Universal Multiple-Octet Coded Character Set
International Organization for Standardization
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1. Introduction

In the book named *Quanguo Zhuyao Fangyanqu Fangyin Duizhaobiao* published by Chinese Character Reform Commission in 1954, I found there were also several unencoded Bopomofo letters, some are for the Cantonese usages, and others are for other Chinese dialects usages. The Cantonese Bopomofo letters were also published by the Guangdong Province Governments after the founding of PRC, please see Fig. 1. I trust these letters are very useful but I am aware that the current evidences are not sufficient enough.

ㄍ and ㄎ are the initials (聲母), the corresponding IPA values are [kʷ-] and [kʰʷ-], and the Cantonese pinyin used for these two initials are GW- and KW- in the Unihan Database. For example, the kCantonese property value for 鬼 (U+9B3C) is *gwai2*, which the corresponding Bopomofo sequence should be ㄍㄟ; the kCantonese property value for 葵 (U+8475) is *kwai4*, which the corresponding Bopomofo sequence should be ㄎㄟ.

ㄜ and ㄏ are the finals (韻母), the corresponding IPA values are [œ] or [ø] and [ɐ], and the Cantonese pinyin used for these two initials are OE or -EO- and -A- in the Unihan Database. For example, the kCantonese property value for 梁 (U+6881) is *loeng4*, which the corresponding Bopomofo sequence should be ㄌㄜㄫ; the kCantonese property value for 雷 (U+96F7) is *leoi4*, which the corresponding Bopomofo sequence should be ㄌㄜㄧ; the kCantonese property value for 墨 (U+58A8) is *mak6*, which the corresponding Bopomofo sequence should be ㄇㄏㄎ.

Bopomofo	IPA	kCantonese
ㄍ	kʷ-	gw
ㄎ	kʰʷ-	kw
ㄜ	œ / ø	oe / -eo-
ㄏ	ɐ	-a-

2. Proposed characters

31BC	ㄪ	BOPOMOFO LETTER GW
31BD	ㄫ	BOPOMOFO LETTER KW
31BE	ㄮ	BOPOMOFO LETTER OE
31BF	ㄛ	BOPOMOFO LETTER AH

3. Ordering

The native ordering for the list of Bopomofo letters for Cantonese is shown as below according to Fig. 1.

ㄅ<ㄆ<ㄇ<ㄈ<ㄉ<ㄊ<ㄋ<ㄌ<ㄍ<ㄎ<ㄫ<ㄏ<ㄐ<ㄑ<ㄒ< ㄪ < ㄬ < 一<ㄨ<ㄩ<ㄚ

<ㄛ<ㄝ<ㄞ<ㄟ<ㄠ<ㄡ<ㄢ<ㄣ<ㄤ<ㄥ< ㄮ < ㄧ

Fig. 1 List of Cantonese Bopomofo Letters published by Guangdong Province Government

However, other 29 letters had been encoded in Unicode, 1.0. So, the ordering for four unencoded letters should be shown as below.

ㄪ < ㄬ < ㄮ < ㄧ

4. Unicode Properties

Block: Bopomofo Extended
Script: Bopomofo

```
31BC;BOPOMOFO LETTER GW;Lo;0;L;;;;;N;;;;;
31BD;BOPOMOFO LETTER KW;Lo;0;L;;;;;N;;;;;
31BE;BOPOMOFO LETTER OE;Lo;0;L;;;;;N;;;;;
31BF;BOPOMOFO LETTER AH;Lo;0;L;;;;;N;;;;;
```
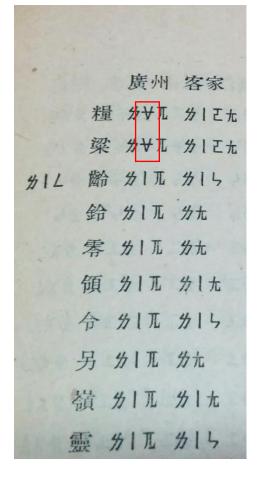
5. Evidence

Fig. 2 Quanguo Zhuyao Fangyanqu Fangyin Duizhaobiao, P. 17

Fig. 3 Quanguo Zhuyao Fangyanqu Fangyin Duizhaobiao, P. 35

		廣州	客家
	賴	ㄌㄞ	ㄌㄞ
ㄌㄟ	雷	ㄌㄟ	ㄌㄨㄧ
	類	ㄌㄟ	ㄌㄨㄧ
	淚	ㄌㄟ	ㄌㄨㄧ
	壘	ㄌㄟ	ㄌㄨㄧ
	累	ㄌㄟ	ㄌㄨㄧ
ㄌㄠ	老	ㄌㄛㄨ	ㄌㄛ ㄌㄠ
	勞	ㄌㄛㄨ	ㄌㄠ
	牢	ㄌㄛㄨ	ㄌㄛ ㄌㄠ
	撈	ㄌㄠ	ㄌㄛ ㄌㄠ
ㄌㄡ	漏	ㄌㄡ	ㄌㄡ

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Fig. 4 Quanguo Zhuyao Fangyanqu Fangyin Duizhaobiao, P. 39

	廣州	客家
糧	ㄌㄚㆭ	ㄌㄧㄛㆭ
粱	ㄌㄚㆭ	ㄌㄧㄛㆭ
齡	ㄌㄧㆭ	ㄌㄣ
鈴	ㄌㄧㆭ	ㄌㆭ
零	ㄌㄧㆭ	ㄌㆭ
領	ㄌㄧㆭ	ㄌㄧㆭ
令	ㄌㄧㆭ	ㄌㄣ
另	ㄌㄧㆭ	ㄌㆭ
嶺	ㄌㄧㆭ	ㄌㄧㆭ
靈	ㄌㄧㆭ	ㄌㄣ

Fig. 5 Quanguo Zhuyao Fangyanqu Fangyin Duizhaobiao, P. 44

Fig. 6 Quanguo Zhuyao Fangyanqu Fangyin Duizhaobiao, P. 45

Fig. 7 Quanguo Zhuyao Fangyanqu Fangyin Duizhaobiao, P. 63

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6. Bibliography

Chinese Character Reform Commission, Quanguo Zhuyao Fangyanqu Fangyin Duizhaobiao (《全國主要方言區方音對照表》), Beijing: Zhonghua Book Company, 1954

7. Acknowledgements

(End of Document)