# The Prosodic Transcription of a Corpus of Hong Kong English: Collection Criteria, Transcription System and Preliminary Findings

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#### Abstract

This paper describes the prosodic transcription of a corpus of Hong Kong English and some preliminary findings on the communicative role of intonation in Hong Kong English.

### 1 Introduction

As an important feature of the communication of meaning in English, intonation of other non-native English varieties have also begun to receive interest and attention. At the Hong Kong Polytechnic University, we are attempting to describe the communicative role of intonation in Hong Kong English. By uncovering the similarities and differences of intonation patterns between native and Hong Kong speakers of English, we will be in a position to describe how Hong Kong speakers make use of intonation to communicate meanings, and find out whether or not there is a systematic pattern which we can name "The Intonation system of Hong Kong English". The findings will hopefully better inform our understanding of Hong Kong English and help the development of English language learning and teaching materials directed at discourse intonation.

### 2 Our Data

Spoken discourses between native speakers of English and Hong Kong Chinese have been recorded as a first step to build up the Hong Kong Corpus of Spoken English (HKCSE). The HKCSE is divided into four sub-corpora: conversations,

business discourses, academic discourses and public discourses. Each sub-corpora consists of 50 hours of naturally-occurring discourses. The participants are monitored in terms of age, gender, nationality, occupation, educational backgrounds and residence overseas.

### **3** The Transcription System

Data collected are first orthographically transcribed. The intonation system proposed by David Brazil (1997) known as the Brazil System is being used for the prosodic transcription of data manually. This is a discourse-based system that suits our need of describing Hong Kong intonation along with discourse features. Below are the labels adopted from the Brazil System of intonation:

Tone unit boundaries: //

Prominence refers to the stressed syllables. Tone is the tonic or nucleus in a tone unit (i.e. the last prominent syllable of a tone unit), and either the letters are capitalised or underlined, the latter is for cases in which more stressed syllables follow the tonic. Key and termination refer to the key of the first stressed syllable and the tonic respectively.

A system for computer labelling has also been developed:

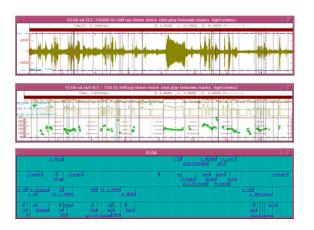


Fig 1. Computer speech file of sample conversation between a male native speaker and male non-native speaker

The program used for the purpose of computer transcription is 'xwaves', a package developed as a research tool for all kinds of acoustic analysis. The recording process is followed by this computer labelling using Brazil's paradigm along with the orthographic transcription. As can be seen from the above speech file, orthographic transcriptions are put in alternate columns, with the intonation notations above. Only the capitalised onset syllable (the first prominent syllable of the tone group) and the tonic (indicated by p, p+, r, r+ or o) of each tone unit are inserted.

Statistical analysis has also been carried out for part of the conversation sub-corpus of conversations:

Table 1: Crosstabulation of tones used by native speakers (NS) and Hong Kong speakers (NNS)

Tone	p	r	p+	r+	0	u*	Total
NS	308	90	92	142	208	35	875
NNS	559	25	24	106	796	43	1543
Total	867	105	116	248	1004	78	2418

<sup>\*</sup> unfinished utterances

It can be seen that there is a dominant use of the level tone o and proclaiming tone p among Hong Kong speakers of English. Contrast is also seen in the use of the referring tone r between the two parties. Native-speaker data show more

instances of the referring tone. Another referring tone r+ has more or less the same frequency of occurrence in the two different sets of data. All these will be viewed along with representative examples extracted from the data concerned in the sections that follow.

### 4 Description of Tone Choices

In Brazil's (1997) system of native-English intonation, R and P stand for the referring and the proclaiming tone respectively. They are further subdivided into r and r+ (for R), and p and p+ (for P).

A: What will you do on your day off?

B: // r WHEN i've prepared my LECture // r if there's any TIME left // p i shall GO into TOWN // r and AFter THAT // p it will dePEND on the WEAther // p perHAPS i shall play TENnis// r if its FINE // r and if there's anyone aROUND // r OTHerwise // p i'll WRITE some LETters // (Brazil 1997:73)

This example shows the use of a fall-rise r to indicate negotiated information/assumed common ground, and p to signal new information. This stands for the P/R opposition proposed by Brazil (Brazil, 1997).

# 5. Preliminary Findings

Preliminary results from the conversation subcorpora show that the level tone is dominant and is used in almost half of the tone units. Below is a typical example:

A: // p WHAT's the REAson // p for reCORding us//

b: // p YEA // p SHE is DOing a phD PROject //
o ON ER // u ENglish // o ER// p TEAching //
o in FACT ER // u IT IS ON THE aNAlysis
OF THE // p for eXAMple // o converSAtion //
o HOW USually ER er CHINESE // p ER the
USE of WORDS // o FOR the ORdinary
converSAtion // u and THEN THE // o er i i
think it's MAINly THE // o ER // p ENglish
Usage // u MAYBE SHE is GOing TO

anaLYSE MY ER // o in ONE SENTENCE // p ER how i STRUCture MY WORDs //

At points where the speaker is obviously signaling shared information, or information already present in the consciousness of the two parties (e.g. *conversation*, *ordinary conversation*, *in one sentence*), the speaker uses the level tone *o* instead of the referring fall-rise *r*.

The use of proclaiming tone is also dominant. The next example presents us with a series of falls (p):

a: // o beCAUSE // r IN PRINciple // p we should ASK the conTRACtor // p PROject conTRACtor // p the MAIN conTRACtor // o to DO it// p to TOUCH up ALL THESE FAULTs //

The "contractor" mentioned in the above chunks should be understood as already present in the consciousness of the hearer, for the conversation parties have been discussing construction matters. Subsequent "contractors" would become old information which should be used with a referring tone according to Brazil. But here they are all said with a proclaiming tone *p*.

### 5.1 The Intonation of Questions

It is claimed by Brazil that when native English speakers echo what they have just heard or ask to have an assumed common ground confirmed or refuted, they use either a fall p or a rise r+. Below are examples from the Hong Kong English data: (a: Hong Kong male speaker, b: Hong Kong female speaker)

E (echoing questions)

- b: // r+ CHANging techNOlogy //
- a: // p JUST ONCE or TWICE TIMEs //
- a: // r+ caSIno GROUP //
- a: // p two DAUGHters // p in UK //
- b: //r+ not BAD //
- a: // p you WANT to GET an ANSwer //

A (assumed common ground)

b: // r+ your GOOD friend //

- a: // p so you you will GO as WELL //
- a: // p OH // r+ you LIKE THIS er // p you LIKE this //
- a: // r+ say LIKE er RUSsel STREET //
- b: // p YOU're NOT REALly INteresTED in LEAving HONG KONG //
- a: // r+ IT'S BETter //

Preliminary results show that Hong Kong speakers use both p and r+ in asking questions as native speakers do.

Further, we have examined examples of yes/no questions and information questions. This time the P/R opposition in terms of information status comes into play. According to Brazil (1997), p is used when the question content is not yet the negotiated common ground. On the other hand, r and r+ are used when the question is put forward as a presumed assumption. Some examples of the transcribed data are as follows (Q stands for "genuine questions", meaning the speaker is asking for information unknown to him/her:

Q (Information questions including *Wh*-questions):

- a: // p HOW to SPEND // r+ toNIGHT // o HOW to SPEND // r+ to SPEND toNIGHT // p HOW to SPEND toNIGHT // (O)
- a: // p YEA // o WHAT // p what KIND of PROblem // (Q)
- b: // o and you'll be LEAVing TO // o UK // p as WHEN //
- b: // o HOW about the overALL // o UM // p PASSing RATE // p for THIS YEAR //

Q (Yes/no questions)

- a: // r+ DO you // r+ DO YOU // o LIKE //r to EAT the INside BODY // p I MEAN the // p Animal INside BOdy // r+ DO you GET the MEAning //
- b: // r CAN you suGGEST a <u>CLE</u>ver WAY TO // p to FIgure OUT //
- b: // o BUT UM // o do you MIND if // p we JUST SPEND FIVE or TEN MInutes //

- b: // o SO // o JACK // p have YOU SEEN <u>THIS</u> ONE //
- b: // o HOW aBOUT THE // u ORgaNI- // r+ AS a COMmiTEE MEMber //

P: (including declarative mood questions)

- b: // o is IT BE BEcuase DUE TO the // r+ ALL THE CRACKS //
- a: // p and HOW'S GOing with the ONE that YOU you TALKED about LAST TIME // r+ that is the (.) LIKE er INStitutional BUILdings is it //
- a: // r+ WORK DOing IN // r+ DOing FOR // o you MEAN //
- b: // r+ your GOOD friend //
- a: // r+ IT'S <u>BET</u>TER //

One point worth noting is the fact that speakers tend to use a fall p more often in Wh-questions. This is in line with Brazil's (1997) proposal that this type of question is asked using a fall because the speaker has no idea about the answer. A rise r+ is associated with a considerable number of questions that carry presumed assumptions. However, as a general picture, it is not yet clear whether Hong Kong speakers actually manipulate the P/R opposition in asking questions as native speakers do, since we do have instances of both the P and R tone within the same category of questions.

This matter is further complicated by the overwhelming use of level tones (Please refer to table 1 above) which are frequent in questions as well:

- a: // o DO you LIKE CHInese GOOD //
- a: // o ARE you also WORKING FIVE DAY PER WEEK //
- b: // u WILL IT AUTO // o AUTOMAtically // o ER CAN GO TO THE // o TO THE SOUTH AfriCA CONferENCE //

Use of the fall rise r is emphasised particularly by Brazil (1997) as a means to indicate a presumed common ground in asking questions. But r rarely occurs in our Hong-Kong-speaker data. The proclaiming tone p and the rising tone r+ are the dominant tones for questions.

#### 6 Conclusion

Preliminary results suggest that Hong Kong speakers do use the full variety of tones in speaking English. However this pattern of usage seems to differ from that of NS (e.g. r is much rarer and the level and proclaiming tones are dominant). They seem to manipulate the choice in the same way as native speakers in some of the sub-categories (e.g. Wh-questions). However, we have yet to establish whether Hong Kong speakers make the same conscious distinction between p and r. NNS's frequent use of r+ in questions, for example, may be due to a non-native speaker intuition that a rise is the normal "question tone" in English. Also, if future results reveal that there is an overwhelming use of a fall p and a level o in whatever situation, then we have no reason to believe that there exists a native-like distinction.

On top of the main concern regarding whether Hong Kong Chinese speakers deviate from native speakers in terms of the use of tones (and if so, how), it will be interesting to investigate also whether Hong Kong Chinese speakers have developed a Hong Kong English intonation system. If so, it will better inform us the way to design teaching materials geared towards discourse intonation in English.

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### Reference

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