

A Study of the Cantonese Hearsay Particle *wo* from a Phonetic Perspective

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Abstract

Cantonese is a tone language very rich in sentence-final particles which express moods and attitudes. Some of them are identical in phonetic segments but different in lexical tones. This paper discusses a pair of such SFPs in Cantonese, *wo3* and *wo5*, the former has been in use for a long time and its function has altered from indicating hearsay to unexpectedness and noteworthiness, while the latter is not found in the earlier literature and its only function is to express hearsay information. By reviewing the development of Chinese phonology and present-day Cantonese phonology, hypotheses are proposed in this paper to explain the reason why the tone of the hearsay *wo* would be tone 5 instead of the other tones when there are six contrastive lexical tones in Hong Kong Cantonese.

Keywords: Cantonese, Sentence-final particles, tone, hearsay

1. Introduction

1.1 Cantonese Sentence-final particles

The sentence-final particles (hereafter SFPs) in Cantonese are plenty; these particles are a group of morphemes attached at the end of utterances serving to express the speaker's mood and attitude, or sometimes even the meaning of a sentence, similar in function to intonation in intonation languages such as English. Kwok (1984) pointed out that there are around thirty monosyllabic SFPs commonly found in everyday conversation, and they are often used in clusters of two to four as a single unit to express different moods and emotions (Leung, 1992). They have a high frequency of occurrence in daily use and serve such communicative functions as indicating speech-act types, the source of information, and affective and emotional states (Matthews & Yip, 1994; Leung, 2008). Cantonese SFPs have been studied in detail in terms of their semantic and pragmatic functions (Cheung, 1972; Kwok, 1984; Luke, 1990; Leung, 1992; Matthews, 1994; Fung, 2000), but little has been researched on the history of particular particles.

1.2 The hearsay *wo*

Leung (2006) traced the origins and usage of the present-day Cantonese SFPs *wo3* and *wo5* using historical written Cantonese materials (published in 1910s), Hong Kong movies (from 1940s to 1970s) and Hong Kong University Cantonese Corpus (data collected in 1997-1998), and provided explanations for how they came into their forms and usage. It was found that *wo3* has been in use as an SFP since the late 19th century and its main feature was to express hearsay according to Ball (1888). However, there is no trace of *wo5* in Ball (1888) or any other early literature (e.g. Wisner, 1906). The lack of sound recordings from the early 20th century results in no substantial evidence of the phonetic features of the SFPs, and we are therefore not certain of when the hearsay SFP *wo5* came into use in Cantonese. As the second half of the 20th century was reached, the development of the SFP *wo3* was distinctive; its pragmatic functions expanded from “hearsay” (in the late 19th century, see Ball, 1888) to “realization”, “reminder”, “showing contrast” and “hearsay”. Being a multi-functional SFP in the past decades, *wo3*'s “hearsay” function might have been gradually shared by another particle identical in phonetic segments but different in tones. This is one of the possibilities of the origin of *wo5*. With the above background, this paper points out the differences between *wo3* and *wo5* (section 2) and suggests the possible reasons why the hearsay *wo* is currently with tone 5 but not the other lexical tones (sections 3 and 4).

1.3 Romanization

The Cantonese discussed in this paper is the variety spoken in Hong Kong. It is a tone

language having six contrastive lexical tones (Zee, 1999). In this paper the Jyutping Romanization scheme (Linguistic Society of Hong Kong, 1993) is adopted for the notations of Cantonese sounds. The corresponding IPA transcriptions for the phonemes and lexical tones to be discussed are summarized in Figure 1.

Figure 1. IPA transcriptions

<i>Lexical tones</i>				
Jyutping Tone no.	IPA	Name	Tone values	Examples
1	˥	High Level	55	fɛn˥ (to separate)
2	˨˨˦	High Rising	25	fɛn˨˨˦ (the powder)
3	˨˨	Mid Level	33	fɛn˨˨ (to train)
4	˨˨˩	Low Falling	21	fɛn˨˨˩ (the tomb)
5	˨˨˦	Low Rising	23	fɛn˨˨˦ (the fury)
6	˨˨˩˩	Mid Low Level	22	fɛn˨˨˩˩ (the share)
<i>Phonemes</i>				
w: /w/ o: /ɔ/ h: /h/ au: /əu/ m: /m/ u: /u/ n: /n/				
kw: /k ^{hw} / gw: /k ^w / k: /k ^h / g: /k/ b: /p/ d: /t/ f: /f/				
j: /j/ yu: /y/ eoi: /øy/ i: /i/ e: /ɛ/				

2. The SFPs *wo3* and *wo5* in modern Cantonese

The particles *wo3* and *wo5* are the same in phonetic segments and only different in tones. *Wo3* has been in use for a long time and mentioned in various documents, but *wo5* is nowhere to be found in the early works. This section discusses the differences between the two SFPs in Cantonese diachronically and synchronically.

Wo3 is used very frequently in modern Cantonese, and the earliest material mentioning the SFP *wo3* is Ball's *Cantonese Made Easy* (1888, p. 114, 2nd edition). In the syntax section of the book, there is a table called "List of Finals, and their Tonal Variants", in which *wo* appears in three tones: tone 3 (mid-level tone), tone 4 (low-falling), and tone 6 (low departing; *wo6* does not exist in modern Cantonese). Ball points out that the function of *wo3* is "denoting that the statement preceding it has been made by someone before", which is function of the hearsay particle *wo5* in modern Cantonese.

There is no mention of *wo5* in Ball's book (1888; 1924). *Wo5* is, however, commonly known as a hearsay particle in modern Cantonese used in reported speech to express objective attitudes (Kwok, 1984; Luke, 1990; Matthews, 1998). Cheung (1972) holds the stand that *wo5* is a hearsay particle which is a combination of the verb *waa6* (話 "to speak / to say") and the SFP *aa3* (啊 a frequently used SFP) and *aa3*. Cross-linguistic studies reveal that the "say" verb tends to develop into a hearsay marker of a complementizer (Heine et al., 1991; Hopper & Traugott, 1993; H. Sohn, 1999; Klamer, 2000; Heine & Kuteva, 2002). This

suggests another potential origin of the SFP *wo5*, which is worth more in-depth study in the future from a cross-language perspective. The particle *wo5* is best translated into English as “I have heard that...”, “I hear that...”, “s/he told me that...” or “Reportedly”. When people communicate with each other, they often provide the source of information and express their own standpoint and attitude. *Wo5* is not only concerned with the source of information, whether directly seen or heard or obtained from other people, but also reflects how much the speaker is willing to be responsible for the information he or she is providing, which is related to whether the information is reliable or not. This linguistic phenomenon stimulates a new aspect of research known as “evidentiality” (Plungian, 2001).

Although in modern Cantonese *wo3* and *wo5* can sometimes be substituted by each other, the difference of modality is apparent. *Wo3* reflects “unexpectedness, noteworthiness, remarkableness, unusualness...etc” (Luke, 1990), and *wo5* is used when the speaker is reporting other people’s views, and at the same time shows uncertainty about the reliability of the information and unwillingness of the speaker to be held responsible for the information. In other words, the particles *wo5* and *wo3* show the different attitudes and stances of the speakers and obviously have different social functions from the pragmatic point of view. Before discussing in the next section why tone 5 would be the most feasible tone of the hearsay particle, let us illustrate the hearsay function with the following examples containing *wo3* and *wo5*.

Example 1

Alan 唔 去 *wo3*

Alan m4 heoi3 wo3

Alan NEG go SFP

“Contrary to your expectation, Alan is not going.”

Example 2

Alan 唔 去 *wo5*

Alan m4 heoi3 wo5

Alan NEG go SFP

“Someone said that Alan is not going.”

In the above examples, without the SFPs the utterance will simply be a declarative sentence meaning “Alan is not going”. In Example 1, the speaker intends to “remind” the listener of the fact, contrary to his/her expectation, that Alan is not going, indicated by the use of *wo3*, whereas in Example 2, the main information that Alan is not going is the same, but the speaker explicitly says that the source of the information is not the speaker’s own but someone else’s, as indicated by the use of the SFP *wo5*. The function of *wo5* which indicates the external source of information is referred to as the hearsay function.

Example 3

呢 啲 嘢 佢 唔 知 *wo3*
 nei1di1 je5 keoi5 m4 zi1 wo3
 DEM things 3SG NEG know SFP

“Contrary to your expectation, he does not know about these things.”

Example 4

呢 啲 嘢 佢 唔 知 *wo5*
 nei1di1 je5 keoi5 m4 zi1 wo5
 DEM things 3SG NEG know SFP

“Someone said he does not know about these things.”

Without the SFPs the above statement is simply a declarative sentence meaning “he does not know about these things”. In Example 3 the speaker intends to “remind” the listener contrary to his/her expectation that the other party does not know about these things. This “contrast” feature is apparently indicated by the use of *wo3*. In Example 4, the information that the other party does not know about these things is the same, but the speaker emphasizes that the source of the information is from someone else and he is not going to take the responsibility, as indicated by the use of the SFP *wo5*. *Wo3* and *wo5* are certainly not interchangeable in the above examples; otherwise the meanings conveyed will be totally different. When we analyze this closely, we can see that there is a semantic difference when the two SFPs are employed to express speaker’s modality. The following table is a brief summary of the functions of *wo3* and *wo5* in the past and present. It is noticeable that the hearsay feature once belonged to *wo3* is now served by *wo5*.

Table 1. Brief summary of the functions of *wo3* and *wo5*

Particles	Past	Present
<i>wo3</i>	“denoting that the statement preceding it has been made by some one before” (Ball, 1888)	“unexpectedness, noteworthiness, remarkableness, unusualness etc” (Luke, 1990)
<i>wo5</i>	No mention	“hearsay” (Kwok, 1984; Luke, 1990; Matthews, 1998)

3. The hearsay particle *wo* in tone 5

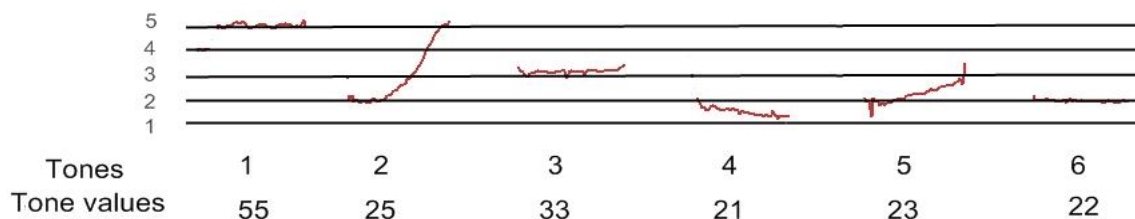
Leung (2006) suggested that during its historical development, *wo3* has expanded its pragmatic functions of hearsay to include the functions of another SFP *bo3*, and as time passed, the hearsay function became the characteristic of *wo5*. The evolution of *wo5* is worthy of further studies. The logical question to ask is, among the five lexical tones in present-day Cantonese, why would tone 5 (low rising) be the candidate for the hearsay

function instead of other tones? This section provides the possible reasons why tones 1, 2, 3, 4 and 6 would be less likely than tone 5 as the tone of the new particle.

3.1 The elimination of tones 1, 3, 4 and 6

There are six contrastive lexical tones in Cantonese with different contours. If we assign the tone contour range to the 5-point scale suggested by Chao (1930), we can represent the Cantonese tones in terms of tone values, numbers which indicate the initial and final relative pitch levels. Tone 1 (tone value 55), tone 3 (tone value 33), tone 4 (tone value 21) and tone 6 (tone value 22) are either level or slightly falling (Wu, 2008, p 23).

Figure 2. Cantonese tones represented by tone values (adapted from Wu, 2008)



Out of the five possible level tone values, except tone value 44, we can find the other four level tones in the Cantonese tonal system. It is conceivable that the space in the tone range for level tones is narrow and may increase the difficulty of meaning distinction. On the contrary, the space for rising tones is larger. As a result, if the hearsay feature were to be assigned to a sentence final particle which should be differentiable from other SFPs, then the new SFP should have a tone other than the four level tones to relieve the pressure on the tonal system. Moreover, as a matter of fact, tonally there is no SFP with tone 6 in modern Cantonese. Tones 1 and 6 can therefore be ruled out. Furthermore, the particle *wo* in tone 3 is an SFP to serve the reminder function (examples in section 2), and there is another SFP *wo* in tone 4 (Example 5 below) which conveys the feeling of surprising and unbelieving (Matthews, 1998). Both tones thus are unlikely to be a candidate.

Example 5

Alan 唔 去 *wo4*

Alan m4 heoi3 *wo4*

Alan NEG go SFP

“To my surprise, Alan is not going.”

3.2 The elimination of tone 2

The two rising tones in Cantonese are tone 2 (tone value 25) and tone 5 (tone value 23). We will first explain why tone 2 would not be the candidate for the hearsay function. There is a well known language phenomenon in Cantonese termed “diminutive tone sandhi” (Mai, 1991; 2000), referring to the fact that some commonly used words will end in tone 2 in speech when their lexical tones in isolation are other than tone 2. In these words, if the tone of the last syllable belongs to tones 4, 5 or 6 (the so-called *yang* series in traditional Chinese phonology term), the tone may be changed to tone 2 in conversation so as to express familiarity or unimportance, e.g., *jyu4* -> *jyu2* (魚 “fish”), *hau6mun4* -> *hau6mun2* (後門 “backdoor”). To avoid a low tone, some Cantonese words with a low tone value such as tone 4 (tone value 21) and tone 6 (tone value 22) will be changed to tone 2 to raise the whole pitch contour (Lin, 2002). Thus, the number of tone 2 syllables in Cantonese is remarkably large. Such phenomenon of diminutive tone sandhi essentially involves tones 4, 5, 6 and basically does not involve tone 3, and so the likelihood of tone 3 changing into tone 2 is minimal. If *wo5* did originate from *wo3* (see 1.2), then the new tone would not likely be tone 2.

3.3 Words in tone 5 are less in number

Out of the six tones in Cantonese, tone 5 is the most likely as a tone of a new SFP to express the hearsay function because tones 1, 2, and 6 are shown to be less likely above, and tone 3 is the tone of *wo* to convey the mood of reminder and contrast while tone 4 of *wo* is to express surprise. Besides the above discussion, another explanation based on the development of Cantonese tones can be offered. During the development of tones, quite a number of syllables which should have developed into tone 5 had developed into tone 6 in Cantonese. Such phenomenon is called *zhuo shang gui qu* “濁上歸去” (syllables with voiced obstruent initials and rising tone were changed to the “departing” tone; more details are given below) (He, 1988; Lau & Cheung, 2001), a phonological rule applicable to other Chinese dialects. Consequently, among the six lexical tones, syllables with tone 5 are much less in number than those with the other five tones. This fact is reflected in the Chinese Character Database (粵語審音配詞字庫; by the Chinese University of Hong Kong), which lists the information on the Cantonese pronunciations of all the Chinese characters found in several commonly used and authoritative Cantonese dictionaries. The Database includes a total of 13060 Chinese characters, and it is observed that syllables with the initials /kw/, /gw/, /g/, /b/, /d/, /f/, and zero-initial are not associated with tone 5 in Cantonese. There are 517 characters with tone 5, including some infrequently used characters. The characters with tone 5 can be divided into two groups, one which had sonorant initials (*cizhuo* initials 次濁聲母) in Middle Chinese, i.e., characters which are with /l/, /m/, /n/ and /ng/ initials (265 characters); and the other which had voiced obstruent initials (*quanzhou* initials 全濁聲母) in Middle Chinese (252 characters). Sonorant initials were not affected by the rule of *zhuo shang gui qu*; but many characters which had voiced obstruent initials in Middle Chinese underwent *zhuo shang gui*

qu, and as a result only 252 of these characters are in tone 5 in Cantonese now. Syllables with tone 5 are indeed relatively fewer in number compared to other tones, and this imbalance of distribution of tones would make tone 5 a good candidate for the assignment of tone to the SFP with the hearsay feature.

3.4 *The phenomenon zhuo shang gui qu*

The explanations in 3.3 can be substantiated with what we know about the development of Chinese phonology which resulted in tone 5 syllables in Cantonese being few in number. In Middle Chinese (6th to 10th centuries AD), there were four tones, namely the “level” (*ping*), “rising” (*shang*), “departing” (*qu*), and “entering” (*ru*) tones, and there were both voiced and voiceless initial consonants. The general consensus about Chinese phonology is that during the Middle Chinese era, there were two major phonological changes, namely (1) devoicing of voiced obstruent initials, and (2) the above-mentioned *zhuo shang gui qu* phenomenon (syllables with voiced obstruent initials and the “rising” tone being merged into the “departing” tone). The phenomenon *zhuo shang gui qu* is a tonal split which began in the Chinese dialects in the northern parts of China and had a high frequency of occurrence in the history of Chinese phonology. Let us first consider the case of Mandarin. For the syllables with the “rising” tone in Middle Chinese, those with voiced initials are now with the “departing” tone in Mandarin, and those with voiceless initials are now with the “rising” tone. For example, both the two characters 杜 (“to prevent”) and 賭 (“to bet”) were with the “rising” tone in Middle Chinese, but the former had a voiced initial whereas the latter had a voiceless initial. As a result of the phenomenon *zhuo shang gui qu*, the character 杜 now has a “departing” tone whereas 賭 is now pronounced with a “rising” tone in Mandarin. In fact, the same occurs in Cantonese, where 杜 is now pronounced with tone 6, derived from the “departing” tone, but 賭 is pronounced with tone 2, derived from the “rising” tone. Cantonese is said to be phonetically the closest dialect to Middle Chinese and such phenomenon is even more readily recognizable in Cantonese than in Mandarin since syllables with tones 1, 2 and 3 in Cantonese were associated with voiceless initials in Middle Chinese, and syllables with tones 4, 5 and 6 were associated with voiced initials.

The phenomenon *zhuo shang gui qu* began early in the phonological history of Chinese and was seen in more than one Chinese dialect by the end of the Tang Dynasty (618-907 AD), and scholars believe that by the Southern Song Dynasty (1127-1279 AD) it appeared in most of the Chinese dialects as all pronunciation-related materials after the Southern Song Dynasty reflected that *zhuo shang gui qu* had occurred. As we compare the number of syllables with voiced obstruent initials and rising tone in different Chinese dialects, we find that in the Guangzhou (Canton) dialect, of which Hong Kong Cantonese is a variety, about two-thirds of them are now pronounced with the “departing tone” (Chang, 1975; Chen & Newman, 1984;

He, 1988; Lau & Cheung, 2001). The words with tone 5 are therefore much less than those with other lexical tones.

4. The tone changes in some varieties of Cantonese

Section 2 points out that the particle *wo3* was always associated with *wo5* in discussions because they are the same in phonetic segments and only different in tones, though the evolution of *wo5* remains unclear. The tonal unlikeness inevitably leads to differences in meanings, moods and emotions. Strictly speaking, tone 3 and tone 5 are contrastively distinctive phonetically, but in daily conversations tone 3 may not be auditorily differentiated easily from tone 5 due to their little difference in tone values. To provide another perspective regarding the association and the relationship between tones 3 and 5, this section outlines the phenomenon of tone changes concerning the merging of tones 3 and 5 in some varieties of Cantonese, namely Hong Kong, Guangdong (Conghua 從化, Gaoming 高明 and Huizhou 惠州) and Malaysia (Cantonese is commonly used in Kuala Lumpur in the Chinese circle).

The effects of the two major phonological changes mentioned above exist in the phonology of modern Chinese dialects, and the changes are ongoing. In modern Cantonese, examples of syllables originally with tone 5 merging into tone 3 are not lacking, e.g., *ci5* 似 (“to resemble”), *kau5* 臼 (“mortar”), *se5* 社 (“society”). Cheng (2003) points out that in contemporary Hong Kong Cantonese, besides the merging of tone 5 into tone 3, there is also the merging of tone 3 into tone 5, and both phenomena occur concurrently. His analysis shows that the direction from tone 3 to tone 5 is more forceful than the reverse (Cheng, 2003, p. 15). Such tone 3 > tone 5 merging has not raised much discussion among scholars, but Vance (1976, p. 376) did observe the change of *si3* 試 (“to try”) as early as in 1970s and found that *si3* 試 was often pronounced as *si5* 市 (“the market”):

...it must be noted that the many instances where a low rising tone was identified as mid-high are almost certainly due to the fact that the word [si(33)] ‘try’ is often pronounced [si (13)] since it occurs with a low rising tone in many compounds.

In Hong Kong, quite a number of scholars noted in recent years that some syllables in tone 3 are now sometimes pronounced with tone 5, and this phenomenon often occurs in polysyllabic compound words (Cheng, 2003; Wong, 2006; Leung, 2007). Some of these characters (e.g., *wan3* 醞 “to brew”, *kwai3* 愧 “ashamed”) are always pronounced with tone 5 and speakers are even not aware of the fact that these characters should be pronounced with tone 3. For the other characters with tone 3, the original tone 3 has not been abolished and so there are two acceptable pronunciations, with tone 3 or with tone 5, e.g., *fan3* 販 (“to sell”), *cim3* 僭 (“to usurp”), *si3* 試 (“to try”), *kei3* 暨 (“and”), *se3* 舍 (“house”).

Moreover, concerning the phenomenon of tone merging, in some Cantonese dialectal areas,

such as in Guangdong Province, tones 3 and 5 have merged together to form a single tone category. There are at least three places where merging of tone 3 and tone 5 is found: Conghua, Gaoming (Zhan, 2002, p. 131) and Huizhou, and the merging of “rising” tone into “departing” tone is compatible with the development of Mandarin (Zhan & Cheung, 1990, pp. 57, 72, 98, 312-315). Killingley (1985) points out that a similar phenomenon also occurred in Malaysian Cantonese:

...Could it be possible that here is a case of two allophonic variants (mid-level 33 and low rising 13) being contrastively presented but identified as one toneme by the listeners? [si(33)] is a verb word which tends to occur most frequently in an aspected form (eg. [si ha] ‘try-for the first time/for a limited time’) and it is also a bound morph in compounds words like [si tse] ‘tempter’, [si tsi] ‘litmus paper’. Colloquially, [si] is a bound form with the general meaning ‘city’ and occurs in compounds like [sing si] ‘city’, [kai si] ‘market’ (p. 7)

Since no perfect contrasts are found between the LR tone and the ML (or LL) tone from which it could be low-rasied, the differences in tone should be treated as phonetic rather than phonological distinctions. This would be unlike the case of the phonological contrast between the HR tone and any low or mid-level tone, because perfect contrasts can be found for these tones. (p. 29)

Therefore, in her description of Cantonese, there are only five tones, with no tone 5 (p. 24). Vance (1976) took one more step and observed that it was difficult to auditorily differentiate tone 3 from tone 5:

In fact, all the subjects remarked that [si (33)] ‘try’ and [si (13)] ‘city’ were the most difficult to tell apart of all the test words, and there is no apparent explanation for this in acoustic terms. (p. 376)

Cheng (2003) further proposed that the phonological changes taking place in Conghua, Gaoming and Huizhou as observed by Zhan (2002) may affect the tonal system of Hong Kong Cantonese:

Geographically, the three places formed a triangular area surrounding Guangzhou, the origin of Hong Kong Cantonese. It is not surprising that if there is such a sound change in Cantonese actuated by language contact with these dialects... The two directions of tone change are competing with each other and eventually the two tones will merge. (Cheng, 2003, pp. 14-15)

He assumes that this is a natural consequence of the contact between the languages in geographical vicinity, and puts that in Hong Kong Cantonese, the merging of tone 3 into tone

5 and the merging of tone 5 into tone 3 will eventually cause the two tone categories to merge into one, similar to the cases in Conghua, Gaoming and Huizhou. If the tones in Cantonese do change in this way, it is conceivable that the distinction of their meanings may not rely on the different tones but depend on other features. However, on the whole, up to the present this is only a speculation based on some evidence found in other Cantonese-speaking areas, and in Hong Kong Cantonese tones 3 and 5 are still very distinctly separated.

5. Summary and Conclusions

In Cantonese, there are a number of SFPs which are identical in phonetic segments but different in tones. This paper focuses on a pair of such SFPs in Cantonese, *wo3* and *wo5*. *Wo3* is known as a particle with long history of usage but the origins of *wo5* still remain unknown. We can put forward the following possibilities of the origin of *wo5* for further investigation based on the discussions above: it derived from the multifunctional SFP *wo3* and came into use in the 20th century; or it was the combination of *waab* (話 a verb meaning “to speak”) and *aa3* (啊 a frequently used SFP); or perhaps it has been in use for a long time but no one in the past regarded it worth discussing. Concerning the functions of these SFPs, Ball (1888) documented the main function of *wo3* was “denoting that the statement preceding it has been made by some one before”, but as time passed, nowadays *wo3* is used to remind and to show contrast while *wo5* is commonly known as a hearsay particle, reporting what other people say. In terms of the adoption of the tone, sections 3 and 4 reviewed the development of Chinese phonology and present-day Cantonese phonology and explained why the tone of the hearsay particle would be tone 5 instead of tones 1, 2, 3, 4, or 6. On the whole, the explanations can be summarized as follows:

Table 2. The reason for the tone of the hearsay particle being tone 5

Tones	Hearsay <i>wo</i>	Reasons
1	No	level tone is not a good candidate
2	No	syllable number is large due to tone sandhi
3	No	another SFP <i>wo3</i> indicating reminder and contrast
4	No	another SFP <i>wo4</i> indicating surprise
5	Yes	syllable number is small due to <i>zhuo shang gui qu</i> ; the tone is close to tone 3 auditorily
6	No	not applicable to SFPs

Besides tracing the origin of *wo5*, a fundamental concept also needs to be raised for further investigation. Wu (2009) underwent acoustic analyses of ten Cantonese SFPs and suggested that the pitch of SFPs is likely to be the combination of tone and intonation, based on the findings that the “tones” of the SFPs are in some ways different from the traditional lexical

tones. This is a significant and promising research direction in Cantonese linguistics involving the fields of phonetics and pragmatics. Further in-depth studies would definitely help recognize the features and the influence of the pitch performance at the end of a sentence. I do hope that the discussion of this paper will bring some insights to other researchers.

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References

- Ball, J. D. (1888). *Cantonese Made Easy* (2nd edition). HK: The China Mail Office.
- Ball, J. D. (1924). *Cantonese Made Easy* (4th edition). HK: Kelly and Walsh Ltd.
- Chang, K. (1975). "Tonal development among Chinese dialects", *BIHP* (Bulletin of the Institute of History and Philology, Academia Sinica), 46.4, 636-710.
- Chao, Y-R. (1930). "A system of tone-letters", *Le Maître Phonétique*, 45, 24-27.
- Chen M. Y. & Newman J. (1984). "From Middle Chinese to Modern Cantonese", *Journal of Chinese Linguistics*, 12, 148-198 & 334-388; 13, 122-170.
- Cheng, S. K. (2003). "3a-2b Tonal Alternations: An On-going Sound Change in Hong Kong Cantonese?", Presentation to Lelab Members, City University of Hong Kong.
- Cheung, H-N. (1972). 張洪年：《香港粵語語法的研究》。香港：香港中文大學，1972年。
- Chinese University of Hong Kong. The Chinese Character Database (with Word-formations Phonologically Disambiguated According to the Cantonese Dialect). Online: <http://arts.cuhk.edu.hk/Lexis/lexi-can/> (accessed 1-AUG-2009).
- Fung, Roxana S-Y. (2000). *Final Particles in Standard Cantonese: Semantic. Extension and Pragmatic Inference*. PhD dissertation. The Ohio State University.
- He, D-A. (1988). 何大安：〈濁上歸去與現代方言〉，《中央研究院歷史語言所集刊》第59年。台北：中央研究院，1988年。
- Heine & Kuteva (2002). *World Lexicon of Grammaticalization*. Cambridge: Cambridge University Press.
- Heine et al. (1991). *Grammaticalization: a conceptual framework*. Chicago: University of Chicago Press.

- Hopper, P. J. & Traugott, E. C. (1993). *Grammaticalization*. Cambridge: Cambridge University Press.
- Killingley, S. Y. (1985). *A New Look at Cantonese Tones: Five or Six?* Newcastle upon Tyne: Grevatt & Grevatt.
- Klamer, M. (2000) *How report verbs become quote markers and complementizers*. *Lingua*: 110. 69-98.
- Kwok, H. (1984). *Sentence Particles in Cantonese*. Centre of Asian Studies, The University of Hong Kong.
- Lau, C-F. & Cheung, K-H. (2001). 劉鎮發、張群顯：〈中古濁上字的演變與粵客贛方言〉，載《香港客粵方言比較研究》。廣州：暨南大學出版社，2001年。
- Leung, C-S. (1992). *A Study of the Utterance Particles in Cantonese as Spoken in Hong Kong*. MPhil thesis. The Hong Kong Polytechnic University.
- Leung, W-M. (2006). *On the synchrony and diachrony of sentence final particles: the case of wo in Cantonese*. PhD dissertation. The University of Hong Kong.
- Leung, W-M. (2007). 梁慧敏：〈香港粵語的聲調變異現象〉，《粵語研究》2:48-53。澳門：澳門粵方言學會，2007年。
- Leung, W-M. (2008). “Promising Approaches for the Analysis of Sentence-final Particles in Cantonese”, *Asian Social Science*, 4(5), 74-82.
- Lin, J-P. (2002). *Study of intonation in Hong Kong Cantonese*. PhD dissertation. The Chinese University of Hong Kong.
- Linguistic Society of Hong Kong. (1993). *The LSHK Cantonese Romanization Scheme*. Retrieved from <http://www.lshk.org/cantonese.php>
- Luke, K. K. (1990). *Utterance Particles in Cantonese Conversation*. Amsterdam ; Benjamins.
- Mai, Y. (1991). 麥耘：〈廣州話的小稱變音及其來源〉，載《第三屆國際粵方言研討會論文集》，1991年。
- Mai, Y. (2000). 麥耘：〈廣州話的聲調系統與語素變調〉，載《開篇》Vol. 20，東京好文出版，2000年12月。
- Matthews, S & V. Yip (1994). *Cantonese: a Comprehensive Grammar*. London: Routledge.
- Matthews, S. (1998). “Evidentiality and mirativity in Cantonese: *wo3*, *wo4*, *wo5*!” *Proceedings of the International Symposium on Chinese Languages and Linguistics*,

Academia Sinica.

Plungian, Vladimir A. (2001). “The Place of Evidentiality within the Universal Grammatical Space”, *Journal of Pragmatics*, 33, 349–357.

Sohn, Ho-Min (1999). *The Korean Language*. Cambridge: Cambridge University Press.

Vance, T. J. (1976). “An Experimental Investigation of Tone and Intonation in Cantonese”, *Phonetica*, 33, 368-396.

Wisner, O. F. (1906). *Beginning Cantonese*. Canton: China Baptist Publ. Society.

Wong, T-S. (2006). 黃得森：〈香港粵語陽上陰去相混之始〉，論文發表於第七屆中國語音學學術會議暨語音學前沿問題國際論壇，北京大學，2006年。

Wu, W-L. (2008). “An Acoustic Phonetic Study of the Intonation of Sentence-Final Particles in Hong Kong Cantonese”, *Asian Social Science*, 4(2), 23-29.

Wu, W-L. (2009). Sentence-final particles in Hong Kong Cantonese: Are they tonal or intonational? in the *Proceedings of the 10th Annual Conference of the International Speech Communication Association (Interspeech 2009)*, Brighton, UK, pp2291-2294.

Zee, E. (1999). “Chinese (Hong Kong Cantonese)”, in the International Phonetic Association, *Handbook of the International Phonetic Association*. Cambridge, U.K.: Cambridge University Press, 58–60.

Zhan, B-H. & Cheung, Y-S. (1990). 詹伯慧、張日昇：《珠江三角洲方言綜述》。香港新世紀出版社，1990年。

Zhan, B-H. (2002). 詹伯慧主編：《廣東粵方言概要》。廣州：暨南大學出版社，2002年。

Abbreviations

DEM	Determiner
NEG	Negator
SFP	Sentence-final Particles
SG	singular