However, since the mid-1950s, publishing in non-Mandarin Chinese or in non-character graphic forms other than the officially recognized romanized Mandarin system (Pinyin) was forbidden by the Chinese government in the form of statutory regulations. As a result, Shanghai Wu writings have not been in circulation in written form for a long time, with

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the recent exceptions that *Xinmin Evening Paper* launched a special weekly column in the language around 2005 called “Shanghai Language” (上海閒話). Modern Shanghai Wu scripts have become a rarity, especially because the books in the library room which used to house a copy of each and every missionary Shanghainese publication in Shanghai were burnt in the Cultural Revolution. Fortunately, due to recent efforts in digitization of rare library collections in overseas libraries, it is now possible for interested linguists to study these works first-hand, so as to learn more about the grammatical system of modern Shanghai Wu and contrast it with its contemporary variants.

## 2. Encoding time in modern Shanghai Wu: some recent claims

It has been argued by Qian (2004; 2006; 2009; 2010; 2011; 2014) and Zhu, Cao & Qian (2017) that while Mandarin does not have tense markers, nor does contemporary Shanghai Wu, modern Shanghai Wu, on the other hand, does have markers for tense, which can be sentence-final particles (henceforth SFP). One of them is *tse* 哉, which expresses time current to the time of speaking. Another one is *keh* 個, which marks recent past.

Qian (2006) observes that *tse* is used to indicate the state of an event or action concurrent with the temporal information denoted by the time adverbial, as shown in (1). However, in the absence of such an adverbial, *tse* points to present by default, as shown in (2)-(3). Qian (2006) does not entertain the possibility of a sentence inheriting temporal information from the context, which would have affected his claim presented here.<sup>2</sup>

- (1) 伊話上禮拜寫個哉。

yi wo zong lipa xia keh tse  
 3SG say last week write PST CUR  
 ‘S/He said it had been written last week.’  
 (Macgowan 1862: 52, cited in Qian 2006: 948)

- (2) 自來水龍頭壞脫者。<sup>3</sup>

zylesy lungdeu wa-theh tse  
 running.water tap break-COMPL CUR  
 ‘The water tap is broken.’ (Obata 1908: 散語 70, cited in Qian 2016: 39)

- (3) 表停者，勿曉得有幾點鐘者。

piao ding tse, veh xioateh yeh ji-ti tsung tse  
 watch stop CUR, not know have how-CLF hour CUR  
 ‘The watch has stopped. Don’t know what hour it is.’  
 (Obata 1908: 問答 34, cited in Qian 2016: 39)

<sup>2</sup> Shanghainese pinyin and glossing ours. See the appendix for the correspondence between the Shanghainese romanization adopted here and the IPA. Tones in Shanghainese are not represented here, as they tend to vary in actual phrases due to tone sandhi. All abbreviations in the glosses follow the Leipzig Glossing Rules with the addition of AM ‘assertion marker’, CEP ‘cause and effect particle’, CM ‘complement marker’, CP ‘compound pronoun’, CUR ‘current state marker’, HON ‘honorific’, MOD ‘modifier marker’, PM ‘pause marker’, RQM ‘rhetorical question marker’, SFP ‘sentence-final particle’ and SP ‘status-marking particle’.

<sup>3</sup> 哉 and 者 are used interchangeably when used as an SFP.

According to Qian (2006), *keh* denotes recent past, as shown in (4)-(7).

- (4) 儂是幾時搬到地頭來個?  
 nung zy jizy poe-toa diehdeu le keh  
 2SG be when move-to here come PST  
 ‘When did you move to here?’ (Obata 1908: 問答 53, cited in Qian 2016: 39)
- (5) 伊是幾時轉來個?  
 yi zy jizy tsoele keh  
 3SG be when return PST  
 ‘When did s/he come back?’ (Obata 1908: 問答 59, cited in Qian 2016: 40)
- (6) 我佢一直替那一家人家交易,  
 nguni yehzeh dah na yeh-ka ningka jioani,  
 1PL always with 2PL one-CLF household trade  
 勿到別人家去個。  
 veh-toa biehningka qi-keh  
 not-go others go-PST  
 ‘We always trade with your firm alone and never have dealings with others.’  
 (Obata 1908: 散語 49, cited in Qian 2016: 40)
- (7) 公債股票咯甚賣買從前都做個,  
 kungtsa kuphio gesang mama zungzi ze tsu keh,  
 bonds shares like.that buy-sell before all do PST,  
 現在勿做者。  
 yize voh tsu tse  
 now not do CUR  
 ‘We/I used to buy and sell government bonds and shares, among others. Now we don’t do it anymore.’ (Obata 1908: 散語 72, cited in Qian 2016: 40)

Qian takes a sentence with a sentence-final tense marker to be a tensed sentence, while he takes one containing an aspectual marker to be an aspectual sentence. According to him, tense and aspectual markers occurring in one and the same sentence in modern Shanghainese can take the form of a tense-aspectual compound at the end of the sentence (Qian 2006; 2009; 2010), as shown in (8)-(10).

- (8) 耶穌看見伊拉個相信啫, 對癱子話:  
 Yasu khouji yila-heh xiangxing loa, te thetsy wo  
 Jesus see 3PL-POSS belief CEP to paralytic say  
 “兒子呀, 放心, 儂個罪饒赦哉” ... ..  
 nitsy ah, fongxing, nung-heh ze nioaseh tse  
 son PM be.at.ease 2SG-POSS sin forgive CUR

話儂個罪饒赦拉哉... ..。

wo nung-heh ze nioaseh la tse  
say 2SG-POSS sin forgive COMPL CUR

‘[and when] Jesus saw their faith, he said to the paralytic, “Take heart, my son; your sins are hereby forgiven.” ... to say that your sin has been forgiven’  
(American Presbyterian Mission Press 1895: Matthew 9:2-5, cited in Qian 2006: 950)<sup>4</sup>

- (9) 到之末，看見房子空拉，

toa-tsy meh, khoeji vongtsy khung la,  
arrive-PRF PM see house vacant DUR

打掃啫裝潢拉哉。

tangsoa loa tsongwong la tse  
sweep and decorate COMPL CUR

‘And when he returned, he found it empty, swept, and put in order.’ (American Presbyterian Mission Press 1895: Matthew 12:44, cited in Qian 2006: 950)<sup>5</sup>

- (10) 伊個人腳那能蹺拉個？

yi-geh-ning jiah naneng qioa la keh  
3SG-that-person foot why lame DUR PST

毛病呢還是生成功拉個？

moabing neh hezy sangzengkung la keh  
illness PM or born.with DUR PST

‘Why was that person walking with difficulties? Was that an accident or was it inborn?’ (Obata 1908: 散語 Chapter 7, cited in Qian 2006: 956)

In addition, a sentence may contain temporal adverbials such as time-denoting nouns or aspect-denoting adverbs. (11) and (12) are the mixed cases.

- (11) 儂個令堂也已經交關難過拉哉。

nung-heh lingdong ha yijing jioakue neku la tse  
2SG-POSS mother.HON also already very sad DUR CUR

‘Your respected mother has already been very sad.’  
(Bourgeois 1939: 72, cited in Qian 2009: 64)

<sup>4</sup> While Qian (2006: 950) refers to the American Bible Society (1923) when citing (8) [his example (25)], he only cites the first part of the example, which does not contain 拉 *la*, i.e. the underlined part (but *la* did appear in his example). Our view is that the perfective marker 拉 *la* should not appear in the first part because it is a speech act that takes place on the scene. On the other hand, it makes sense for 拉 *la* to appear in the second part of the example because it is an indirect speech referring to a completed event.

<sup>5</sup> Note that Qian (2006: 950) mistakes it (his example (26)) for a sentence from Chapter 13. Qian’s literal translation is 到了以後，看見房子空著，就打掃和裝潢好了 (‘He arrived and found the house vacant, so he swept and put it in order’), which is very different from ours.

- (12) 現在天熱哉，要用紗祭披。

yize thi nieh tse, yoa yung sojiphi  
 now weather hot CUR should use thin.chasuble  
 ‘Now it is getting hot. You should put on a thin chasuble.’  
 (Bourgeois 1939: 81, cited in Qian 2009: 193)

According to Qian (2006; 2009), tense/aspectual markers, especially tense-aspectual compounds, had gradually given way to the more frequent use of time adverbials as Shanghai Wu developed from its modern version to its present contemporary version.

### 3. Two related studies

Qian relates his characterization of Shanghainese tense to two predecessors: Chao (1926) and Li, Thompson & Thompson (1982). Chao (1926), while comparing Peking Mandarin with the Wu languages of Suzhou and Changzhou, takes the Mandarin SFP *le* (了/勒/啦/喇) to express, not the past meaning, but the present or future in two specific senses. First, it expresses inchoative meaning in indicating a new happening or registering a new realization. Second, it expresses perfect meaning, on the completion of an event or action. Chao remarks that sometimes an action can be viewed either at its initiated stage or at its stage of completion. So the inchoative reading and the perfect reading could be related. The equivalent of the Mandarin *le* in Suzhou Wu is *tse*, which is similar to *tse* in modern Shanghainese. Chao also mentions another use of *tse*, which he takes to be narrative past, as shown by (13) - (15).

#### Suzhou Wu<sup>6</sup>

- (13) 商量得嘸不結果，大家就轉氣哉。

saonlian teh mpeh cihkou, daka zeu tsoechi tse  
 discuss COMP not.have result everyone therefore return PST  
 ‘Not reaching anything in the discussion, we all went back home.’  
 (Chao 1926: 881; Chao 1992: 93)

- (14) 一歇歇俚又出去哉。

ihshihshih li yeu tshchchi tse  
 a.short.while SP again go.out PST  
 ‘After a short while, Ø went out again.’ (Chao 1926: 881; Chao 1992: 93)

- (15) 後來我就氣暈哉。

gheule ngou zeu chi khuen tse  
 later 1SG then go sleep PST  
 ‘Later, I went to bed.’ (Chao 1926: 881; Chao 1992: 93)

Chao takes the above three examples to be similar to the French *passé défini* (also called *passé simple*), as shown in (16). He further observes that in sentences where the French *imparfait* (as shown by (17)) should be used instead of *passé défini*, the equivalent sentences in Chinese should not take on *le* (for Mandarin) or *tse* (for Suzhou Wu). As far as we can see, (13)–(15) saliently point to past rather than present. In (13), the first clause

<sup>6</sup> The romanized pinyin system used to represent Suzhou Wu is promulgated by the Wu Language Association: <http://wu-chinese.com/romanization/suzhou.html>.

provides the contextual information related to a past situation, and both (14) and (15) contain aspect-denoting adverbs which point to past situations. If a sentence in French is in *imparfait*, the aspectual feature is imperfective, and a sentence in *passé défini* should carry the perfective aspectual feature. The relevant examples are given as (16) and (17). It can be inferred from the above discussion that sentences carrying *le* or *tse* carry perfective aspectual meaning.

(16) **French (*passé simple*)**

Je remplaç-ai le comédien malade  
 1SG replace-PST.1SG the actor sick  
 ‘I replaced the sick actor.’ (Heminway 2016: 131)

(17) **French (*imparfait*)**

Je sav-ais qu’il avait raison  
 1SG know-IPFV.1SG that-he have-IPFV.3SG reason  
 ‘I knew he was right.’ (Heminway 2016: 67)

As to the equivalent of *keh* in Suzhou Wu, represented here as *kah*, Chao (1926:45) takes it to indicate past and thinks that sentences containing it would be rendered into English in simple past. He also observes a similarity in temporal meaning between *kah* and *laizhe* (來著) in Beijing Mandarin.

**Suzhou Wu**

(18) 我今朝看見王先生格。

ngou cingtsau khoecie Waon siesan kah  
 1SG today see Wang mister PST  
 ‘I saw Mr. Wang today.’ (Chao 1926: 909; Chao 1992: 106)

**Beijing Mandarin**

(19) 我今天看見王先生來著。

wo jintian kanjian Wang xiansheng laizhe  
 1SG today see Wang mister PST  
 ‘I saw Mr. Wang today.’ (Chao 1926: 909; Chao 1992: 106)

Li, Thompson & Thompson (1982) provide a functional analysis of the Mandarin SFP *le*, i.e. *le<sub>2</sub>*,<sup>7</sup> whose usage is comparable to the Shanghainese *tse*, as pointed out by Qian (2006). According to Li, Thompson & Thompson (1982: 22), *le<sub>2</sub>* is to signal a ‘currently relevant state’ (CRS), indicating that a state of affairs has special current relevance to some particular reference time which, in the unmarked case, is the conversational setting in which the speaker and hearer are participating as interlocutors. However, *le<sub>2</sub>* will not be used in the following contexts: in talking about simple general truths, on-going states, past and future events, and commands and requests, where no currently relevant state is involved. Nevertheless, they note one exception: *le<sub>2</sub>* can be found in written narrative about past eventuality, where it serves to bring a state of affairs into the time at which the narrative is taking place. According to them, such a use is entirely analogous to its use in conversation except that the reference point is the narrative time rather than the speech

<sup>7</sup> *le<sub>1</sub>* is generally characterized as a verb suffix.

time. In terms of data observation on past narrative, Chao (1926) and Li, Thompson & Thompson (1982) hold similar views.

#### 4. Conceptual scrutiny

Qian (2006; 2009; 2014) can be said to have taken over the views of Chao (1926) and Li, Thompson & Thompson (1982) in their analyses of Chinese languages other than Shanghainese and goes a step further in claiming that in modern Shanghai Wu, *tse* and *keh* are tense markers. However, several theoretical issues need to be addressed before claims about Shanghainese can make sense against the current literature on tense and temporality.

Klein (2009) discusses six types of devices that are regularly used to encode time in language: (a) tense, (b) aspect, (c) Aktionsart, (d) temporal adverbials, (e) temporal particles, and (f) discourse principles. Chinese Han languages are known to make no use of (a) but use all of the rest. Some SFPs are likely to be examples of (e), if they have time-encoding properties. But Klein (2009) only mentions particles in Mandarin “which can [immediately] follow or [in one case] precede the verb”, i.e. verb-endings *le*, *guo*, *zhe* and the pre-verbal *zai*, where the *le* is the verb-suffix *le*<sub>1</sub>. Chao (1926) is a study of auxiliary words as realizations of mood and modality.<sup>8</sup> Auxiliary words in traditional Chinese grammar are functional words or words with no conceptual meaning, which can be either verb suffixes or SFPs, or pre-verbal functional words. Chao (1926) takes some uses of *tse* and *keh* to be clearly time-indicating. However, although translations to English and French with equivalent tense and aspectual properties are suggested, no theoretical characterization is given in Chao’s paper. Li, Thompson & Thompson (1982) try to show that *le*<sub>2</sub> as an attitudinal SFP in Mandarin performs many of the functions of the perfect aspect. It can be inferred that the authors take *le*<sub>2</sub> to encode aspectual meaning. However, Qian (2006) endeavours to show that *tse* as an equivalent of *le*<sub>2</sub> in modern Shanghainese is a tense marker rather than an aspect marker, as it can co-occur with an aspect marker or aspect-denoting adverbs. Moreover, according to him, when a sentence with *tse* does not contain any aspect markers, *tse* acts as the indicator of tense, while aspectual meaning should be gleaned from the context or from relevant adverbs (Qian 2006: 947).

If *tse* is characterized as a marker for present tense, the issue is that it is not an obligatory marker for present, nor does it only encode present meaning, as it can also be used in past narrative sentences. If it is taken as indicating current state relative to another provided reference time, then it cannot be absolute tense, contrary to Qian’s claims, as absolute tense must provide a clear index on the time axis. The fact that *tse* can co-occur with *keh* as shown in (1) also indicates that it is inappropriate to treat *tse* as a marker of present, since it would result in time conflicts with *keh*, which is characterized as a marker of recent past tense in Qian’s works. If, on the other hand, *tse* is a relative tense marker denoting current state, then it is aspectual in nature, as relative tense is realized through aspectual features. If *tse* is to be treated as an aspect-marker of current state, in contrast with prior or posterior temporal meaning, then it is still hard to explain why it co-occurs with other aspectual markers, as shown in (8) and (9), as the resulting aspectual compound will form two unrelated aspectual meanings. In this connection, the parallelism drawn by

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<sup>8</sup> Chao (1926) uses a more traditional notion in Chinese grammar called *kouqi* (口氣) which we propose to translate into *utterance tone*.

Qian (2006) between what he called the tense-aspect compound (or rather, aspect-tense compound) and the coalesced tense/aspect verb suffix in English is not justifiable. In the case of (8) and (9), an SFP is adjacent to an element which is either a verb-suffixing particle or another SFP, whereas in English, the tense/aspect ending is a single, portmanteau morph with a regular conjugation paradigm. Little similarity exists between the case in Shanghainese and that in English. A similar line of reasoning can be provided to cast doubt on treating *keh* as an absolute tense marker of recent past.

Li, Thompson & Thompson (1982) propose to treat *le<sub>2</sub>* as expressing perfect meaning, i.e. breaking news, furnishing information of present relevance, and asserting a current state. If the Shanghainese *tse* is identical to *tse* in Suzhou Wu and to *le<sub>2</sub>* in Beijing Mandarin, which needs to be established through data examination, this characterization does not give rise to conceptual disharmony. Yet it is necessary to examine the role of *tse* in the overall picture of tense and aspect marking in modern Shanghainese. On the other hand, the function of *keh* seems to be partially assumed by *le<sub>2</sub>* and marginally taken by *laizhe* as in (19).

Turning now to the use of *tse* in written narrative discourse of past happenings, its equivalent in Suzhou Wu is likened to *passé défini* by Chao (1926), whose meaning is distinct from *imparfait*. Its equivalent in English would be the historical present, or dramatic present, or narrative present, so should be distinct from the simple past or past progressive. This also relates to Chao's characterization of *kah* in Suzhou Wu, which he thinks expresses a meaning like the simple past in English. So *tse* and *kah* have distinct meanings and distributions in Suzhou Wu. The function of *le<sub>2</sub>* in past narrative, according to Li, Thompson & Thompson (1982), is that it brings a state of affairs into the narrated time. In other words, it highlights the time at which the narrative is taking place. All these remarks are revealing, but they are presented in the works of Chao (1926) and Li et al. (1982) with single sentences, and, in fact, about languages other than modern Shanghainese.

Qian (2006; 2009; 2010; 2014) does provide examples in modern Shanghai Wu, but they do not show a complete picture of the uses of *tse* and *keh*, because his examples are mostly single sentences taken from textbooks, which cannot lend us a good view of *tse* in narrative past, since it is not possible to know from single-sentence examples under what conditions each sentence in narrative past discourse needs to take on *tse*. Textbook examples of *keh* look very neat, often arranged to contrast with sentences containing other kinds of temporal meaning, but it is not clear to what extent *keh* is present as an SFP in discourse. Studying discourse data will not only help us solve these puzzles but will also reveal new facts. We will treat *tse* first in the next section and will get to *keh* in Section 6.

### 5. *Tse* in missionary texts

Missionary Shanghainese works have been consulted in order to obtain first-hand information on the use and distribution of SFPs. The scripts consulted are listed in the following table with *tse*'s occurrences.<sup>9</sup>

<sup>9</sup> The bibliographical details of works listed in Table 1 are documented in Shi (2017), with the exception of item 5, which is given in the references as Ali Paipai Feng Dao Ji (1921). Our

Table 1: *tse* in missionary texts

	File /year	Sentence (S)	Character	SFP tse 者	SFP tse 哉	tse/S Ratio	IN	END
1	亨利實錄 1856	1351	13455	72	0	0.053	45	24
2	趁早預備 1868	158	1302	0	4	0.025	4	0
3	剛担丟士 1868	221	1815	0	2	0.009	2	0
4	審判日腳 1868	92	794	0	5	0.054	4	1
5	阿里排排逢盜記 1921	2318	23515	166	1	0.072	167	16
6	十條誠總意問答 1899	238	2488	0	2	0.008	1	1
7	聖經史記 1892	6397	54226	187	32	0.034	198	24
8	耶穌言行傳 1894	5248	37726	0	222	0.042	207	15
9	使徒言行傳 1890	1882	15663	0	59	0.031	53	6
10	路加傳福音書 1886	4591	39289	0	182	0.040	174	8
11	馬太傳福音書 1895	4292	36573	0	168	0.039	156	12
	Total	26788	226846	425	677	0.041	1011	107

Scanned copies of the scripts in Table 1 were acquired from libraries or the internet, which we input into Word so that they became searchable documents. Searching *tse* either in the form of 哉 or as 者 in these files returned initial figures, from which we deleted occurrences of *tse* that are not sentence-final. Non-SFP *tse* involves the use of 者 ‘person’ as another lexeme. *Tse* is not used as a verb suffix, even though it may happen to appear after a non-transitive verb at the end of a sentence.

### 5.1 Some general observations about *tse*

Judging by the ratio between the number of *tse* occurring in a script and the number of sentences contained therein (the *tse*/S ratio), occurrence of *tse* in most scripts is conspicuous, even though it cannot be described as frequent. Although there are variations from script to script, the longer the script, the more similar the *tse*/S ratios become. This conspicuous use of *tse* in modern Shanghaiese contrasts sharply with its zero return from a search for the SFP use of 哉 and 者 in a database containing contemporary Shanghaiese writings, which we are collecting from the Shanghaiese Page (上海閒話) published weekly by Xinmin Evening Paper (新民晚報) and Shanghaiese blog writings in Douban Net (豆瓣網). This result conforms to the judgment of native speakers of contemporary Shanghai Wu, who tend to think that *tse* is not in use in the middle and new variants of the contemporary version, although it is still in use in the old variant in some areas. On the other hand, searching in the missionary Shanghaiese database for *le* (了) only yielded one return, which is a verb suffix, not an SFP.<sup>10</sup> But searching for *le* (了) in our database of contemporary Shanghai Wu returns numerous occurrences, both as verb suffixes and as SFPs. These findings provide support to the feeling shared by most language users of Shanghaiese that its contemporary

references also include items 1 and 7 in Table 1 as we will discuss them in detail. The searchable database we constructed out of the digitized image files accounts for more than fifty percent of known Shanghaiese missionary scripts.

<sup>10</sup>The example is “後首亞當又養了一个兒子”, from 《聖經史記》 Shengjing Shiji (Old Testament History).

version has lost much of its linguistic uniqueness due to the infiltration of Mandarin as the standard Han language.

### 5.2 Two uses of the SFP *tse*

We discuss the use of *tse* with the findings from 亨利實錄 *Hengli shilu* (The history of Little Henry and his bearer) as a sample, generalizing to the other texts where applicable. From the text, 72 occurrences of the sentence-final *tse* written as 者 are found. No occurrence of *tse* written as 哉 is found. A sample paragraph and its gloss are given as (20):

- (20) a. 有一个小囡,  
 yeu yeh-geh xioanoe  
 there.be one-CLF child  
 ‘There was a child.’
- b. 名頭叫亨利,  
 mingdeu jioa Hengli  
 name call Henry  
 ‘His name is called Henry.’
- c. 養拉亭南怕戶蕩,  
 yang la Dingnoepho wudong  
 be.born at Dinapore place  
 ‘He was born at the town of Dinapore.’
- d. 就是印度國裏。  
 zieuzy Yingdu koh li  
 that.is India country in  
 ‘That is in the country of India.’
- e. 伊个爺, 是一个英咭喇个武官,  
 yi-heh ya, zy yeh-geh Yingjili-heh wukuoe  
 3SG-POSS dad be one-CLF England-POSS military.officer  
 ‘His dad was an English military officer.’
- f. 亨利養得勿多幾時,  
 Hengli yang teh voh-tu-jizy  
 Henry born COMP not-much-time  
 ‘Not long after Henry’s birth.’
- g. 伊个爺去攻打炮台畔,  
 yi-heh ya, qi kungtang phoade loa  
 3SG-POSS dad go attack fort CEP  
 ‘As his father was sent to attack a fort,’

- h. 撥拉對敵殺脫个,  
 pehla tedieh sah-theh keh  
 pass enemy kill-COMPL PST  
 ‘was killed by the enemy.’
- i. 亨利勿曾滿歲末,  
 Hengli vohzeng moe se meh  
 Henry not.yet reach year PM  
 ‘When Henry was not yet one year old.’
- j. 伊个娘又死者,  
 yi-heh niang yeu xi tse  
 3SG-POSS mother also die CUR  
 ‘his mother also died.’
- k. 蓋啐亨利拉小个辰光,  
 kehloa Hengli la xioa-heh zengkuong  
 that.is.why Henry at little-POSS time  
 ‘That’s why when Henry was little.’
- l. 就無得子爺娘啐,  
 zieu meh-teh-tsy yaniang loa  
 therefore not-have-PFV father.mother CEP  
 ‘so he lost both his father and his mother.’
- m. 最苦惱只那。  
 tse khunoa tseh-na  
 most miserable CUR-SFP  
 ‘He was very miserable.’ (Hengli Shilu 1856)

*Tse* in (20j) appears in the middle of a paragraph, presenting a situation or a state, which may be initiated earlier but has current relevance to the narration, followed by a cohesive word *kehloa* (蓋啐) ‘that’s why’, which introduces discourse continuity. So current relevance is found to be the temporal contribution *tse* makes. To be more specific, we propose that *tse* as an SFP not only presents a proposition as a situation or the beginning of a situation when involving an inchoative verb, but also introduces a reference time. This latter function is similar to a time adverbial or a subordinate clause, which can also introduce reference time,<sup>11</sup> irrespective of whether there are other expressions that introduce reference time in the same sentence or whether the reference time can be inferred from the context, as is common in Chinese.

Two other discourse segments are presented below as (21) and (22). In (21), there are three occurrences of *tse*: (21f), (21h), and (21j). (21f) with its use of *tse* introduces a new situation which leads to a consequence described by (21g)-(21h), while (21h) with its own

<sup>11</sup> Cf. Hofmann (Hofmann 1993, Chapter 7).

use of *tse* serves to present the result. (21j) with the third *tse* is a further result in response to a situation introduced by (21i). (22h) serves the same function as (21i).

- (21) a. 亨利望進來,  
 Hengli mang jingle  
 Henry look inside  
 ‘Henry looked in.’
- b. 看見子畫睇要想走進去,  
 khoeji-tsy wo loa yoa-xiang tseu jingqi  
 see-COMPL painting CEP want-wish go inside  
 ‘He saw the picture and wished to enter the room.’
- c. 但是勿搭蒲師一淘末,  
 dezy veh tah Busy yehdoa meh  
 but without with Boosy together PM  
 ‘but without the company of his carer Boosy,’
- d. 勿敢進去,  
 veh koe jingqi  
 not dare enter  
 ‘[he] did not dare to go in’
- e. 歇子一歇,  
 xieh-tsy yehxieh  
 pause-COMPL a.while  
 ‘moments later’
- f. 搭子姑娘兩個熟子點者,  
 tahtsy kuniang liang-keh zoh-tsy ti tse  
 with lady two-CLF familiar-COMPL bit CUR  
 ‘getting more familiar with the lady’
- g. 就是蒲師拉門外頭,  
 zieuzy Busy la meng-ngadeu  
 even.though Boosy at door-outside  
 ‘even though Boosy is not with him in the room’
- h. 伊也敢進去白相者。  
 yi ha koe jingqi behxiang tse  
 1SG also dare enter play CUR  
 ‘he also dared to go in and play.’
- i. 後首末一眼勿怕睇,  
 heuseu meh yehnge veh pho loa  
 later PM not.least not afraid CEP  
 ‘Later, he was not afraid at all.’

- j. 常常走進去者。  
 zangzang tseu jingqi tse  
 often go enter CUR  
 ‘[He] would often go into the [lady’s] room.’
- k. 搭之姑娘兩個,  
 tahtsy kuniang liang-keh  
 with lady two-CL  
 ‘together with the lady,’
- l. 親熱啐快活得極。  
 qingnieh loa khuaweh-teh djieh  
 intimate CEP happy-CM extreme  
 ‘He never was more happy than when he was with this lady.’  
 (Hengli Shilu 1856)
- (22) a. 難末對亨利話,  
 nemeh te Hengli wo  
 therefore to Henry say  
 ‘Therefore, [she] said to Henry.’
- b. 第个神勿能殼救自家,  
 dieh-keh zeng veh nengkeu jieu zyka  
 this-CL god not can save self  
 ‘This god cannot save himself.’
- c. 那能救別人呢,  
 naneng jieu biehning neh  
 how save other Q  
 ‘How can he save others?’
- d. 叫伊勿能殼响,  
 jioa yi veh nengkeu xiang  
 call him not able.to talk  
 ‘If you talk to him, he is unable to respond.’
- e. 又勿能殼動。  
 yeu veh nengkeu dung  
 also not able.to move  
 ‘Nor can he take action.’
- f. 伊歇辰光,  
 yi-xieh zengkuong  
 that-CL time  
 ‘During that period of time,’

- g. 亨利聽得子姑娘个講究末,  
 Hengli thing-tehtsy kuniang-keh kongjieu meh  
 Henry hear-COMPL lady-POSS argument PM  
 ‘Henry listened to the lady’s arguments,’
- h. 救相信子第个道理者。  
 zieu xiangxing tsy dieh-keh doali tse  
 so believe COMPL this-CL doctrine CUR  
 ‘so he was convinced by her arguments.’ (Hengli Shilu 1856)

We went through all the 1100-odd sentences containing *tse* from the eleven works listed in Table 1 and found that they basically fall into two types, as have been exemplified by the discourse segments (20), (21) and (22): those that present a situation with immediate follow-ups, and those that appear at the end of a concluding sentence.

### 5.3 Sentence cluster and the discourse function of *tse*

To sharpen the findings reported in 5.2, we propose to use a descriptive concept, sentence cluster (句群), for our current analysis. Sentence cluster, as proposed by Wu & Tian (2000), can be defined as (23):

- (23) Sentence cluster: two or more sentences forming a group of sentences that are related to one another with cohesive devices and coherent content structure.

A sentence cluster may contain complex and compound sentences as its members. In addition to using logical connectives and sentential adverbials as cohesive devices, it also makes use of SFPs, discourse deixis and implicit reasoning to establish coherence. Within a sentence cluster, we can observe rhetorical relations as expounded in Rhetorical Structure Theory (RST) (Mann & Thompson 1988). We can also observe structural properties that are often identified in Chinese discourse, such as topic chain, paratactic construction, and multiple use of zero anaphora across discourse. All these are devices that can tie a sentence cluster together.

We can now conclude that *tse* has two uses: first, it is used within a sentence cluster to bring out a situation, to be followed by some closely related consequential extension. Second, it is used at the end of a sentence cluster to present a conclusion, a summary remark, or an end to a stretch of description.

In Table 1, the IN column records the occurrences of *tse* within a sentence cluster, while the END column records the occurrences of *tse* at the end of a cluster. It can be observed that the IN-cluster use far exceeds the END-cluster use. The IN-cluster use of *tse* mainly marks a change of state. The END-cluster use indicates the speaker’s total contribution up to the point, especially when nothing follows the cluster.

Overall, both uses of *tse* contribute to the discourse organization by introducing a reference time which is concurrent to the speech time. The speech time of a sentence is by default set to be present, but in a stretch of discourse presented in narrative past the speech time can also be shifted to past in order to achieve a vivid narrative effect: the past portrayed as present, or historical present. Thus, *tse* can also relate an event to the

concurrent time of speech which is set in the past. It can be observed that the SFP *tse* only appears in some sentences, not in many others, as not every sentence needs to emphasize the current time.

Although we think *tse* resembles *le<sub>2</sub>* in terms of some discourse functions, the two expressions are by no means equivalent, as they each belong to a different language. A full understanding of the use of *tse* is dependent on the description of the other SFPs in modern Shanghainese, such as the alleged recent past marker *keh*, among others. The findings on the use of *tse* cover both narrative use and conversational use, as they both occur in the scripts we consulted. Biblical texts appear to be narrative. Yet they contain many cases of direct speech. In both narrative and conversational texts, the temporal contribution of *tse* is constant, which is the introduction of current time, leaving the exact choice of tense information to other factors in the discourse.

## 6. *Keh* in missionary texts

### 6.1 The multiple functions of SFPs

The above study on *tse* reveals a common feature of SFPs, that they often involve several senses or functions. In an earlier paper, Qian (1996) gives the following description of *leh* 了 in contemporary Shanghai Wu, noting that its older form is *tse* 哉:

(24) *leh* 了 (old form *tse* 哉)<sup>12</sup>

- (a) narrating past event
- (b) narrating the process of an event
- (c) narrating future event
- (d) stating result of a hypothesis or condition
- (e) stating result of a reasoning
- (f) stating result in contrast to the usual expectation
- (g) clarifying
- (h) persuading, consulting
- (i) reporting current state

While *leh* in contemporary Shanghai Wu may no longer be the same as *tse* in modern Shanghai Wu,<sup>13</sup> it should also be acknowledged that discourse analyses conducted by different researchers may split out different types of discourse meaning, depending on how much one takes the contextual information into consideration. Since we only wish to give candid data description in this paper, we will not explore the possibility of rationalizing the strands of meaning of an SFP within a given theoretical framework. However, data description may tell us to what extent each sense of an SFP is present in discourse. In the case of *tse*, we have shown through the discussion above that its temporal meaning is always available, which is accompanied by its other, IN-cluster or END-cluster discursal functions.

<sup>12</sup> 了 [舊：哉]：(1) 敘事過去 (2) 敘事過程 (3) 敘事將來 (4) 假設、條件的結果 (5) 直推的結果 (6) 轉折的結果 (7) 申明，表白 (8) 勸聽，商量 (9) 現狀 (Qian 1996).

<sup>13</sup> As one evidence, Qian (2006) has argued that the temporal meaning of *tse* has been weakened, if not completely lost, in contemporary Shanghai Wu.

## 6.2 The senses of *keh*

Qian (1996; 1997) gives the following description of *keh* in contemporary Shanghai Wu.

- (25) *keh* 個<sup>14</sup>
- (a) asserting, affirming
  - (b) clarifying
  - (c) reminding, warning
  - (d) forbidding
  - (e) stating the result of concession
  - (f) reporting a recent past event

(25) relates back to the cursory discussion of *keh* as encoding past time in modern Shanghai Wu in Sections 2 and 3, and to examples (4)-(7) and (10). Our question here is: how exactly is the sense of (25f) expressed in modern Shanghai Wu? How does (25f) stand in relation to the other senses? Does it co-occur with some other senses, or is it used to the exclusion of the others? The answers are no to be found in Qian's works, as his discussion of the use of (25f) is supported by a neat set of well-chosen single-sentence examples, as shown in Section 2, that would not let one see the use of *keh* in real discourse.

We look at our missionary database to see what functions *keh* can take on. *Keh*'s occurrences in the database are listed in Table 2. (\*, +\*。 means *keh*-sentences ending with a comma plus those with a full stop.) The scripts are all in traditional characters. Yet they use either 個 or 个 for *keh* but not both. With the only exception of 聖經史記 (Shengjing Shiji 1892), which uses both 個 and 个 for the SFP *keh*. It is also this work that uses both 哉 and 者 to represent the SFP *tse*.

Table 2: Distribution of *keh*

	File /year	Sentence	Character	SFP <i>keh</i> 個 (* , +*。)	SFP <i>keh</i> 个 (* , +*。)
1	亨利實錄 1856	1351	13455	0	74+45
2	趁早預備 1868	158	1302	5	0
3	剛担丟士 1868	221	1815	9+3	0
4	審判日腳 1868	92	794	5	
5	阿里排排逢盜記 1921	2318	23515		70+117
6	十條誠總意問答 1899	238	2488	3+4	
7	聖經史記 1892	6397	54226	41+5	144+25
8	耶穌言行傳 1894	5248	37726	0	293+106
9	使徒言行傳 1890	1882	15663	104+8	
10	路加傳福音書 1886	4591	39289		197+154
11	馬太傳福音書 1895	4292	36573	0	232+144
	Total	26788	226846		

<sup>14</sup> 個: (1) 確實, 肯定 (2) 申明, 表白 (3) 提醒, 警告 (4) 禁止 (5) 讓步

An examination of the sentences containing the SFP *keh* from 亨利實錄 *Hengli shilu* (The history of Little Henry and his bearer) shows a function of *keh* which is not related to the temporal meaning of recent past event:

- (26) 第个話頭末, 全拉聖書上个。

dieh-geh wodeu meh, djyuae la sengsy zong keh  
this-CL topic PM all at sacred.book on AM  
'This topic can all be found in the sacred book.' (Hengli Shilu 1856)

- (27) 又造个可怕个地獄, 勿肯懊悔罪孽个人, 應該住拉化个。

yeu zoa keh khupho-keh dinioh,  
also build CL horrible-MOD hell

veh kheng oahue zenieh keh ning,  
not willing repent sin MOD person

yingke zy lawo keh  
must live there AM

'And the dreadful hell was also built. Those who are unwilling to repent for their sins should live there.' (Hengli Shilu 1856)

- (28) 比方儂个娘,

pifong nung-keh niang,  
for.example 2SG-POSS mother

叫儂到伊房裏去,

jioa nung toa yi vong-li qi,  
ask 2SG to 3SG room-in go

做一樣事體,

tsu yehyang zythi,  
do one-CL thing

儂倒勿肯做,

nung toa veh kheng tsu,  
2SG however not willing do

娘豈勿要動氣个否。

niang qiveh yoa dungqi keh feu  
mother RQM will feel.angry AM not

亨利話, 是也, 終要動氣个。

Hengli wo, zy ya, tsung yoa dungqi keh  
Henry say be PM, finally will feel-angry AM

“If your mama were to desire you to come into her room to do something for her, and you were to refuse, would she not be displeased with you?” Henry said, “Yes, she would be angry in the end.” (Hengli Shilu 1856)

(29) 姑娘又話,

kuniang yeu wo,  
lady again say

儂或是叫蒲師來對儂扇扇,

nung wehzy jioa Busy le te nung soe-soe,  
2SG perhaps ask Boosy come for 2SG fan-fan

或是抬轎,

wehzy de djioa  
perhaps carry wagon

伊倒勿肯做,

yi toa veh kheng tsu,  
3SG however not willing do

或是叫伊做第樣,

wehzy jioa yi tsu dieh-yang,  
perhaps ask 3SG do this-type

伊倒做子伊樣,

yi toa tsu-tsy yi-yang,  
3SG however do-COMPL that-type

或是叫伊抱儂到伊塊去,

wehzy jioa yi boa nung toa yi-khue qi  
perhaps ask 3SG carry 2SG to that-place go

伊到抱子到別塊去,

yi toa boa-tsy toa bieh-khue qi  
3SG however carry-ASP to still.other-place go

伊豈勿差否。

yi qiveh ca feu  
3SG RQM unsatisfactory not

亨利話, 是算差个。

Hengli wo, zy soe ca keh.  
Henry say, be count.as unsatisfactory AM

‘The Lady continued, “Or, if you ask Boosy to fan you, or to carry you in your palanquin, and Boosy refuses. Or you ask him to do this, and he does something quite different; or if you desire him to carry you one way, and he carries you another: would he not be unsatisfactory?” Henry said, “He would not be satisfactory, to be sure.”’ (Hengli Shilu 1856)

(30) 蓋睍我看起來，第種人勿好个。

kehloa ngu khoe-qile, dieh-tsung ning veh hoa keh  
 that.is.why 1SG see-up this-sort person not good AM  
 ‘That is why I do not see these people as being virtuous.’ (Hengli Shilu 1856)

(26) reports a lasting state which is not specifically related to past or present. (27) is a modal assertion stating a subjective requirement. (28) is about a conditional consequence. (29) involves the emphatic assertion construction “zy ... *keh*”. (30) is a judgment. The common factor that can be observed is the assertion function of *keh*.

But the following sentences containing *keh* do report past events. (31) is about some past event that recurred but is not necessarily recent. (32) is a past event followed by other narrative content so can be considered as recent past. (33) is recent habitual past state. (34) is an assertion about some recent past action. In (35), the factual conditional states the relationship between a possible action performed in the recent past and its consequence.

(31) 除子蒲師末，

zytsy Busy meh  
 except Boosy PM

亨利無得別人當心伊，

Hengli meh-the biehning tongxing yi  
 Henry not-possess other.person care.for 3SG

格睍有个人曉得

kehloa yeuheh ning xioateh  
 therefore some.PL person know

蒲師待亨利實蓋能个軟心腸睍，

Busy de Hengli zehkehnengkeh nyuoe xingsang loa  
 Boosy treat Henry so.very tender hearted SFP

稱讚伊个好處，

cengtsoe yi keh hoacy  
 praise 3SG MOD virtue

三不時，人未送點物事拉伊个。

**sepehzy ning-meh sung ti mehzy la yi keh**  
 occasionally person-PM give some thing to 3SG PST  
 ‘Except for Boosy, Henry had no one else to take care of him. That is why some people noticed the very kindness of Boosy to the child, and he got presents from many people.’ (Hengli Shilu 1856)

(32) 亨利病重格辰光,

Hengli bing zung keh zengkuong  
Henry illness worsen MOD time

蒲師常庄望伊啐,

Busy zangtsong mang yi loa  
Boosy often inspect 3SG SFP

勿肯到牀上去睏,

veh kheng doa zanglang qi kung  
not willing to bed.on go sleep

直奉承到病好子啐放心个。

zeh vengzeng doa bing hoa tsy loa fongxing keh  
till look.after to illness good ASP PM be.at.ease PST

‘When Henry was seriously ill, Boosy often inspected his situation and would not go to sleep. Only until Henry recovered did he stop worrying.’ (Hengli Shilu 1856)

(33) 自伊自家對自家話,

zyyi zyka te zyka wo  
CP.3SG<sup>15</sup> self to self say

伊拉平素日腳,

**yila bingsu niehjiah**  
3PL ordinary time

窮苦來非凡个,

**djionkhu le five keh**  
poor duration extraordinary PST

現在竟然要用傢生來量金子,

yize jingzoe yoa yung kasang le liang jingzi  
now even need use utensil for weigh gold

伊拉个暴富,

yila-keh boafu  
3PL-MOD become.suddenly.rich

<sup>15</sup> CP denotes a compound pronoun in an obsolescent pronoun system in Shanghai Wu (a similar system still exists in some Wu languages now). A compound pronoun is the usual pronoun prefixed by zy ‘self’ yet has no reflexive meaning. It arguably can be used in an emphatic way but not necessarily, as some speakers prefer to stick to compound pronouns.

不言可知个者。

peh-yi-khu-tsy keh tse  
can.tell.without.saying PST CUR

‘He told himself, they were normally extremely poor. Now they even need to use utensils to measure gold. Their sudden rise to richness is self-evident.’

(Ali Paipai Feng Dao Ji 1921)

- (34) 阿里排排勿等伊个女人个說話話完,

Ah-li-ba-ba veh teng yi-keh nyuning keh sohwo wo woe  
Ali.Baba not wait 3SG-CL woman MOD words say finish

就阻擋自伊啞話,

zieu zudang zyyi loa wo  
then stop CP.3SG PM say

自儂勿必緊嚇得,

zynung veh pieh jinghah tah  
CP.1SG not must feel-afraid SFP

我一定勿至於做盜賊个。

**ngu yehding veh tsyyu tsu doazeh keh**  
1SG certainly not end.up act gangster PST

‘Without waiting for her to finish, Ali Baba interrupted and said, “Don’t you be afraid! There is no way I became a robber.”’ (Ali Paipai Feng Dao Ji 1921)

- (35) 自儂已經得著拉个金子銀子,

zynung yijing teh-tseh-la-keh jingzi ningzi  
CP.2SG already get-COMPL-COMPL-PST gold silver

我也勿要者。

ngu ha veh yoa tse  
1SG also not want CUR

自儂若使敢有一句說話哄騙自我个,

**zynung zohsy koe yeu yeh-jyu sohwo hungphi zyngu keh**  
CP.2SG if dare have one-CL word cheat CP-1SG PST

我就要到官府宕去告自儂,

ngu zie yoa doa koefoadang qi koa zynung  
1SG then will to official.place go report CP.2SG

話自儂是窩贓。

wo zynung zy wotsang.

say CP.2SG be help.hide.loot

“You have got your gold and silver, which I don’t want. If you dared to cheat me on anything, I will turn you in at the government office for abetting the gangsters in keeping the loot.” (Ali Paipai Feng Dao Ji 1921)

Overall, *keh* is not necessarily present in all statements about recent past. In fact, its presence is rather limited. In such cases, it involves the reporting of a completed event, which is a form of non-emphatic assertion. So the temporal meaning of recent past is more of an inferred sense rather than an encoded sense for *keh*. It is parasitic on the assertive use of *keh*.

### 7. Concluding remarks

To conclude, SFPs in Shanghainese as exhibited by *tse* and *keh* do not encode absolute tense information themselves. *Tse*’s function is to convey current relevance of a sentence it is attached to, and *keh*’s function is to mark an assertion.

### Appendix

Shanghainese alphabetic system and its correspondence with the IPA phonemes (Tang 2000).

上海話拼音系統與國際音標對應表

(1) consonants 聲母 (27)

Shanghainese Pinyin	IPA	Example
p	[p]	爸爸 papa 5 21 ‘father’
ph	[pʰ]	泡泡 poapoa 5 21 ‘bubble’
b	[b]	婆婆 bubu 13 ‘grandma’
m	[m]	媽媽 mama 5 21 ‘mother’
f	[f]	發福 fah foh 3 4 ‘stout’
v	[v]	俯伏 vuvoh 1 3 ‘prostrate’
t	[t]	爹爹 tiatia 5 21 ‘dad’
th	[tʰ]	太太 thatha 3 4/5 21 ‘wife’
d	[d]	洞洞 dungdung 1 3 ‘hole’
n	[n]	囡囡 noenoe 5 21 ‘baby’
l	[l]	玲瓏 linglung 1 3 ‘dainty’
ts	[ts]	珠珠 tsytsy 5 21 ‘bead’
c	[tsʰ]	拆穿 cahcoe 3 4 ‘expose’
s	[s]	伸縮 sengsoh 5 21 ‘flexible’
z	[z]	暫時 zezy 1 3 ‘tentative’
j	[tɕ]	姐姐 jiajia 3 4 ‘sister’
q	[tɕʰ]	親戚 qingqieh 5 2 ‘relatives’
dj	[dʒ]	齊全 djidjyue 1 3 ‘complete’
ni	[ŋ]	肉牛 niohnieu 1 3 ‘meat cattle’

ny	[ŋ]	女人 nyuning 1 3 ‘woman’
x	[ɕ]	休息 xieuxieh 5 2 ‘rest’
zi	[z]	謝謝 ziazia 1 3 ‘thank’
k	[k]	哥哥 kuku 5 21 ‘brother’
kh	[kʰ]	刻苦 khehkh 3 4 ‘diligent’
g	[g]	共用 gungyung 1 3 ‘shared’
ng	[ŋ]	硬臥 ngangngu 1 3 ‘hard berth’
h	[h]	好貨 hoahu 3 4 ‘good stuff’
h	[ɦ]	鞋盒 hahah 1 3 ‘shoebox’

## (2) vowels 韵母 (43)

Shanghainese pinyin	IPA	Example
y	[ɿ]	支持 tsyzy 5 21
a	[A]	喇叭 laba 1 4
o	[o]	火車 hoco 3 4
oa	[ɔ]	報告 poakoa 3 4
eu	[Y]	後頭 heudeu 1 3
e	[E]	來三 lese 1 4
oe	[ø]	半盤 boeboe 3 4
i	[i]	飛機 fiji 5 21
ia	[ia]	爺爺 yaya 1 3
ioa	[io]	小巧 xioaqioa 3 4
ieu	[iY]	九流 jieulieu 3 4
ie	[iE]	機械 jiye 5 21
u	[u]	姑父 kufu 5 21
ua	[ua]	娃娃 wawa 1 3
ue	[uE]	關懷 kuewe 5 21
uoe	[uø]	管理 kueoli 3 4
yu	[y]	語句 nyujyu 1 4
yuo	[yø]	圓圈 yuoeyuo 1 4
el	[əl]	反而 fe’el 3 4
m	[m]	姆媽 mma 5 12
n	[n]	奶 ngna 5 21
ng	[ŋ]	魚頭 ngdeu 1 3
ang	[ã]	冷場 langzang 1 3
ong	[õ]	剛剛 gonggong 5 21
eng	[əŋ]	餛飩 wengdeng 1 3
ung	[oŋ]	籠統 lungthung 1 4
ah	[aʔ]	百搭 pahtah 3 4
oh	[oʔ]	北角 Pohkoh 3 4
eh	[əʔ]	勒勒 lehleh 1 3
iang	[iã]	想像 xiangxiang 3 4

iong	[iã]	手旺 seu yong 3 13
ing	[iŋ]	精靈 jingling 5 21
iung	[ioŋ]	汹涌 xiungyung 5 21
iah	[iaʔ]	吃藥 qieh yah 5 12
ioh	[ioʔ]	沐浴 dayoh 1 3
ieh	[iəʔ]	業績 niehjieh 1 4
uang	[uã]	光火 kuanghu 5 21
uong	[uã]	狂妄 guongwong 1 3
ueng	[uəŋ]	困難 khuengne 3 4
uah	[uaʔ]	挖苦 wahkhu 3 4
ueh	[uəʔ]	骨頭 kuehdeu 3 4
yun	[yn]	均勻 jyunyun 5 21
yueh	[yəʔ]	月亮 yuehliang 1 13

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