

# On the Semantics of Cantonese Changed Tone or Women, Matches, and Chinese Broccoli

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## 1. Introduction

As many researchers have noted, southern dialects of Chinese are particularly rich in their lexical use of tone. In Cantonese, even more than in northern dialects such as Mandarin, lexical tone bears a particularly heavy functional load. For example, Chan (1987) noted that Cantonese songs require the melody to conform to the tone contours of the lyrics, a requirement not found in Mandarin. Indeed, the lexical functional load on tone in Chinese is so high that grammatical processes involving tone are very rare. For as Schuh (1978) points out,

Were tones in Chinese languages allowed to undergo the variety of syntagmatic influences typical of African languages, where a particular syllable may have a number of tonal realizations depending on tonal environment and other factors, the lexical role of tone would be jeopardized. (p. 251)

Although this is generally the case with Cantonese, such phenomena do exist. What I'm going to talk about in this paper is a particular tone change in Hong Kong Cantonese, producing lexical items marked by what is usually called the "changed tone," one of two specific high tones.

The changed tone has been widely remarked on - in fact Giles' 1892 dictionary of Chinese mentions the changed tone, adding that "the discovery of these 'variants' has only been made within the past fifteen years" and that "these 'variants' are in full vogue through the region where the Canton group of dialects is spoken." But from that time onward, most studies have focused on describing the phonological conditions to the change, giving short shrift to the essential semantic side of the process. Most researchers have followed Y. R. Chao, who noted in 1947 that the changed tone "has a morphological meaning, namely, 'that familiar thing one often speaks of.' Few studies have pursued the matter to any further semantic depth. To be fair, even Chao noted that this rather vague abstraction was merely a "convenient summary of a variety of similar meanings." I'd like to take my cue from Chao and try to characterize these "similar meanings."

In order to do so, I will bring to bear semantic tools of the sort used by Claudia Brugman in her analysis of the English preposition "over", (Brugman 1981) and George Lakoff in *Women, Fire, and Dangerous Things* (Lakoff 1987). In particular, I will discuss the semantic radial category delimited by words occurring with the changed tone, centered around a "diminutive" function. Many extended uses of the changed tone will be shown to be motivated by this diminutive semantic core.

Along the way, I will discuss some diachronic and comparative issues in pan-Yue diminutives, and discuss some arguments considering the changed tone as the residue of earlier segmental processes.

## 2. The Changed Tone

Hong Kong Cantonese is normally considered extremely close to the dialect of Guangzhou. However, the dialects do seem to be diverging, particularly with respect to the changed tone. Since the process of tone change is not at the same stage of productivity in the two dialects, I will concern myself exclusively with Hong Kong Cantonese, which I will refer to as Cantonese for brevity. Thus much compiled evidence (for example Rao 1981) is used only as a guide to elicitation. The orthography used in examples is that of Lau (1977); the tones are numbered as in Figure 1, and the high-rising changed tone will be marked with an asterisk.

As is clear in Figure 1, Hong Kong Cantonese has six tone classes. Of course by traditional Chinese philology there are nine tones, but for the purposes of synchronic description, only six are tonetically distinct. Syllables with stopped finals, that is with *ru sheng*, the entering tone, do have a shorter tone than the corresponding level tones in open and nasalized segments, but this is sub-phonemic. Until quite recently, and perhaps still with some older speakers, particularly men, there were actually seven distinctive tones. However, in the idiolects of most modern speakers of Hong Kong Cantonese, the high level and high falling tones have fallen together. This is true with my informant, who is a twenty-five year old woman.

1	2	3	4	5	6
<i>yin ping</i>	<i>yin shang</i>	<i>yin qu</i>	<i>yang ping</i>	<i>yang shang</i>	<i>yang qu</i>
High Level	High Falling	High Rising	Mid Level	Low Falling	Low Rising
55:	53:	35:	33:	21:	13:
(fallen together)					22:

Figure 1 - Cantonese Tones

The loss of the seventh tone turns out to be relevant to the discussion of the changed tone because there are actually *two* changed tones, not just one. In other words, there are two phonetically distinct products of the tone change derivational process. With some exceptions, each of the Cantonese tones acquires a predictable one of these changed tones from the derivational process. The two changed tones are identical to the high level and the high rising tones.

The rule might be summarized as in Figure 2. Note that the high falling tone changes to the high level tone, and the other tones, with the exception of the high rising tone, change to the high rising tone. Now recalling that the high level and high falling tones have fallen together in Hong Kong, (which is to say they are in free variation) you will see that about half the data for this derivational process is lost, at least with young informants. The only clear cases where the derived high level tone is clearly noticeable are the few exceptional cases which violated the derivational rule in Figure 2. In other words, words of lower tones which changed to high level and not high rising tone. Other evidence for the high level derived tone, can readily be found in dictionaries and word lists compiled by older speakers. But in the dialect of my informant, the right half of the rule in Figure 2 is completely inoperative.

Mid Level		33:						
Low Rising		13:						
Low Level		22:	→	High Rising		High Falling	→	High Level
Low Falling		21:		35:		53:		55:
High Rising Changed Tone				High Level Changed Tone				

Figure 2 - Tone Change

Because the changed tone carries a morphological rather than phonological function it is best looked at as a derivational process reminiscent of the Archaic Chinese processes of derivation by tone change, and not a sandhi phenomenon. This derivational process is no longer productive in its entirety, although as will be shown later, some aspects are indeed fully productive. However, I'm going to talk about it in item-and-process terminology, even though in many cases the tone shift is completely lexicalized.

Although the derived tone is identical with the high rising tone, this wasn't necessarily always the case. In fact, it seems quite likely that the changed tone and the high rising tone fell together only very recently, a theory also advanced by Kam (1980). Evidence for this position comes from many sources, but perhaps the strongest is comparative - as we will note later, in all the other Yue dialects which we will have occasion to mention, the changed tone is a high rising one *distinct* from any lexical tone. And as recently as 1947, Y. R. Chao claimed that the Cantonese changed tone was clearly different from the high rising tone in that it began lower, at 2 instead of 3. But if this was the case then, it is certainly not now, at least not in Hong Kong.

To summarize, then, the tone change rule is a **paradigmatic replacement** rule (in the sense of Schuh 1978). Thus the rule is not formulated in terms of feature changes, but as absolute replacement of tone. It replaces all non-high tones with the high rising tone, and does not affect the high level and high rising tones.

### 3. Phonological Constraints

As might be expected from the less than fully productive state of the rule in Figure 2, it has somewhat complex phonological constraints. First is the fact that the tone shift excludes all words of original high rising tone. This is because, as discussed above, the *derived* tone is identical with the high rising tone. So the process is simply not applicable to words with high-rising tone, and of course with the loss of the level-oblique contrast in the high tone, it is applicable to no high tones at all. Thus we are in the position of having a morphological process with semantic force, but phonological constraints preventing it from applying to lexical items that it otherwise might.

Additionally, the tone shift is much more common with words of lower tones - the majority of examples are from words with original low falling or low level tones. A very small number are from words with low rising tones or mid level tones. I will propose later that many of the mid level examples are actually from a distinct nominalizing process not related to the diminutive tone shift.

The next phonological constraint is also somewhat unusual, and brings up another issue in the analysis of the tone shift. The changed tone applies only idiosyncratically to bisyllabic words. In bisyllabic words, the change seems to only be allowed in the final syllable. So there are many examples where the semantics would seem to predict a changed tone in the first syllable of a bisyllabic root, but no change occurs. We will come back to this point later as evidence for a suffixal origin for the changed tone.

### 4. The Changed Tone as Derivational Process

The rest of the paper will focus on the use and semantics of the changed tone, in two parts. First I'll stress the derivational nature of the tone change process. Noting that the process is primarily a nominalizing one, I'll outline a rough derivational typology, pointing out the ubiquitous use of metaphor and metonymy in the derivations. Next, I'll change the focus to the semantic domain, and illustrate the radial category formed around the concept of the diminutive.

Derivation by tone change is not a new process in Chinese. Remnants of such a very productive process in Middle Chinese are to be found in abundance in the modern Cantonese lexicon. However, the Cantonese process differs from the older pan-Chinese one in that it tends to be a *nominalizing* process, as we will see, where the older one was a more general one, and of course

in the specifics of the lexical items which have undergone the change. In addition, the Cantonese process was productive up until quite recently, and in some parts of it are still productive, while the Middle Chinese process is present only in its remains.

One of the most common of the derivational patterns is the deverbal nominalization. Below are a few examples where the derived noun is the *object* of the original verb.

家用	ga <sup>1</sup> yung <sup>6</sup> *	[HOUSE USE(V)]	"household necessities"
燒賣	siu <sup>1</sup> maai <sup>6</sup> *	[ROAST SELL(V)]	"pork dumplings"

In the second case, of course, there is not only the move to the *object* of the verb "sell", but also the idiosyncratic limitation to dumplings. Other deverbal nominalizations include quite a large number of instrument nominalizations:

掃	so <sup>3</sup> "to dust"	->	so <sup>3</sup> * "broom, duster"
拍	paak <sup>3</sup> "to hit, slap"	->	paak <sup>3</sup> * "racquet"
話	wa <sup>6</sup> "to speak"	->	wa <sup>6</sup> * "speech, dialect"
販	faan <sup>3</sup> "to peddle"	->	faan <sup>3</sup> * "peddler"
杖	jeung <sup>6</sup> "to beat"	->	gwaai <sup>2</sup> jeung <sup>6</sup> * "walking stick"

Nominalizations are also quite commonly formed from noun classifiers. In the most typical case, the derived nominal expresses the central or prototypical member of the semantic class delimited by the classifier. Thus note tiu<sup>4</sup>, which is the classifier for long, narrow things, prototypically rods and sticks, forms the noun tiu<sup>4</sup>\*, "wand, bar, stick". Note that although the classifier is also used for other, metaphorical extensions of long, narrow things, such as roads and rivers, the nominalization does not include these.

條	tiu <sup>4</sup> "long, narrow Clf"	->	柳條	lau <sup>5</sup> [WILLOW] tiu <sup>4</sup> * "willow wand"
件	tiu <sup>4</sup> "long, narrow Clf"	->	金條	gam <sup>1</sup> [GOLD] tiu <sup>4</sup> * "gold bar"
位	gin <sup>6</sup> "affairs, matters Clf"	->	事件	si <sup>6</sup> [AFFAIR] gin <sup>6</sup> * "incident"
位	wai <sup>6</sup> "persons, seats Clf"	->	位	wai <sup>6</sup> * "location, place"
架	ga <sup>3</sup> "Clf for shelves, etc"	->	架	ga <sup>3</sup> * "shelf"

Nominalizations from adjectives are somewhat less common, and a few examples are presented.

白	baak <sup>6</sup> "white"	->	眼白	ngaan <sup>5</sup> [EYE] baak <sup>6</sup> * "whites of eyes"
黃	wong <sup>4</sup> "yellow"	->	蛋黃	daan <sup>5</sup> [EGG] wong <sup>4</sup> * "egg yolk"

In the rest of the cases here, the derivation proceeds from noun to noun, so rather than a nominalizing force the tone change derives new nouns through metaphoric and metonymic routes. Note the metonymic extension of "kitchen" to "someone who works in a kitchen, cook". Below this is an excellent example of a body-part metaphor, the extension of physical "face" to "dignity, prestige" or "side, covering".

廚	chui <sup>4</sup> "kitchen"	->	廚	chui <sup>4</sup> * "cook"
	min <sup>6</sup> "face"	->	船面	suen <sup>4</sup> [SHIP] min <sup>6</sup> * "ship deck"
面	min <sup>6</sup> "face"	->	反面	faan <sup>2</sup> [OPPOSE] min <sup>6</sup> * "be cold to friends"
	min <sup>6</sup> "face"	->	封面	sue <sup>1</sup> [BOOK] min <sup>6</sup> * "book cover"
	min <sup>6</sup> "face"	->	俾	bei <sup>2</sup> [GIVE] min <sup>6</sup> * "to do a favor"

If we examine the words that have undergone nominalization or metaphoric extension, it immediately stands out that the vast majority of the derived words have come from words with the third or sixth tone. This is an important fact, for the third and sixth tones are the *yin* and *yang* reflexes of the Ancient Chinese *qu sheng*, the departing tone. This seems to suggest that the nominalizing process originally applied only to words in the departing tone, and of course the entering

tone words (checked syllables) that have the same tone level. If this observation is not simply due to random fluctuations in the data, it suggests two things. First, it suggests great age for the process, to have applied before the *yin-yang* split occurred. And second, that the tone rules at that time must not have distinguished between open and closed finals.

However, there are some exceptions to the generalization, three of which have been included above.

## 5. Semantic Domain of Changed Tone

We turn now to the semantic domain characterized by the changed tone. I have said that the domain is best expressed as a radial category with diminution as the central member. I will begin by attempting to explain the barest essentials of the notion of a radial category. In attempting to characterize the meaning marked by such grammatical tools as noun classifiers, or in this case derivation by tone change, George Lakoff proposed that instead of searching for the most abstract feature set that covers all the data - surely an impossible task in this problem, - that we characterize the semantic domain as a network of concepts. By expressing the similarities and differences among concepts and expressing the result as a set of conceptual mappings in a network formalism, we are better able to really talk about what it *means* to be "in the changed tone".

A radial category is one such category-type. Here there is a central subcategory, and non-central extensions of the subcategory. But the extensions are not generated from the central subcategory by any semantic rule. Indeed they must be memorized in learning the category. So the relation between the central and extended members of the category is not one of *prediction*, but one of *motivation*. I will not claim to be able to predict which extended senses arise from the central sense of the diminutive - only to explain what the motivation was for the ones that there are, and by doing so shed some light on the nature of the category.

Figure 3 shows a representation of the radial category formed by the changed tone. Note first that there are four major extensions from the central diminutive category. These are small things, familiarity, contempt, and approximations. I will now go through some of the more interesting of these peripheral categories, touching on the structure of each of the peripheral categories themselves, and the metaphorical nature of the semantic links between the central and peripheral members.

### 5.1. Small Things

To begin with, note the subcategory on the left, which I have called "Small (Round) Things". These are the cases where a mostly literal diminutive is applied. I have put the word "round" in parentheses because although the prototypical member of this subcategory is a small round object, many of the members do not share this feature. Typical examples of this category are cases of the well-understood diminutive derivational process. These include products of such metaphorical derivations as *toi*<sup>4</sup> "terrace or stage", to *toi*<sup>2</sup> "table".

台	<i>toi</i> <sup>4</sup> "stage, terrace" ->	枱	<i>toi</i> <sup>4</sup> * "table"
柴	<i>chaai</i> <sup>4</sup> "firewood" ->	火柴	<i>foh</i> <sup>2</sup> [FIRE] <i>chaai</i> <sup>4</sup> * "matches"
裙	<i>kwan</i> <sup>4</sup> "skirt" ->	圍裙	<i>wai</i> <sup>4</sup> [ENCLOSE] <i>kwan</i> <sup>4</sup> * "apron"
鏡	<i>geng</i> <sup>3</sup> "mirror" ->	眼鏡	<i>ngaan</i> <sup>5</sup> [EYE] <i>geng</i> <sup>3</sup> * "eyeglasses"

#### 5.1.1. Diseases and Bugs

A somewhat bizarre subclass of the diminutive is a class consisting of diseases or irritations with small, round skin symptoms.

痲	<i>ma</i> <sup>4</sup> * "measles"
瘰	<i>mak</i> <sup>6</sup> * "mole"

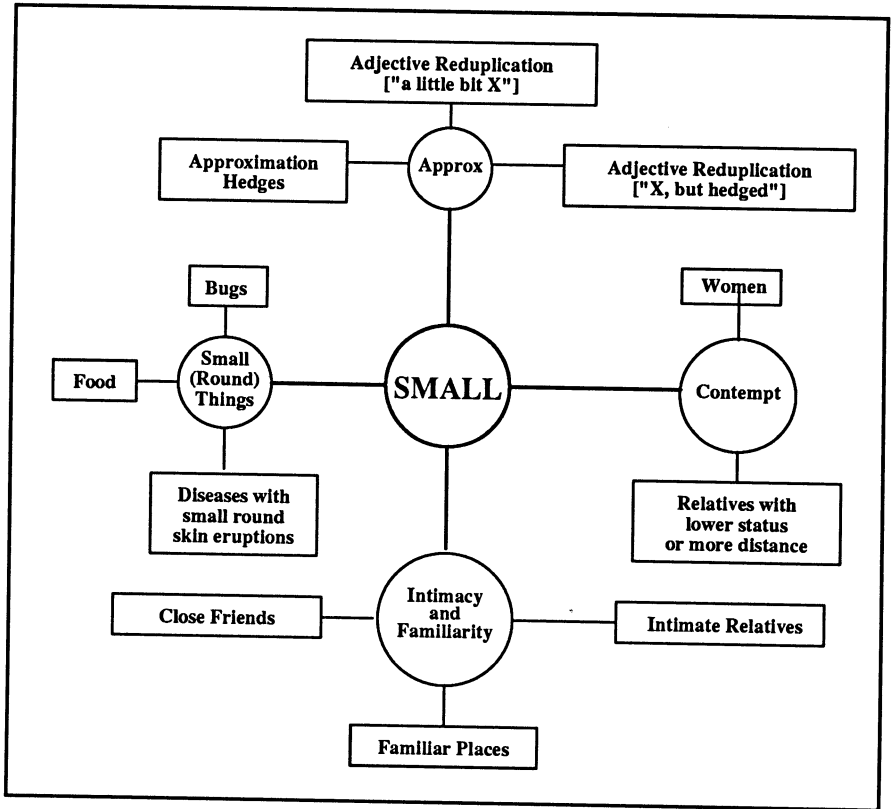


Figure 3 - The Diminutive Changed Tone

痘  
腐

dau<sup>6\*</sup> "smallpox"

lau<sup>6\*</sup> "swelling, tumor"

Many names of bugs also take the changed tone. Again, bugs are a salient small thing.

甲由

gaat<sup>6</sup> jaat<sup>6\*</sup> "cockroach"

蝴蝶

woo<sup>4</sup> dip<sup>6\*</sup> "butterfly"

#### 5.1.2. Food

An extraordinary number of words relating to food take the changed tone. I have divided these into four major subclasses; fruits, vegetables, birds, and seafood. Besides these four concepts, other meanings relating to food are extraordinarily common in the changed tone, such as the following:

蛋  
角

daan<sup>6\*</sup> "egg"

gok<sup>3</sup> "corner" ->

gok<sup>3\*</sup> "triangular pastry"

### 5.1.2.1. Fruit

The names of most fruits usually appear in the changed tone. Again, these fruits are small and round, fitting the concept of the prototypical small object discussed above.

Note here that of the fruits which do not take the changed tone, durian and pineapple are particularly large. In addition, although it is not clear what relevance this may have, both words are borrowed into Chinese. As for the final word, apricot, it is unclear to me why the tone change tone does not occur.

Changed Tone			No Change		
梨	lei <sup>4*</sup>	"pear"	杏	hang <sup>6</sup>	"apricot"
李	lei <sup>5*</sup>	"plum"	榴蓮	lau <sup>4</sup> lin <sup>4</sup>	"durian"
桃	to <sup>4*</sup>	"peach"	菠蘿	boh <sup>4</sup> loh <sup>4</sup>	"pineapple"
梅	mooi <sup>4*</sup>	"plum"			
石榴	sek <sup>6</sup> lau <sup>4*</sup>	"pomegranate"			
綠柚	luk <sup>1</sup> yau <sup>6*</sup>	"pomelo"			
橙	chaang <sup>4*</sup>	"orange"			

### 5.1.2.2. Vegetables

Again, beans and tomatoes are small and roundish. A particularly clear food-related example is *gaai<sup>3</sup> laan<sup>4\*</sup>*, "Chinese broccoli" which contrasts with *laan<sup>4</sup> orchid*". As for *bin<sup>2</sup> dau<sup>6</sup>*, this exact lexical item is the only type of bean not to take the changed tone in Taishan as well as Cantonese, as Cheng (1973) comments, and is as much of an enigma for Cantonese as it is for Taishan.

Changed Tone			No Change		
大豆	daai <sup>6</sup> dau <sup>6*</sup>	"bean"	扁豆	bin <sup>2</sup> dau <sup>6</sup>	"lima bean"
茄	ke <sup>3*</sup>	"eggplant/tomato"			
芥蘭	gaai <sup>3</sup> laan <sup>4*</sup>	"Chinese broccoli"			
西芹	sai <sup>1</sup> kan <sup>4*</sup>	"celery"			

### 5.1.2.3. Seafood

Here note that small, edible fish and sea creatures take the changed tone, while larger, and inedible one, do not. Another puzzling example is *chai<sup>4</sup> yu<sup>4</sup>* "walleye pollack".

Changed Tone			No Change		
鯇魚	chong <sup>1</sup> yu <sup>4*</sup>	"pomfret"	魚鱷	ngok <sup>6</sup> yu <sup>4</sup>	"crocodile"
煙魚	fan <sup>1</sup> yu <sup>4*</sup>	"smoked fish"	鯨魚	king <sup>4</sup> yu <sup>4</sup>	"whale"
魷魚	yau <sup>4</sup> yu <sup>4*</sup>	"squid"	鯊魚	sa <sup>1</sup> yu <sup>4</sup>	"shark"
蜆	loh <sup>3*</sup>	"conch"	望魚	chai <sup>4</sup> yu <sup>4</sup>	"walleye pollack"
螃	paang <sup>4</sup> kei <sup>4*</sup>	"land crab"	鯊魚		

### 5.1.2.4. Birds

Again, small and/or edible is the key. The difficulty in deciding which is the right answer involves finding a small, inedible bird with low tone. Very likely now is that both size and edibility contribute to the characterization of the domain.

Changed Tone			No Change		
鵞	ngoh <sup>4*</sup>	"goose"	鳥	toh <sup>4</sup>	"ostrich"
雀	jeuk <sup>3*</sup>	"sparrow, small bird"			
鶴	hok <sup>3*</sup>	"crane"			

鴨	aap <sup>3*</sup>	"duck"
金鴿	gap <sup>3*</sup>	"squab, pigeon"

## 5.2. Contempt

The second major extension of the diminutive is to contempt. The link between the central diminutive and contempt is a standard metaphorical one, perhaps a universal one. In section 6 we note contempt readings for the changed tone in other Yue dialects as well. In the examples below, note the extension of the word *yau<sup>5</sup>*, "friend", to mean someone with whom one would prefer not to be associated. In addition, note the particularly sexist category formed by tone change to the word for "woman". A droll note is that the same tone-changed word *nui<sup>5\*</sup>* means "daughter" - here by the metaphoric extension to intimate and especially younger kinship terms.

	yau <sup>5</sup> "friend" ->	炒友	chau <sup>2</sup> [SPECULATE] yau <sup>5*</sup> "speculator"
友	yau <sup>5</sup> "friend" ->	鑿鑿友	gwoo <sup>2</sup> waak <sup>6</sup> [SNEAKY] yau <sup>5*</sup> "sneaky rascal"
	yau <sup>5</sup> "friend" ->	儂友	bong <sup>6</sup> [TO SPONGE] yau <sup>5*</sup> "sycophant"
	yau <sup>5</sup> "friend" ->	大脚友	daai <sup>6</sup> geuk <sup>3</sup> [BIG LEG] yau <sup>5*</sup> "flatterer"
女	nui <sup>5</sup> "woman" ->	舞女	mo <sup>5</sup> [DANCE] nui <sup>5*</sup> "dance hostess"
	nui <sup>5</sup> "woman" ->	俾女	sau <sup>1</sup> [AMEND] nui <sup>5*</sup> "nun"
	nui <sup>5</sup> "woman" ->	石女	sek <sup>6</sup> [STONE] nui <sup>5*</sup> "frigid woman"

## 5.3. Familiarity and Intimacy

The third major extension is also universal, and also metaphorical. This is to familiarity and intimacy, particularly with human terms - names or kinship terms. One example is in a vocative usage with a close friend, the name of the friend can take the changed tone. Some kinship terms, such as *mooi<sup>6</sup>* "sister" often take the changed tone.

## 5.4. Approximation

The link between diminution and approximation is a meta-linguistic one. This will be more clear as we examine each of the submembers of this category. There are three - two kinds of reduplicated adjectives and a group of hedges.

### 5.4.1. Reduplication of Adjectives 1

Reduplication of adjectives is an extremely common process in Chinese, and tone change in reduplicated adjectives is perhaps the most widespread form of tone change across the dialects. In Cantonese, tone change on reduplicated adjectives takes two forms. In the first, the second syllable takes the changed tone. The derived meaning is "X to a diminished extent," or "a little bit X", where X is the basic semantics of the adjective in question. Thus the changed tone has a weakening or softening force, diminishing the extent to which the associated predicate holds. An example:

紅 hung<sup>4</sup> "red" -> hung<sup>4</sup> hung<sup>4\*</sup> "reddish"

More often than not, this type of adjective reduplication co-occurs with the suffix *dei<sup>2</sup>*, as in *hung<sup>4</sup> hung<sup>4\*</sup> dei<sup>2</sup>* "reddish".

In a rather neat opposition to the tone change diminishing adjectival force, when the *first* syllable in a reduplicated adjective changes tone, the adjective acquires an emphatic force, so

紅紅 hung<sup>4\*</sup> hung<sup>4</sup> "very red"

This process is less common than the other, as is also noted by Kam (1980).



5.4.2. Adjective Reduplication 2

The second kind of adjective reduplication differs from the first in a few ways. First is its syntactic function. Where the first type of reduplication produces a derived form that is still an adjective, in the second construction the derived form is an adverb, and appears preverbally in an AAB pattern.

慢慢行	maan <sup>4</sup> maan <sup>4</sup> haang <sup>4</sup>	[SLOW SLOW WALK]	"akin to Eng. 'drive safely'"
慢慢食	maan <sup>4</sup> maan <sup>4</sup> sik <sup>6</sup>	[SLOW SLOW EAT]	"akin to Eng. 'help yourself'"

This second construction seems to only appear in commands, and has a mild, somewhat motherly tone to it. Thus where the first type had the hedge modifying the semantic content of the adjective, diminishing its extent, in the second type the hedge modifies the utterance of the adjective, softening a command to a wish or benediction. Assuming that this second form of reduplication arose from the first, we see a diachronic change from softening or weakening the locutionary force of the adjective to softening or weakening the illocutionary force of the speech act.

Thus extending from the first to the second type of diminutive involves involves a change of domain from the literal meaning of the utterance to the discourse situation. The two rules' semantic structures for the two cases of reduplication might be stated as follows:

Redup1

Hedge the adjective: "Weaken or soften the locutionary force of the adjective."

Redup2

Hedge the utterance: "Weaken or soften the illocutionary force of the utterance."

5.4.3. Hedges

Quite a number of postpositions that have the sense of "approximately", or "more or less", take the changed tone.

大概	dai <sup>6</sup> koi <sup>3</sup> *	"about"
上下	seung <sup>6</sup> ha <sup>6</sup> *	"more or less"
左近	jo <sup>2</sup> gan <sup>6</sup> *	"more or less"
左近	jo <sup>2</sup> yau <sup>6</sup> *	"more or less" (Note minimal pair with jo <sup>2</sup> yau <sup>6</sup> 'left and right')
左近	do <sup>3</sup>	"postposition: place, location" -> do <sup>3</sup> * "more or less"

The extension of the idea of diminution to hedges involves a change of domain from the literal meaning of the utterance to the discourse situation in exactly the same sense as the adjectival reduplication discussed above. Again, I draw on Kay's (1982) intuition that

A hedged sentence, when uttered, often contains a comment on itself or on its utterance or on some part thereof. (p 1).

In other words, the "more-or-less" hedges that occur with the changed tone are making a meta-comment on the the literal meaning of an utterance. They have a pragmatic weakening force on the extent to which the speaker is committed to the truth value of the utterance.

5.5. Locatives

There are a number of examples of uses of the changed tone that seem to be related to some sort of locative notion. For example, many words for buildings or rooms take the change:

书房	sue <sup>1</sup> fong <sup>4</sup> *	[BOOK ROOM]	"study"
厨房	chue <sup>4</sup> fong <sup>4</sup> *	[KITCHEN ROOM]	"kitchen"
亭	ting <sup>4</sup> *		"pavilion"
廟	miu <sup>6</sup> *		"temple"
電報局	din <sup>6</sup> bo <sup>3</sup> guk <sup>6</sup> *	[ELECTRIC NEWS OFFICE]	"telegraph office"

The locative preposition/copula is derived from the regular copula:

係 *hai*<sup>3</sup> "copula" → 喺 *hai*<sup>3\*</sup> "locative copula (to be at)"

Finally, a small number of postpositional locatives take the changed tone.

樓上	<i>lau</i> <sup>4</sup> <i>seung</i> <sup>6*</sup>	[BUILDING UP/ON]	"upstairs"
樓下	<i>lau</i> <sup>4</sup> <i>ha</i> <sup>6*</sup>	[BUILDING DOWN/UNDER]	"downstairs"
地下	<i>dei</i> <sup>4</sup> <i>ha</i> <sup>6*</sup>	[FLOOR DOWN/UNDER]	"floor"

There are only a small number of locative uses of the changed tone, and it is unclear how they are to be related to the diminutive uses.

## 5.6. Perfective

Another use of the changed tone which seems independent of the diminutive uses above is as a perfective marker, functioning in a very similar way to the normal particle *joh*<sup>2</sup> which is used to mark the perfective. I will not be discussing the perfective here for lack of space.

## 6. Comparative and Diachronic Issues

Having talked about the semantic problems of the changed tone, I turn to a discussion of the diminutive in a broader Chinese sense. A morphologically marked diminutive is quite common in Chinese. Means for expressing the diminutive include retroflexion, change in rhyme, infixation, suffixation and nasalization in addition to tone change. In fact, one of the first comments about the Cantonese changed tone was Chao's remark on its similarity to the process of "er-hua" in Peking Mandarin.

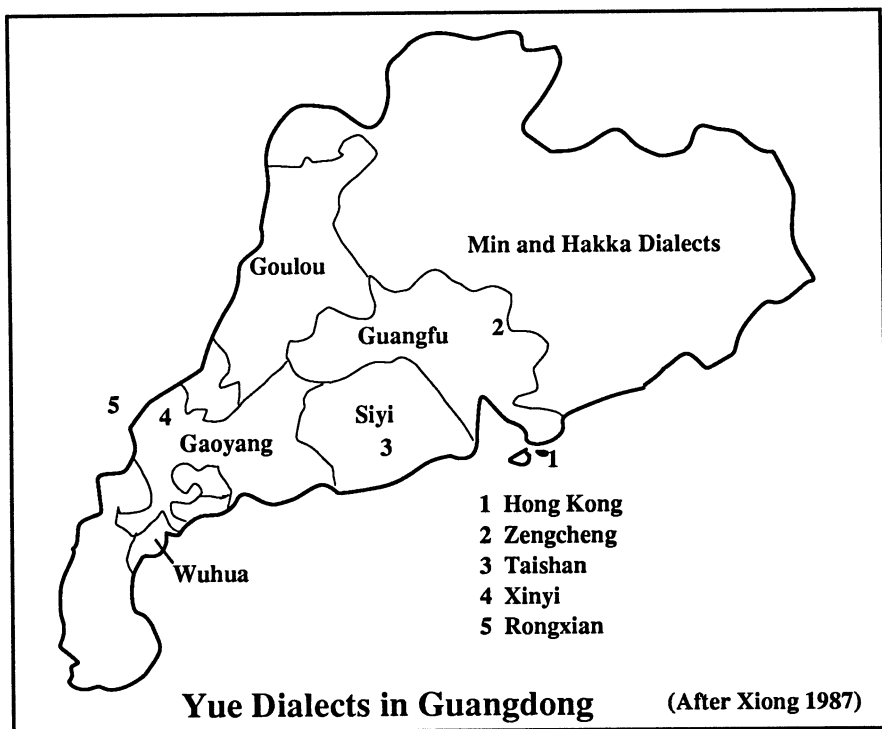
Cantonese is not alone in using tone change for diminution. Hirata (1983) notes that besides other Yue dialects, two other southeastern dialect families - Hui and Wu - also attest tone change diminution. Although the resulting tone marking diminutives varies from dialect to dialect, the most general and wide-spread tone produced seems to be a high-level or high-rising one. Indeed, as John Ohala (1984) noted, there does seem to be a cross-language tendency to use high tone sound-symbolically with words connoting smallness, or diminution.

It is important to understand the Hong Kong Cantonese diminutive in the context of the greater Yue area. With that in mind, we turn now to data from four other Yue dialects, representing three of the five Yue subfamilies distinguished by Xiong (1987). The dialects are Taishan (Cheng 1973) representing the Si Yi family, Zengcheng (He 1987), which along with Cantonese represents the Guangfu family, and Xinyi (Ye and Tang 1982) and Rongxian (Zhou 1987) representing the Gaoyang family. Thus two of the five families, Wuhua and Goulou, are not represented. Rongxian is spoken in eastern Guangxi - the rest are spoken in Guangdong. Below is a very rough map of the Yue dialects of Guangdong province, after Xiong (1987). I have marked the locations of the dialects to be discussed.

### 6.1. Taishan

The Taishan dialect, a Si-yi (or Sei-yap) dialect has two changed tones, one rising and one falling. The falling changed tone is used less frequently, mainly for nominalizations, and is mainly limited to applying to words in the mid level tone, (the upper departing tone or mid *yin* entering tone). It is also used for pluralization of pronouns, a much noted phenomenon. So the plural of *ni*, "you sing.", is *nek* "you plural", where the tone shifts from middle level to low falling. However with both second and third person, this tone change is accompanied by segment change, so it is highly likely to be a residue of affixation, and will not be discussed further here.

Many of the lexical items which take the changed tone and are *ying qu* tone in Hong Kong Cantonese take the falling changed tone in Taishan.



As for the rising tone, it is extremely common in Taishanese. Cheng (1973) says that "Generally speaking, isolated nouns or the last element of compound nouns always bear rising tones. (p. 278)" Phonetically speaking, the rising changed tone is higher than any lexical tone.

The Taishan dialect has two productive locative uses of the changed tone. For verbs which subcategorize for some sort of location (like *k'i* "stand" and *t'u* "sit"), when the verb is followed by a locative NP complement the verb tone can change. The shift in meaning is to an aspectually more progressive interpretation. Cheng suspects a segmental origin for this subtype of changed tone.

The second locative use is for nouns, which take the changed tone when used locatively. These two productive locative uses seem to confirm the locative sense proposed above for Hong Kong Cantonese. However, it does not help to decide whether the locative is in fact an extension of the diminutive, or whether there was originally a distinct locative tone-change process (or suffix).

## 6.2. Zengcheng

Like Taishan, the Zengcheng dialect also has two changed tones, one high rising and one high falling. Although these tones are not identical with any lexical tone, they do appear in normal tone sandhi processes. Also like Taishan, Zengcheng has pronoun pluralizing by tone drop, but without the segmental change that occurs in Taishan.

One of the most interesting aspects of the changed tone in Zengcheng is its use to express perfective aspect. This functions just as in Hong Kong Cantonese, changing the tone of the verb

to mark a perfect or completive sense. What is different about the process in Zengcheng, however, is that the *first* syllable of a bisyllabic verb can undergo the change. For example *fak tsɿ*, [SEND-OUT WEALTH] "get rich", where the tone on the first syllable changes. Since the diminutive changed tone almost never applies in the first syllable of a bisyllabic, this may indicate that the perfective use is a different process.

Tone change in reduplicated adjectives is also similar to Cantonese, although the weakening effect is achieved, not by changing the tone of the second adjective alone, like Cantonese, but by changing the tone of both adjectives, probably a case of tone spreading. However, while in Cantonese this reduplication phenomenon is limited to adjectives, in Zengcheng it is much more productive - both verbs and classifiers can reduplicate with tone changes. With verbs, the process is limited to psych/emotion words - so with the example *p'a*, "be afraid", *p'a p'a* with both tones changed indicates "a little scared", while changing only the first tone expresses "very scared." Classifier reduplication with the changed tone has the sense of "every one", so *ga* "family" reduplicates to *ga ga*, "every household", with the tone change on the first syllable.

### 6.3. Xinyi

Like the other Yue dialects, the Xinyi changed tone is different from, and higher than all lexical tones. Just as in Cantonese, the second syllable of bisyllabic words can change, but rarely the first syllable of polysyllabic words. A particularly interesting feature of the changed tone in Xinyi is that it comes with a segmental change. All syllables in the changed tone get final nasals except open syllables ending in offglides -i and -u, and of course nasals.

The changed tone is completely productive in Xinyi except for a few exceptional, foreign, or bookish words. Like Cantonese, it is used for general nominal derivation, for diminutives, for indicating contempt and familiarity, and for adjective reduplication. Like Zengcheng, it can also be used for verbal reduplication with the force of "do V a little."

An interesting meta-linguistic use in Xinyi which is not present in Cantonese is the use on classifiers after numbers to mean *only* that many - "just five fish", "just 3 inches". Here the diminutive is used not to modify the number itself, but to express a meta-linguistic comment on the number. So the utterance contains the semantic force "3 inches", and the meta-linguistic force "and that's a small number".

### 6.4. Rongxian

Rongxian dialect is very similar to Xinyi, which it borders geographically. As expected, the changed tone is 35, which is not a lexical tone. Like Xinyi, the changed tone comes with a segmental change, also a nasal, but in Rongxian only stopped syllables change to the homorganic nasal. Again, the first syllable word of bisyllabic words does not change tone.

The semantics are remarkably similar to what we have seen before, although the changed tone appears even more productive here than in other dialects. The tone is used as a general diminutive, to indicate contempt, with classifiers like Xinyi and in other ways, with reduplicated adjectives, and with verbal classifiers,

### 6.5. Summary

A first comment must be to note that all of the changed tones are high and rising, except the Taishan second changed tone, which is low falling. On that basis, and others I will mention here, I choose to reconstruct this tone shift as a different process than the diminutive one. First, unlike the diminutive process, this one, a nominalizing one, seems to pick out departing tone words (and entering tones of the same level) in Taishanese. The corresponding nominalization function in Cantonese also picks out departing tone words, and as discussed above, it does not distinguish the *yin* and *yang* registers, an argument for extreme antiquity. This process is quite reminiscent of the

Ancient Chinese process of nominal derivation by change *to* the departing tone, (Mei 1980, Takashima 1984) but in reverse.

As for the perfective uses of the changed tone, I would like to argue that these are also from a different process - note that it only occurs in two dialects, both in the Guangfu family, and seems to have the ability to change the first syllable in bisyllabic words, which makes it quite unusual when compared to the diminutive tone changes.

As for the reduplication phenomena, comparative evidence seems to show that the function we see in Hong Kong Cantonese is part of a larger process, where a rising tone on the bisyllable (caused by raising the second syllable) indicates diminution, while a falling tone (caused by raising the first syllable) indicates emphasis. In other words, the weakening/emphasis semantics is carried by the tone contour of the entire word, not the syllable.

Finally, let's look at the diminutive process. We could imagine two possible theories of origin. The first is that the tone is a grounding (or sandhi) from a earlier diminutive suffix, perhaps a nasal, while the second is that the change was always a productive tonal process.

Hirata (1983) presents an argument for the second hypothesis, pointing out that in all his examples, the tone that is changed to is high rising, and higher than any lexical tone. (This is also true in the dialects we have outlined, except, of course for Cantonese). Thus such an extraordinary tone could not merely have come from tone grounding from a suffix. As for the presence of the nasal in the western dialects, he accepts that in such cases there was clearly a nasal suffix, but claims suffixation must have happened after or contemporaneously with a tonal change.

The conclusion Hirata draws is not for an original tone change, either. He proposes that the extra high pitch may have come from some original glottal tension, because of its close relationship with high tone. Yet in considering Yue data, we have noted the phonological constraint that tends to prevent tone shift from occurring on the first syllable of bisyllabics. If we assume that the tone shift took place after a point where these bisyllabic words were formed, then the phonological constraint could certainly be construed as evidence that the changed tone derives from tone grounding from a dropped suffix.

Certainly more comparative evidence could help decide this issue. For example, evidence like Huang 1958's data on Amoy dialect, a Southern Min dialect, cited by Hirata, which discusses an *-a* suffix which can have meanings expressing smallness or condescension, act as a nominalizer, give a feeling of familiarity to a person's name, and when added to a word expressing direction mean "approximately in that direction." A remarkable similarity to the Yue phenomena we have discussed, and from an affix. The processes outlined above are summarized below in the conclusion.

## 7. Conclusion

I would like to draw a number of conclusions from this very preliminary study of the Cantonese changed tone. First, in the semantic domain, an important conclusion is that it is only by having a rich framework for discussing semantic categories that we are able to begin to crack this old semantic chestnut. In a sense, we get a glimpse into the diachronic as well as synchronic semantics of the phenomena - how the category might have gotten built up, and how it might be conceptualized.

From a typological viewpoint, it is clear that rather than being limited to phonological tonal processes, Asian languages do possess morphological processes like the diminutive as well as ones that would have to be called grammatical, like the perfective markers.

And finally, from a diachronic perspective, we have separated out four processes in Yue that produce a changed tone:

- a diminutive shift to high rising (or perhaps level) tone.
- a shift to falling tone applying to words in the departing (or equi-level entering) tone and carrying a nominalizing force.
- a reduplication process that seems to produce multi-syllabic contours.
- a perfectivizing process, also changing to high rising.

Of course we have only scratched the surface of this particular category. There are quite a large number of subcategories that do not fit cleanly into the domain I've just sketched, and exceptions to the ones I have noted. And from an areal point of view, it is essential for more cross-dialect studies of diminutives, following Hirata's important start, and indeed for areal studies in general - here Kam (1980) provided important comparison with Thai.

Extending this preliminary analysis to cover more of the Cantonese data as well as other dialects using derivation by tone change could certainly help get a handle on the complicated semantic problems in areal as well as genetic relationships in the linguistically rich south of China.

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