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Final Accepted Manuscript**Abstract**

This study provides a statistical account and a contrastive study on the use of classifiers in historical Cantonese and contemporary Cantonese documents. We have conducted a statistical analysis of classifiers present in the Cantonese translations of the 1880s edition and the 2010 edition of the four canonical gospels in the *Christian New Testament*. 94 classifiers are observed in the 2010 edition, but only 80 are found in the 1880s edition. Our results show that while some classifiers have been used most regularly since the nineteenth century, for example, **ko³³** 個 (a general classifier), **kin²²** 件 ‘piece’, **t^hiu¹¹** 條 ‘strip’, **tsɛk³³** 隻 (mostly for counting animals and dolls), and **ti⁵⁵** 的/啲, the frequency of some classifiers in the 2010 edition drops drastically as a result of lexical replacement; for example, **tat³³** 筴 (for counting fields) in place of **fai³³** 塊. We have also found that the reduction in frequency of reduplicated classifiers is a result of changes in translation strategy rather than a real reduction in usage in contemporary Cantonese.

Keywords: four Gospels, historical Cantonese, classifier, corpus-based analysis, Christian document

15

On a Historical Approach to Cantonese Studies

A Corpus-Based Contrastive Analysis of the Use of Classifiers in Historical and Recent Translations of the Four Gospels

Tak-Sum Wong and Wai-Mun Leung

15.1 Introduction

Supported by the Lord Wilson Heritage Trust, the “Database of the 19th Century (1865–1894) Cantonese Christian Writings” provides a public data repository through the digitization of 15 Cantonese Christian classics published in mid- to late nineteenth century (Tóngguāng 同光 period of Qing Dynasty), with a total of approximately 466,000 characters. The database is accessible by those who are interested in the history of Christianity in Hong Kong and provides valuable and reliable documents for scholars in the fields of linguistics, theology, religion, translation, and other academic disciplines.¹

Since Robert Morrison (1782–1834) arrived in Guangzhou at the beginning of the nineteenth century, marking the beginning of Protestant missions in China, many missionaries have followed his footsteps coming to the East. To facilitate the dissemination of Christian teachings, missionaries who came to Guangdong learned the local language, Cantonese, in the Guangdong region (including Hong Kong) and began to translate, write, and publish Christian books in Cantonese dialects, such as prayers, evangelistic books, and hymns. In addition to the various books of the *Bible*, many influential Christian books were gradually translated to or written in Cantonese during the mid- to late nineteenth century, such as *Coming Close to Jesus* (1865), *The Pilgrim’s Progress* (1871), and *Questions and Answers on the Gospel of John* (1888).

The historical value of the works available in this database is enormous for the study of Christian missionary activities in the Guangdong area and the history of early Cantonese translations. For example, it provides not only materials for the study of the progress of scholars' interpretation of ancient biblical manuscripts but also documents for the study of the historical development of Cantonese, textual analysis and interpretation of Cantonese, comparison of expressions and styles in English-Cantonese translations, and historical formation of written Cantonese.

The four key features of this database are as follows:

- 1 High diversity of literature. Full texts of the 15 Cantonese Christian classics during the mid- to late nineteenth century were digitalized, covering the following four categories:

- Books of the Bible:

The Old Testament: *Genesis* (1873), *Exodus* (1888), *Deuteronomy* (1888)

The New Testament: *Acts* (1872), *Matthew* (1882), *Mark* (1882), *Luke* (1883), *John* (1883), *Selected Readings of the Gospel of Luke* (circa the 1880s, Chinese-English-Romanization edition)

- Allegorical novels: *The Pilgrim's Progress* (1871), *The Pilgrim's Progress II* (1870)
- Spiritual missions: *Coming Close to Jesus* (1865), *That Sweet Story of Old* (1874)
- Teaching materials: *Questions and Answers on the Gospel of John* (1888), *Readings in Cantonese Colloquial* (1894)

- 2 Easy searching and exporting. Our database provides retrieval and advanced query functions such that users can set the number of results per page from 10 to 100 entries. The

preceding and ensuing three sentences of each search result are displayed on the result page to help users understand its context. Results can be easily copied or exported to a spreadsheet for further processing.

- 3 Displaying images of original materials. Scanned images of original texts of all the 15 documents are provided to facilitate close reading of primary sources by users.
- 4 Facilitating the comparison of different translations.

The Old Testament. The following translation is provided for users to compare different translations of verses in *Genesis*, *Exodus*, and *Deuteronomy*:

- The Mandarin version published in Shanghai in 1919 (“The Old and New Testaments,” Chinese Union Version Bible, published by the American Bible Society)

The New Testament. The following two editions are provided for users to access selected readings from *Matthew*, *Mark*, *John*, *Acts*, and *Luke* for text comparison:

- The Mandarin version published in Shanghai in 1919 (“The Old and New Testaments,” Chinese Union Version Bible, published by the American Bible Society)
- The contemporary Cantonese translation published in Hong Kong in 2010 (*Cantonese Bible: New Cantonese Version*, published by the Hong Kong Bible Society, first edition published in 2006)

In the first stage of development of our database, 15 historical Christian writings were digitalized and made publicly accessible. In the second stage, we planned to provide linguistic tagging for all texts. At present the tagging of the 1880s (Noyes, Piercy & Masters 1882a, 1882b, 1883a, 1883b) and 2010 editions of the four canonical gospels in the *Christian New Testament*

(“four Gospels,” *hereinafter*) was finished. In this chapter, we will focus on these eight texts and provide a statistical account and a contrastive study on the use of classifiers therein. For the linguistic value of studying the translations of the four Gospels, please refer to [Leung \(2011, 2021\)](#). On the study of digitalizing the early Cantonese Bible, the reader may refer to [Kataoka \(2021\)](#).

15.2 Classifiers in Cantonese

In most European languages, the use of measure words is marked. They are only employed when actualizing the semantic boundary of nouns ([Bisang 1999](#), 121) is desired. In some cases, the natural boundary is absent (e.g., *a cup of coffee*, and *a drop of water*), while in other cases, the use of natural boundaries is not intended (e.g., *a basket of fruit*, and *a gang of people*). In the context when the natural boundary is adopted when counting, measure words are always absent (e.g., *an apple*, *a man*, and *a bean*). On the other hand, in another part of the world, the use of measure words is mandatory for a number of languages, even when the natural boundary is adopted when counting. The *measure words* in these languages are often referred to as *classifiers*. For example, in contemporary Cantonese:

- (1) 一個哥哥
jet⁵ kɔ̃³³ kɔ̃¹¹kɔ̃⁵⁵
 one CL elder.brother
 “an elder brother”

- (2) 兩隻眼
lœŋ¹³ tsɛk³ ŋan¹³
 two CL eye
 “two eyes”

- (3) 三個姑娘
sam⁵⁵ kɔ̃³³ ku⁵⁵nœŋ¹¹
 three CL young.lady
 “three young ladies”

- (4) 六隻貓
lok² tsɛk³ mau⁵⁵
 six CL cat
 “six cats”

The absence of classifiers is ungrammatical when counting (with rare exceptions), for example:

- (1) *一哥哥
**jɛt⁵ kɔ¹¹kɔ⁵⁵*
 one elder.brother
 “an elder brother”

- (2) *兩眼
**lœŋ¹³ ŋan¹³*
 two eye
 “two eyes”

- (3) *三姑娘
**sam⁵⁵ ku⁵⁵nœŋ¹¹*
 three young.lady
 “three young ladies”

- (4) *六貓
**lok² mau⁵⁵*
 six cat
 “six cats”

Classifiers can be used to count not only nouns but also actions, *exempli gratia*:

- (5) 賭一鋪
tou³⁵ jɛt⁵ p^hou⁵⁵
 bet one CL
 “to take a gamble”

- (6) 打十下
ta³⁵ sep² ha¹³
 hit ten CL
 “hit ten times”

Classifiers for counting objects, as shown in examples 1 to 4, are commonly known as *numerical classifiers*, while those for counting actions, as shown in examples 5 and 6, are commonly called *verbal classifiers*.

When nouns are premodified with demonstrative and interrogative pronouns, the use of classifiers is also mandatory, such as:

- (7) 呢個姑娘
ni⁵⁵ kɔ̃³³ ku⁵⁵næŋ¹¹
 this CL young.lady
 “this young lady”

- (8) 嗰隻貓
kɔ̃³⁵ tsɛk³ mau⁵⁵
 that CL cat
 “that cat”

- (9) 邊隻眼?
pin⁵⁵ tsɛk³ ŋan¹³ ?
 which CL eye
 “Which eye?”

Being commonly used for counting and referential purposes in Cantonese (and the majority of Sinitic languages), noun classifiers can also undergo reduplication to form *reduplicated classifiers* denoting *each individual* (Wu 2017), for example:

- (10) 個個姑娘都好靚
kɔ̃³³kɔ̃³³ ku⁵⁵næŋ¹¹ tou⁵⁵ hou³⁵ lɛŋ³³
 CL-CL young.lady also very pretty
 “Every young lady is pretty.”

In example 10, the general classifier *kɔ̃³³個* is reduplicated to form the construction *kɔ̃³³kɔ̃³³個*, “everyone,” referring to *every young lady*.

For a comprehensive usage of classifiers in contemporary Cantonese, readers can refer to Cheung (2007, 344–6) as well as Matthews and Yip (2011, 39, 109–26).

15.3 A Contrastive Analysis of the Use of Classifiers in Historical and Recent Translations of the Four Gospels

In this section, we will compare the use of classifiers as observed in the Cantonese translations of the 2010 edition and the 1880s edition of the four canonical gospels in the *Christian New Testament*. In Section 15.3.1, classifiers for counting and referential purposes will be analyzed, while reduplicated classifiers will be discussed in section 15.3.2.

15.3.1 Classifiers for Counting and Referential Purposes

The ten most frequently used classifiers for counting and referential purposes as observed in the 2010 edition of the contemporary Cantonese translation of the four Gospels are listed in [Table 15.1](#).

Table 15.1 List of Top 10 Classifiers Present in the Contemporary Cantonese Translation of the *Four Gospels*

Matthew (N = 684)		Mark (N = 432)		Luke (N = 720)		John (N = 465)	
Classifier (63)	#	Classifier (50)	#	Classifier (72)	#	Classifier (47)	#
個 kɔ ³³	247	個 kɔ ³³	152	個 kɔ ³³	296	個 kɔ ³³	167
啲 ti ⁵⁵	144	啲 ti ⁵⁵	89	啲 ti ⁵⁵	110	啲 ti ⁵⁵	103
日 jet ²	42	日 jet ²	22	日 jet ²	51	位 wei ³⁵	43
隻 tsek ³	25	隻 tsek ³	15	隻 tsek ³	20	日 jet ²	36
班 pan ⁵⁵	19	次 ts ^h i ³³	15	件 kin ²²	20	件 kin ²²	16
件 kin ²²	17	條 t ^h iu ¹¹	13	人 jen ¹¹	19	次 ts ^h i ³³	11
條 t ^h iu ¹¹	17	件 kin ²²	11	次 ts ^h i ³³	16	條 t ^h iu ¹¹	9
位 wei ³⁵	15	班 pan ⁵⁵	11	位 wei ³⁵	15	年 nin ¹¹	6
次 ts ^h i ³³	15	座 tsɔ ²²	9	年 nin ¹¹	13	班 pan ⁵⁵	6
句 key ³³	11	位 wei ³⁵	7	條 t ^h iu ¹¹	11	羣 k ^{wh} en ¹¹	6

In Table 15.1, N denotes the total number of classifier tokens in each gospel, while the total number of classifier types is shown in row 2. For instance, 63 different classifiers are found in the *Gospel of Matthew*, while 684 tokens are present. It can be observed that 7 classifiers are overlapping in the *top 10 classifier list* across these four Gospels (highlighted). Note that in contemporary Cantonese, **kɔ³³** 個 is a general classifier used in a countable context in which the number or amount to be expressed is exact, while **ti⁵⁵** 啲 is a general classifier used in an uncountable context or when the number/amount to be expressed is unspecified. One example for each classifier is presented in the following for illustration:

(11) 個 **kɔ³³**

五個餅 (Luke 9:13, 2010)

η^{13} **kɔ³³** $p\epsilon\eta^{35}$

five CL loaf

“five loaves”

(12) 啲 **ti⁵⁵**

呢啲工作 (Luke 4:43, 2010)

ni^{55} **ti⁵⁵** $k\o\eta^{55}ts\text{ɔ}k^3$

DEM CL work

“these tasks”

(13) 日 **jet²**

三日 (Mark 8:2, 2010)

sam^{55} **jet²**

three **day**

“three days”

(14) 件 **kin²²**

呢件事 (Luke 1:18, 2010)

ni^{55} **kin²²** si^{22}

DEM CL matter

“this issue”

(15) 條 **t^hiu¹¹**

兩條魚 (Luke 9:13, 2010)

lœŋ¹³ t^hiu¹¹ jy³⁵

two CL fish

“two fishes”

(16) 位 **wɛi³⁵**

嗰位天使 (Luke 2:13, 2010)

kɔ³⁵ wɛi³⁵ t^hin⁵⁵si³³

that CL angel

“that angel”

(17) 次 **ts^hi³³**

得罪你七次 (Luke 17:4, 2010)

tɛk⁵tsɔy²² nei¹³ ts^hɛt⁵ ts^hi³³ ,

trespass.against 2SG seven CL

“to trespass against thee seven times”

It should be noted that the absence of some frequently observed classifiers in the top 10 list of a gospel does not imply its absence in the original text. In most cases, those classifiers merely occupy a lower position in the frequency list. For example, the sortal classifier commonly used for counting animals, **tsɛk³** 隻, appears in all the four Gospels: the *Gospels of Matthew* (25 tokens), the *Gospel of Mark* (15 tokens), the *Gospel of Luke* (20 tokens), and the *Gospel of John* (3 tokens). Its absence in the top 10 list of the *Gospel of John* is just a result of its low frequency, even lower than the tenth most frequently observed classifier, namely, **k^{wh}ɛn¹¹** 羣, “crowd” (6 tokens), which is a collective classifier and can also be used to count animals.

Having introduced the distribution of classifiers in the contemporary Cantonese translation of the four Gospels of the 2010 edition, we travel back to the 1880s! The distribution of classifiers for counting and referential purposes in the historical Cantonese translation of the 1880s edition of the four Gospels is shown in [Table 15.2](#).

Table 15.2 List of Top 10 Classifiers Present in the Historical Cantonese Translation of the *Four Gospels*

Matthew (N = 678)		Mark (N = 398)		Luke (N = 798)		John (N = 476)	
Classifier	#	Classifier	#	Classifier	#	Classifier	#
個 $k\sigma^{33}$	266	個 $k\sigma^{33}$	184	個 $k\sigma^{33}$	392	個 $k\sigma^{33}$	200
的 ti^{53}	210	的 ti^{53}	107	的 ti^{53}	202	的 ti^{55}	174
陣 $tʃ\epsilon n^{22}$	64	隻 $tʃ\epsilon k^3$	19	日 $j\epsilon t^2$	59	日 $j\epsilon t^2$	36
日 $j\epsilon t^2$	43	日 $j\epsilon t^2$	17	隻 $tʃ\epsilon k^3$	33	陣 $tʃ\epsilon n^{22}$	15
隻 $tʃ\epsilon k^3$	27	條 $t^h i u^{11}$	16	陣 $tʃ\epsilon n^{22}$	28	條 $t^h i u^{11}$	15
條 $t^h i u^{11}$	22	樣 $j\epsilon n g^{22}$	16	件 kin^{22}	21	件 kin^{22}	10
樣 $j\epsilon n g^{22}$	20	間 kan^{53}	11	條 $t^h i u^{11}$	21	樣 $j\epsilon n g^{22}$	10
間 kan^{53}	9	件 kin^{22}	10	樣 $j\epsilon n g^{22}$	16	次 $ts^h \gamma^{33}$	6
次 $ts^h \gamma^{33}$	9	句 ky^{33}	10	間 kan^{53}	15	處 $ʃy^{33}$	5
人 $j\epsilon n^{11}$	8	隊 tui^{22}	8	年 nin^{11}	11	位 $w\epsilon i^{22}$	5

Similarly, the overlapping classifiers are highlighted. One example for each of these commonly observed classifiers in historical Cantonese will be given in the following for illustration purposes:

(18) 個 $k\sigma^{33}$

十個城 (Luke 19:17, 1883)

$ʃ\epsilon p^2$ $k\sigma^{33}$ $ʃ\epsilon \eta^{11}$

ten CL city

“ten cities”²

(19) 的 ti^{53}

呢的衆人 (Mark 8:2, 1882)

ni^{53} ti^{53} $tʃ\epsilon \eta^{33} j\epsilon n^{11}$

dem CL multitude

“these people”

(20) 日 $j\epsilon t^2$

三旦 (Mark 8:2, 1882)

*sam*⁵³ *jet*²
 three **day**
 “three days”

(21) 條 *t^hiu*¹¹

呢條標 (John 19:20, 1883)
*ni*⁵³ *t^hiu*¹¹ *piu*⁵³
 DEM CL title
 “this title”

(22) 樣 *jœŋ*²²

各樣嘅私慾 (Mark 4:19, 1882)
*kɔk*³ *jœŋ*²² *kɛ*³³ *sɿ*⁵³*jok*²
 every CL ADN lust
 “the lusts of other things”

Likewise, the absence of some commonly observed classifiers in the top 10 list of a gospel in [Table 15.2](#) does not imply its absence in that gospel. For instance, as shown in [Table 15.2](#), the sortal classifier **kan**⁵³ 間, which is commonly used for counting buildings, appearing in all four Gospels except the *Gospel of John*, is merely a consequence of its low frequency in the *Gospel of John* – only one instance is found.

Apparently, three classifiers are shared among both top 10 lists of the 1880s and 2010 editions, namely, **ko**³³ 個 [(11), (18)], **jet**² 日 [(13), (20)], and **t^hiu**¹¹ 條 [(15), (21)]. Readers who have a basic mastery of the Chinese language should be able to notice the graphical similarity between classifiers 12 and 19, namely, “啲” and “的。” In fact, the two allographs are semantically and phonologically identical; the former one is used predominantly in contemporary Cantonese but already appeared as early as 1877 in other Cantonese historical documents, while the frequent appearance of the latter one in the historical documents published in the nineteenth century is observed. However, in the 1880s edition of the four Gospels, only the preserved graph “的” is present, possibly a result of direct transference from earlier translations. The insertion of the mouth radical “口” to the left of the graph “的” is probably related to a historical sound change of this

classifier. On the etymology and historical development of “啲” and “的,” readers can refer to [Wong \(2010\)](#) for details. It is also worth noting that four instances of the graph “的” are also observed in the 2010 edition, albeit its rare presence, if not absence, in contemporary Cantonese vernacular writing. This suggests that in the course of preparing the 2010 edition, the translator(s) might have referred to the 1880s edition rather than translated from scratch. Thus, four classifiers are in fact shared among the top 10 lists of the four Gospels in both editions, namely:

ko³³ 個, jet²² 日, t^hiu¹¹ 條, and ti⁵³/ti⁵⁵ 的/啲

Tables 15.3 and 15.4 list the top 95% most frequently observed classifiers, based on cumulative frequency, in the 2010 and 1880s editions of the four Gospels, respectively.

Table 15.3 The Most Frequently Observed Classifiers Present in the Recent Cantonese Translation of the *Four Gospels*

Rank	Classifier	Frequency	Rel. Freq.	Cul. Freq.	Cul. Rel. Freq.
1	個 ko ³³	862	37.8%	862	37.8%
2	啲/的 ti ⁵⁵	450	19.7%	1312	57.5%
3	日 jet ²	151	6.6%	1463	64.2%
4	位 wɛi ³⁵	80	3.5%	1543	67.7%
5	件 kin ²²	64	2.8%	1607	70.5%
6	隻 tsɛk ³	63	2.8%	1670	73.2%
7	次 ts ^h i ³³	57	2.5%	1727	75.7%
8	條 t ^h iu ¹¹	50	2.2%	1777	77.9%
9	班 pan ⁵⁵	40	1.8%	1817	79.7%
10	座 tsɔ ²²	28	1.2%	1845	80.9%
11	羣 k ^{wh} ɛn ¹¹	27	1.2%	1872	82.1%
12	句 key ³³	25	1.1%	1897	83.2%
13	年 nin ¹¹	21	0.9%	1918	84.1%
14	人 jɛn ¹¹	19	0.8%	1937	85.0%
15	家 ka ⁵⁵	18	0.8%	1955	85.7%
16	倍 p ^h ui ¹³	16	0.7%	1971	86.4%
17	嚟 keu ²²	15	0.7%	1986	87.1%

18	禽 p ^h ɔ ⁵⁵	14	0.6%	2000	87.7%
19	塊 fei ³³	14	0.6%	2014	88.3%
20	間 kan ⁵³	13	0.6%	2027	88.9%
21	籃 lam ¹¹	12	0.5%	2039	89.4%
22	種 tsong ³⁵	12	0.5%	2051	90.0%
23	粒 nep ⁵	12	0.5%	2063	90.5%
24	張 tsœŋ ⁵⁵	12	0.5%	2075	91.0%
25	代 tɔi ²²	12	0.5%	2087	91.5%
26	樣 jœng ²²	11	0.5%	2098	92.0%
27	晚 man ¹³	11	0.5%	2109	92.5%
28	組 tsou ³⁵	8	0.4%	2117	92.9%
29	兩 læŋ ³⁵	8	0.4%	2125	93.2%
30	身 sœn ⁵⁵	8	0.4%	2133	93.6%
31	歲 sey ³³	6	0.3%	2139	93.8%
32	隊 tœy ²²	6	0.3%	2145	94.1%
33	段 tyn ²²	6	0.3%	2151	94.3%
34	邊 pin ⁵⁵	5	0.2%	2156	94.6%
35	雙 sœŋ ⁵⁵	5	0.2%	2161	94.8%
	(Other 61)	119	5%	2280	100%

Table 15.4 The Most Frequently Observed Classifiers Present in the Historical Cantonese Translation of the *Four Gospels*

Rank	Classifier	Frequency	Rel. Freq.	Cul. Req.	Cul. Rel. Freq.
1	個 kɔ ³³	1042	38.8%	1042	38.8%
2	的 ti ⁵³	693	25.8%	1735	64.5%
3	日 jɛt ²	155	5.8%	1890	70.3%
4	陣 tʃœn ²²	114	4.2%	2004	74.6%
5	隻 tʃɛk ³	83	3.1%	2087	77.6%
6	條 t ^h iu ¹¹	74	2.8%	2161	80.4%
7	樣 jœng ²²	62	2.3%	2223	82.7%
8	件 kin ²²	49	1.8%	2272	84.5%
9	間 kan ⁵³	36	1.3%	2308	85.9%
10	句 ky ³³	26	1.0%	2334	86.8%
11	嚟 kœu ²²	25	0.9%	2359	787.8%
12	次 ts ^h ɿ ³³	24	0.9%	2383	88.7%
13	人 jœn ¹¹	18	0.7%	2401	89.3%
14	年 nin ¹¹	18	0.7%	2419	90.0%

15	倍 p ^h ui ¹³	18	0.7%	2437	90.7%
16	隊 tui ²²	18	0.7%	2455	91.3%
17	位 wei ²²	14	0.5%	2469	91.9%
18	斤 ken ⁵³	11	0.4%	2480	92.3%
19	處 sy ³³	11	0.4%	2491	92.7%
20	籃 lam ¹¹	11	0.4%	2502	93.1%
21	粒 nep ⁵	10	0.4%	2512	93.5%
22	筭 tat ³	10	0.4%	2522	93.8%
23	世 sei ³³	9	0.3%	2531	94.2%
24	代 toi ²²	9	0.3%	2540	94.5%
25	張 tjoŋ ⁵³	8	0.3%	2548	94.8%
	(Other 56)	140	5.2%	2688	100%

In the 2010 edition, 96 classifiers are used, but in the 1880s edition, only 81 are present. Among the top 10 classifiers, 6 are found in both editions, namely, kɔ³³ 個, ti⁵⁵/ti⁵³ 啲/的, jet² 日, kin²² 件, 隻 tsɛk³/tʃɛk³ 隻, t^hiu¹¹ 條, which suggests the prevalent usage of these classifiers in Cantonese since the nineteenth century. It is interesting to see that the cumulative frequency of the tenth most frequently used classifier in the 1880s edition, ky³³ 句, “sentence,” has reached 86.8% already, but its rank counterpart in the 2010 edition, tsɔ²² 座, is 80.9% only, with a difference of almost 6%. In Table 15.3, among the 95% most frequently used classifiers in modern Cantonese, three are not found in the entire four Gospels of the 1880s edition, namely, pan⁵⁵ 班, tsong³⁵ 種, tsou³⁵ 組. All these suggest that the diversity of classifiers used in the 2010 edition is higher than that in the 1880s edition.

It is also interesting to see that the relative frequency of some classifiers underwent a drastic change. For example, there was a reduction in the relative frequency of tui²²/tɔy²² 隊 from 0.7% in the 1880s edition to 0.3% in the 2010 edition, while the relative frequency of jœŋ²² 樣 increased from 0.5% to 2.3%. Do the absence of the three classifiers in the 1880s edition and the drastic change in the relative frequency of some classifiers also suggest that there existed a process of lexical replacement in the history of Cantonese? A comparison of identical verses containing these three classifiers in the two editions was conducted to investigate this conjecture. Our analysis

found that while in most cases, the reduction in the use of classifiers is a result of the employment of other strategies in the course of translation, in other cases, lexical replacement took place.

Example 23 shows a case which employed **tui**²² 隊 as a collective classifier of **jən**¹¹ 人, “human being,” in historical Cantonese, while **tsou**³⁵ 組 was employed in contemporary Cantonese translation.

(23) Luke 9:14

[...] 耶穌又對門生話、叫大眾排開坐倒處、每隊五十人。(1883)

$j\varepsilon^{11}s \quad j\varepsilon u \quad tui \quad mun^{11} \quad \int \quad wa \quad , \quad kiu \quad tai^{22} \quad t\int on^{33} \quad p^{h} \quad ai^{l} \quad h \quad \int i \quad ts^{h} \quad \int \quad tou \quad \int y^{3} \quad mui \quad tui \quad \eta^{13} \quad \int \quad \int \quad j\en^{11} \quad .$
 $[. . . \quad u^{53} \quad 22 \quad 33 \quad \int y^{53} \quad 22 \quad 33 \quad 1 \quad 53 \quad 13 \quad 35 \quad 3 \quad 13 \quad 22 \quad p^2 \quad]$

Jesus als to disciple say ask masses line. PR sit at pla eac CL fifty hum
 o up T ce h an

[...] 耶穌對佢咁話：「叫羣眾一組一組坐落，每組約五十人。」(2010)

$j\varepsilon^{11} \quad sou^{55} \quad t\int y^{33} \quad k^{h} \quad \int y^{13} \quad t\int i^{22} \quad wa^{22} \quad :$
 [...] Jesus to 3PL say

$“ \quad kiu^{3} \quad k^{wh} \quad \int en^{11} \quad t\int on^{33} \quad j\int t \quad tsou \quad j\int t \quad tsou \quad ts^{h} \quad \int \quad l \quad \int k \quad , \quad mui^{l} \quad tsou \quad j\ae k^{3} \quad \eta^{13} \quad \int \quad \int \quad j\en^{11} \quad . \quad ”$
 ask throng on CL on CL sit PR each CL approximat fifty huma
 e e T ely n

“[...] And he [Jesus] said to his disciples, Make them sit down by fifties in a company.”

In contemporary Cantonese, **tøy**²² 隊 is often used to count teams, while the collective classifier for counting groups (of people) is **tsou**³⁵ 組; but in historical Cantonese, apparently, **tui**²² 隊 can also be used to count *groups*, while **tsou**³⁵/**tsu**³⁵ 組 is absent in the four Gospels of the 1880s edition. Example 24 shows a similar example which employed **tui**²² 隊 as the collective classifier of pigs in historical Cantonese, while **k^{wh}en**¹¹ 羣 was employed in contemporary Cantonese translation.

(24) Luke 8:32

[...] 個的鬼求耶穌准佢入個隊猪處 [...] (1883)

[. . .] *kɔ̃³³ tɿ⁵³ k^wɛi³⁵ k^hɛu¹¹ jɛ¹¹su⁵³ tʃun³⁵ k^hy¹³ jɛp² kɔ̃³³ tui²² tʃy⁵⁵ ʃy³³* [. . .]
 DEM CL ghost beseech Jesus allow 3SG enter DEM CL swine place

[. . .] 鬼就央求耶穌，准佢哋去羣豬處 [. . .] (2010)

[. . .] *k^wɛi³⁵ tsɛu²² jœŋ⁵⁵ k^hɛu¹¹ jɛ¹¹sou⁵⁵, tsən³⁵ k^hɛy¹³tei²² hey³³ k^{wh}ɛn¹¹ tsy⁵⁵ sy³³* [. . .]
 ghost then implore Jesus allow 3PL go CL swine place

“[. . .] and they [devils] besought him [Jesus] that he would suffer them to enter into them [. . .]”

In this example, the classifier for counting pigs is **k^{wh}ɛn¹¹** 羣, depicting *a crowd of pigs*.

In contemporary Cantonese, it is also grammatical to say **jat⁵tɔy²²tsy⁵⁵** 一隊豬, but only in the case when pigs are “lining up.”

Example 25 shows an instance which employed **jœŋ²²** 樣, “kind,” as the generic classifier of an abstract concept, namely, **sɿ⁵³jok²** 私欲, “lust,” in historical Cantonese, while **tsong³⁵** 種, “kind,” was employed in contemporary Cantonese translation.

(25) Mark 4:19

[. . .] 與及各樣嘅私慾、都嚟僵死道理 [. . .] (1882)

[. . .] *jy¹³k^hɛp² kɔ̃k³ jœŋ²² kɛ³³ sɿ⁵³jok², tou⁵³ lɛi¹¹ pek⁵ sɿ³⁵ tou²²li¹³* [. . .]
 and every CL ADN lust also come choke die argument

[. . .] 同其他各種慾望入嚟窒息信息嘅生機 [. . .] (2010)

[. . .] *t^hoŋ¹¹ k^hɛi¹¹t^ha⁵⁵ kɔ̃k³ tsoŋ³⁵ jok²mɔŋ² jɛp²lai¹¹ tsɛt²sek⁵ sən³³sek⁵ kɛ³³ sɛŋ⁵⁵kei⁵⁵* [. . .]
 with other every CL desire go.into choke message ADN vitality
 “[. . .] and the lusts of other things entering in, choke the word [. . .]”

In contemporary Cantonese, the use of **jœŋ²²** 樣 is more restricted, such that it can only be used to count a finite set of nouns (e.g., **jɛ¹³** 嘢, “thing; issue”), but **tsong³⁵** 種 can be used in combination of any nouns. As reflected in the four Gospels, in historical Cantonese, **jœŋ²²** 樣 seems to have been used in combination of any nouns, abstract or concrete, for example, **tou²²li¹³** 道理, “argument” (John 4:25), **tʃɛn⁵³li¹³** 真理, “truth” (John 16:13), **sɿ²²** 事, “issue” (Marco 1:38), **tʃɛŋ³³** 症, “disease” (Marco 1:34), **p^hi³³ji²²** 譬喻, “parable” (Marco 4:13), **ʃin²²ji²²** 善義, “righteousness” (Matthew 3:15), and **pɛŋ²²t^hoŋ³³** 病痛, “sickness” (Matthew 4:23).

Example 26 employed **wui**¹¹ 回, “time,” as a verbal classifier of the actions **tək**⁵**tsui**²² 得罪, “trespass against,” and **fan**⁵³**tʃyn**³³ 番轉, “turn round,” in historical Cantonese, while **ts**^h¹³³ 次, “time,” was employed in contemporary Cantonese translation.

(26) Luke 17:4

倘若佢一日七回得罪你、亦七回番轉嚟話 [. . .] (1883)

t^h*ɔŋ*³⁵*jæk* *k*^h*y*¹ *jət* *jət* *ts*^h*et*⁵ **wui**¹ *tək*⁵*tsui*²² *ni*¹³ , *jek*² *ts*^h*et*⁵ **wui**¹ *fan*⁵³*tʃyn*³³ *lei*¹ *wa*² . . .

if 3SG on da seve CL trespass.agains 2S als seve CL turn.roun PRT say
e y n t G o n d

若佢喺一日內得罪你七次, 每一次都回頭對你話 [. . .] (2010)

jæ *k*^h*øy* *hei* *jət* *jət* *nɔi*² *tək*⁵*tsøy*²² *nei* *ts*^h*e* **ts**^h , *mui* *jət* **ts**^h *tou* *wui*¹¹*t*^h*e* *tøy* *nei* *wa* . . .

*k*² ¹³ ³⁵ ⁵ ² ² ¹³ ^t⁵ ³³ ¹³ ⁵ ³³ ⁵⁵ ^u¹¹ ³³ ¹³ ²² .

if 3SG LO on da insi trespass.aga 2S seve CL eac on CL als turn.rou to 2S say
C e y de inst G n h e o nd G

“And if he trespass against thee seven times in a day, and seven times in a day turn again to thee, saying . . .”

In contemporary Cantonese, **ts**^h¹³³ 次 is an unmarked classifier for counting the number of times of an action. Although there exists a difference in the word order between historical and contemporary Cantonese translation, in this context, the use of **ts**^h¹³³ is still an unmarked choice in colloquial contemporary Cantonese even if the classifier is in a preverbal position. The use of **wui**¹¹ 回 as a classifier is no longer common in contemporary Cantonese; it is usually used idiomatically in some particular context, like **m**¹¹ **hei**²² **jet**⁵ **wui**¹¹ **si**²² 唔係一回事, “not the same thing/issue.”

Example 27 shows a verse which employs **tat**³ 筮 as a classifier of **t**^h**in**¹¹ 田, “field,” in historical Cantonese, while **fei**³³ 塊 is used in contemporary Cantonese translation:

(27) Matthew 13:44

[. . .] 好歡喜去賣嘅所有嘅、嚟買個筮田。 (1882)

[. . .] *hou³⁵ fun⁵³ hi³⁵ hy³³ mai²² hiu⁵³ ʃɔ³⁵ jɛu¹³ kɛ³³ , lei¹¹ mai¹³ kɔ³³ tat³ t^hin¹¹ .*
 very joyous go sell PFV all NOM PRT buy DEM CL field

[. . .] 然後好高興將自己所有嘅都變賣，去買個塊田。(2010)

[. . .] *jin¹¹ hɛu² hou³ kou⁵⁵ heŋ tsæŋ tsi²² kei sɔ³⁵ jɛu kɛ³ tou⁵ pin³³ mai , hɛy³ mai¹ kɔ³ fai³ t^hin¹ .*
]₂ ₅ ₃₃ ₅₅ ₃₅ ₁₃ ₃ ₅ ₂₂ ₃ ₃ ₅ ₃ ₁

afterwar very Joyous PRT self all NO also sell.off go buy tha CL fiel
 ds M t d

“[. . .] and for joy thereof goeth and selleth all that he hath, and buyeth that field.”

The previous example shows a typical case of lexical replacement. The classifier **tat³³** survives in contemporary Cantonese but is only used to count places or land parcels (e.g., **jet⁵ tat³ tei²² fɔŋ⁵⁵** 一箇地方, “a place”), as seen in example 28, while the canonical classifier for **t^hin¹¹**, “field,” is **fai³³**.

(28) Marco 14:32

佢哋到一箇地方，名客西馬尼 [. . .] (2010)

k^hɛy¹³ tei²² tou³³ jet⁵ tat³ tei²² fɔŋ⁵⁵ , meŋ¹¹ hak³ sɛi⁵⁵ ma¹³ nei¹¹ . . .

3PL arrive one CL place name GN

“And they came to a place which was named Gethsemane . . .”

It should be noted that, among the classifiers with a drastic change of the relative frequency in [Tables 15.3](#) and [15.4](#), only a number of cases reflect the process of lexical replacement, while many other cases demonstrate a result of the application of different translation strategies. As shown in example 29, the lexical item **k^{wh}ɛn¹¹ tsong³³** 羣衆, “throng,” was used in the 1880s edition, when **jet⁵ tai²² pan⁵⁵ jɛn¹¹** 一大班人, “a huge group of people,” is used in the 2010 edition. In contemporary Cantonese, **jet⁵ tai²² pan⁵⁵ jɛn¹¹** sounds more colloquial, while **k^{wh}ɛn¹¹ tsong³³** is usually used in higher register.

(29) John 6:5

耶穌舉眼、見羣衆嚟到佢處 [. . .] (1883)

jɛ¹¹ su⁵³ ky³⁵ ŋan¹³ , kin³³ k^{wh}ɛn¹¹ tsɔŋ³³ lei¹¹ tou³³ k^hy¹³ ʃy³³ [. . .]

Jesus lift eye see **throng** come to 3SG place

耶穌抬頭，睇見一大班人嚟到佢面前 [. . .] (2010)

jɛ¹¹sou⁵⁵ t^hɔi¹¹t^heu¹¹ , t^hei³⁵ kin³³ jɛt⁵ tai²² pan⁵⁵ jɛn¹¹ lei¹¹ tou³³ k^hey¹³ min²²ts^hin¹¹ . . .

Jesus gain.ground see see one big CL human come to 3SG in.front.of
 “When Jesus then lifted up his eyes, and saw a great company come unto him [. . .]”

In example 30, the general classifier **kɔ³³** 個 is used to count the noun **t^hin⁵³sɿ³³** 天使, “angel,” in the 1880s edition, but the honorific classifier for counting people, **wɛi³⁵** 位, is utilized in contemporary Cantonese translation. In the 1880s edition, **wɛi²²** was also observed, for example, in verse 30, when it is employed to count **t^hin⁵³sɿ³³** 天使, “angel.” In this case, the selection of classifiers seems to have been a matter of the choice of the translators, but no linguistic factor was involved.

(30) Luke 2:13

忽然間、有大隊天軍、同埋個天使讚美上帝話。 (1883)

fɛt⁵jin¹¹kan⁵ , jɛu¹³ tai² tui² t^hin⁵³k^wɛn⁵³ , t^hoŋ¹¹mai¹ kɔ³ t^hin⁵³sɿ³ tsan³³mi¹ sɔŋ²²tɛi³ wa² .

suddenly EXIS big CL heavenly.hos and CL angel praise God say
 T t

忽然，有大隊天軍同嗰位天使，讚美上帝話： (2010)

fɛt⁵jin¹¹ , jɛu¹³ tai² tɔy² t^hin⁵³k^wɛn⁵³ t^hoŋ¹ kɔ³ wɛi³ t^hin⁵³si³ , tsan³³mei¹ sɔŋ²²tɛi³ wa² :

suddenl EXIS big CL heavenly.hos and that CL angel praise God say
 y T t

“And suddenly there was with the angel a multitude of the heavenly host praising God, and saying.”

15.3.2 Classifier Reduplication

Statistics of classifier reduplication are excluded from Tables 15.1 to 15.4. They are presented in Tables 15.5 and 15.6.

Table 15.5 Reduplicated Classifiers in the Cantonese Translation of the 2010 Edition of the *Four Gospels* (N = 11)

Matthew		Mark		Luke		John	
Type	#	Type	#	Type	#	Type	#
人人 jən ¹¹ jən ¹¹	1	種種 tsoŋ ³⁵ tsoŋ ³⁵	1	人人 jən ¹¹ jən ¹¹	2	個個 kɔ ³³ kɔ ³³	2
句句 key ³³ key ³³	1			日日 jət ² jət ²	2		
日日 jət ² jət ²	1			樣樣 jœŋ ²² jœŋ ²²	1		

Table 15.6 Reduplicated Classifiers in the Cantonese Translation of the 1880s edition of the *Four Gospels* (N = 32)

Matthew		Mark		Luke		John	
Type	#	Type	#	Type	#	Type	#
個個 kɔ ³³ kɔ ³³	4	個個 kɔ ³³ kɔ ³³	3	個個 kɔ ³³ kɔ ³³	4	個個 kɔ ³³ kɔ ³³	3
世世 ʃei ³³ ʃei ³³	1	人人 jən ¹¹ jən ¹¹	1	人人 jən ¹¹ jən ¹¹	3		
人人 jən ¹¹ jən ¹¹	1	件件 kin ²² kin ²²	1	日日 jət ² jət ²	3		
句句 ky ³³ ky ³³	1	樣樣 jœŋ ²² jœŋ ²²	1	處處 ʃy ³³ ʃy ³³	1		
日日 jət ² jət ²	1			世世 ʃei ³³ ʃei ³³	1		
				對對 tui ³³ tui ³³	1		
				年年 nin ¹¹ nin ¹¹	1		
				樣樣 jœŋ ²² jœŋ ²²	1		

Table 15.5 shows the statistics of the reduplicated classifiers present in the 2010 edition. It can be observed that only jən¹¹jən¹¹ 人人, “everybody,” and jət²jət² 日日, “every day,” are observed more than once. Table 15.6 shows the statistics of the 1880s edition. It can be seen that kɔ³³kɔ³³ 個個 exists in all four Gospels, while jən¹¹jən¹¹ 人人 is present in three Gospels but not in the *Gospel of John*.

Apparently, the number of reduplicated classifiers was reduced from 32 in the 1880s edition to 11 in the 2010 edition. Does it reflect a historical syntactic change in Cantonese?

By comparing the same verse in both editions, it is found that the reduction in usage of reduplicated classifiers is usually a result of a change of translating strategy when the idea of *each individual* is uttered. In some cases, a universal quantifier was used. For example:

(31) Luke 1:65

topic comment

鄰里個個驚慌 [. . .] (1883)

lun¹¹li¹³ kɔ³³kɔ³³ keŋ⁵³fɔŋ⁵³ [. . .]

neighbour everybody panic

subject predicate

鄰居都好驚奇 [. . .] (2010)

lən¹¹keŋ⁵⁵ tou⁵⁵ hou³⁵ keŋ⁵⁵k^hei¹¹ [. . .]

neighbour also very surprised

“And fear came on all that dwelt round about them [. . .]”

In the 1880s edition, the reduplicated classifier **kɔ³³kɔ³³ 個個** is used to express the idea of *every neighbour*. In the 2010 edition, the universal quantifier **tou⁵⁵ 都** is used to express the idea of *all neighbours*. In addition, there also exists a change in syntactic construction. In example 31, topic-comment construction is used in the 1883 edition such that **lun¹¹li¹³ 鄰里**, “neighbour,” is the topic, while **kɔ³³kɔ³³ keŋ⁵³fɔŋ⁵³ 個個驚慌**, “everybody is panicking,” is the comment. In the 2010 edition, the subject-predicate construction is used, with **lən¹¹keŋ⁵⁵ 鄰居**, “neighbour,” being the subject, while **tou⁵⁵ hou³⁵ keŋ⁵⁵k^hei¹¹ 都好驚奇**, “all being very surprised,” is the predicate. The objective truth expressed by these two translations is identical even though different linguistic constructions were used, which also leads to a shift in focus.

In other cases, other lexical items were used to express the identical objective truth. For instance:

(32) Luke 4:20

topic comment

... 在會堂嘅、人人都定眼睇住佢。(1883)

... *tsɔi*²² *wui*²²*t*^h*ɔŋ*¹¹ *kɛ*³³ , *jɛn*¹¹*jɛn*¹¹ *tou*⁵³ *teŋ*²² *ŋan*¹³ *t*^h*ɛi*³⁵ *t*^h*ɣy*²² *k*^h*y*¹³ .
 LOC synagogue NOM **human-human** also fasten eye see ASP 3SG

subject predicate

... 全會堂嘅人都定眼睇住佢。(2010)

... *ts*^h*yn*¹¹ *wui*²²*t*^h*ɔŋ*¹¹ *kɛ*³³ *jɛn*¹¹ *tou*⁵⁵ *teŋ*²² *ŋan*¹³ *t*^h*ɛi*³⁵ *tsy*²² *k*^h*ɣy*¹³ .

entire synagogue ATTR human also fasten eye see ASP 3SG

“... And the eyes of all them that were in the synagogue were fastened on him.”

The reduplicated classifier *jɛn*¹¹*jɛn*¹¹ 人人, *literally* “human-human,” is used to express the idea of *everybody* in the 1880s edition, while the universal quantifier *ts*^h*yn*¹¹ 全, “entire,” is used with *wui*²²*t*^h*ɔŋ*¹¹ *kɛ*³³ *jɛn*¹¹ 會堂嘅人 to convey the idea of *people in the whole synagogue* in the 2010 edition. There also exists a difference in sentence construction such that a topic-comment is used in the former while a subject-predicate is used in the latter edition. Similarly, the objective truth expressed by these two constructions is identical, although there is a subtle difference in focus.

In a number of cases, the concept of *each individual* is expressed by other constructions, such as:

(33) Luke 11:3

我哋需用嘅糧、日日俾我哋。(1883)

*ŋɔ*¹³*ti*²² *sy*⁵³ *joŋ*²² *kɛ*³³ *lœŋ*¹¹ , *jɛt*²*jɛt*² *pi*³⁵ *ŋɔ*¹³*ti*²² .
 1PL need use ATTR grain **day-day** give 1PL

賜俾我哋每日需要嘅飲食。(2010)

ts^h³³ *pei*³⁵ *ŋɔ*¹³*tei*²² *mui*¹³ *jɛt*² *sɔy*⁵⁵*jiu*³³ *kɛ*³³ *jɛm*³⁵*sek*² .
 bestow to 1PL **each day** need ATTR diet

“Give us day by day our daily bread.”

The reduplicated classifier **jet²jet²** 日日, *literally* “day-day,” is used to express the idea of *every day* in the 1880s edition, while in the 2010 edition, the determiner **mui¹³** 每, “every” + *classifier*, is used to express the same idea.

It is also worth noting that in some cases, other lexical items are used to convey the idea of *each individual*, like:

(34) Luke 9:6

[...] 處處傳福音、醫人嘅病。

[...] *fj³³fj³³ t^hyn¹¹ fok⁵jem⁵⁵, ji⁵³ jen¹¹ kɛ³³ pɛŋ²²* .

place- preach gospel cure human POSS sickness
place

[...] 傳福音，到處醫病。

[...] *ts^hyn¹¹ fok⁵jem⁵⁵, tou³³ts^hy³³ ji⁵⁵ pɛŋ²²* .

preach gospel **everywhere** cure sickness

“[...] preaching the gospel, and healing every where.”

In example 34, the reduplicated classifier *fj³³fj³³* 處處, *literally*, “place-place,” is used to express the idea of *everywhere* in the 1880s edition, while in the 2010 edition, the lexical item **tou³³ts^hy³³** 到處, “everywhere,” is used instead. In terms of lexical choice, in contemporary Cantonese, *fj³³fj³³* is rarely used, while **tou³³ts^hy³³** is only used in a formal context (e.g., news reports). In this context, the word **tsəu⁵⁵wəi¹¹** 周圍 is most frequently used in colloquial Cantonese according to the authors’ native intuition.

In examples 31 to 34, other strategies are employed to replace the reduplicated classifiers in the 1880s edition to express the idea of *each individual* in the 2010 edition. Readers may wonder whether other strategies were replaced by the reduplicated classifiers in the 2010 edition. Let us take a look at the following example:

(35) Luke 4:15

喺各會堂教人、衆人歸榮佢。

hɛi³⁵ kɔk³ wui²²t^hɔŋ¹¹ kau³³ jɛn¹¹ , tʃoŋ³³jɛn¹¹ k^wɛi⁵³wɛŋ¹¹ k^hy¹³ .
 LOC every synagogue teach human everybody glorify 3SG

佢喺各會堂教導人，人人都稱讚佢。

k^hɛy¹³ hɛi³⁵ kɔk³ wui²²t^hɔŋ¹¹ kau³³tou²² jɛn¹¹ , jɛn¹¹jɛn¹¹ tou⁵⁵ ts^hɛŋ⁵⁵tsan³³ k^hɛy¹³ .
 3SG LOC every synagogue teach human **human-human** also glorify 3SG

“And he taught in their synagogues, being glorified of all.”

In the 1880s edition, the pronoun **tʃoŋ³³jɛn¹¹** 衆人, “everybody,” is used to refer to all the people in the synagogue, but in the 2010 edition, the reduplicated classifier **jɛn¹¹jɛn¹¹** 人人, literally “human-human,” is used to convey the same objective truth, albeit a different focus. In terms of lexical choice, in contemporary Cantonese, **tʃoŋ³³jɛn¹¹** 衆人 is only used in a formal context, while **jɛn¹¹jɛn¹¹** 人人 is often used in a colloquial context. This seems to suggest that the construction employed for expressing a collective concept is likely a matter of the choice of the translators. Some readers may make a conjecture that reduplicated classifiers become less popular in contemporary Cantonese as observed from their reduced usage in the 2010 edition. As native speakers, the authors confirm that the use of reduplicated classifiers is still prevalent in contemporary Cantonese. For this reason, investigations into more Cantonese historical documents should be made before jumping to a rash conclusion.

15.4 Conclusion

In this chapter, we first introduced the “Database of the 19th Century (1865–1894) Cantonese Christian Writings,” which provides a public data repository by digitizing 15 Cantonese Christian classics published in mid- to late nineteenth century with approximately 466,000 characters. Then, we provided a statistical account and a contrastive study on the use of classifiers present in the Cantonese translations of the 1880s edition and the 2010 edition of the four canonical gospels in the *Christian New Testament*. Our results show that while some classifiers have been used most

regularly since the nineteenth century, such as **kɔ̃³³** 個 (a general classifier), **kin²²** 件 (piece), **t^hiu¹¹** 條 (strip), **tsɛk³³** 隻 (mostly for counting animals and dolls), and **ti⁵⁵** 的/啲, the frequency of some classifiers in the 2010 edition drops drastically as a result of lexical replacement. For example, **tat³³** 筴 (for counting fields) is replaced by **fai³³** 塊. We also found that the reduction in frequency of reduplicated classifiers is a result of changes in translation strategy rather than a reduction in usage in contemporary Cantonese.

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1 The database is accessible publicly through this link:

www.polyu.edu.hk/cbs/hkchristdb/?fbclid=IwAR1S5m5RB9WcrZO-D0E9xrV4apNAb4KYoX-mtBoh0Nt4WWuscS7HuE3XpUM.

2 All the English translations of the verses in the *Bible* are adopted from the *King James Version* unless otherwise specified. <www.o-bible.com/kjv.html>.