Chinese perception coaching

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Abstract

The article first presents the nowadays reality of Chinese as Second Language (CSL) in Sweden. It is empersized that Chinese Perception Coaching (CPC) should start before the Chinese speech production.

It also introduces how CPC should be planed both at group/class and individual level. The analysis of Perceptual Assimilation Model (PAM) is used in CPC. In particular, it suggests how to build the language awareness of the students. Finally, it shows a possible way for research in this subject in order to improve the practice.

Introduction

The main difficulties of Chinese as a second language (CSL) for learners having Swedish as L1 in Sweden lie in the following aspects: the teachers as resources, the students, and lack of suitable teaching material.

First of all, teachers with efficient knowledge in the phonetics and the phonology of both languages (Swedish/Chinese) are very rare. How do the teachers pedagogically apply the new findings of research in their pratice? Does it really help students to acquire the Chinese tone if the teacher stands in the front of the classroom with stretched hands drawing the contours of the tones with gestruers? Is the only way to grasp the Chinese speech to learn Chinese characters first? Even the most intelligent sinologist, speaking fluent Chinese, can not give good suggestions on CSL if they lack linguistic schooling.

It can be assumed that the background of the students' mother tongue (skånska vs. götamål, having different tone accent system) and experiences of foreign languages (mostly at least two, English and another one) might interfere with their acquisition of Chinese sound and tone system. Experience from our music-trained students shows that acquire the tones more easily than others (see also, C.J., 1985). Students who are bilinguals (one dialect of Chinese and Swedish) have an *even worse* situation since the sound systems of Chinese dialects are quiet different from Mandarin and furthermore they may have more tones than the four ones of Mandarin, for instance Cantonese, Hakka, Min, and the Shanghai dialect. It is also important to know the goals of their studies; their motivation will influence their results.

Earlier Chinese teaching material in Swedish (Ahlgren and Löfstedt, 1973; Björkstén and Erlandsson, 2007; Garlén, 1988; Malmqvist, 1979) does not describe Chinese sounds nor the contrastive sound system in the aspects of perception, acoustics, and production.

The education of Chinese language at University of Gothenburg starts with a course of listening skill called Chinese Perception Coaching (CPC). Adult L2 learners can be characterized as having an "accented" perception as well as their accented production (Strange, 1995 p. 22). The present article will discuss the question how teachers could, in their practice, help the students so they get aware what to focus on in L2 using Perceptual Assimilation Model (PAM) (Strange, 1995 p. 193-199).

Goals

The primary aim of CPC is to help students to understand the L2 prosody by comparing with their own mother tongue with as few interpretations from the teacher as possible in order to build greater language awareness. The students get help both individually and in groups before they start the speech production of their new L2. The difficulty is to balance guidance with the happiness of discovery (compare with a child's acquisition of its own native language).

Pedagogics

For groups or whole class

In this stage of CPC contains, in contrast to traditional didactics, lectures in groups/class about

contrastive prosody avoiding sophisticated terminology in order to establish a language consciousness. Each lesson starts with different short actual speech examples collected from internet or from Chinese dialogue parners including different genders and ages, listening to the melody of the new langague, sometimes also to music (even revolutionary songs). They listen carefully without time stress and then report their feelings, experiences, and interpretations. The data discover that the students have capacities to catch some prosodic features for instance basic emotions like anger, fear, sadness, and joy.

A good way to avoid techers' interpretations is to let the students observe Swedish with Chinese accent. They observe that it is easy for Chinese to produce Swedish CV/CVCV words without distinguished short and long vowels. It is still hard for Swedes to understand this kind of words without the typical Swedish tone accent. They also notice that if the Chinese (wo)men use prominently Chinese tones when trying to imitate Swedish prosody it does improve their Swedish pronuanciation. They furthermore perceive that Chinese *ladda* sounds like *latte*. They remark the difference between tones in citation form and actual speech, respectively. They discuss then how citation tonemes relize in intonation. The students notice that it is difficult to perceive the Chinese final nasal [n] since Chinese usually nasalize an ultima like *boken→bokẽ*. The student complain that it is very hard to perceive the vowels before the Chinese retroflex since they are not aware of how Swedish retroflex affects the vowels like m**öd**a [ø] m**ör**da [œ̣].

For pedagogic sake, on this level the only thing for teachers to do is to emphersize what the students have detected themselves, especially distinguishing phonetic phenomen like *ˈhälsa på/ hälsa ˈpå* and *tomten* (accent I)/*tomten* (accent II).

For individuals

Chinese scholars have never separated syllables into consonants (initials), vowels (cores), and tones; these three elements have always been treated as one whole unit (Zhang et al., 1982). It is, however, possible that for some Swedish students, at the beginning of their studies, it is easier to identify sound categories (vowels and consonants, respectively) since that is in accordance with the traditions of Western phonetic/phonologic scholars. Kiriloff (1969) found

that tone percption results were much better if the participants concentrated only on the parameter on tones and he therefore advocates this method to be *the* correct one for beginners in Chinese learning, concentrating on tone perception.

Earlier experiences teach us that CPC has to be flexible. Both tone and sound perception training start at the same time; it is free for the students to prioritize. Those who listen to the tones do not write down *pīnyīn* transcription, nor *Level Tone/T1 (ˉ), Raising Tone/T2 (ˊ), Dip Tone/T3 (ˇ), Falling Tone/T4 (ˋ), and Natural Tone/T0 (˙)* but only the numbers 1, 2, 3, 4, and 0. Other students prefer to start with sound analysis. They are asked to write down only the *pīnyīn* without any tone marking. After they have finished listening to the material the students are asked to voluntarily hand in their perception documents.

The method of sound recording is also adapted in CPC. At the start of the semester the teacher got the students' permission to record those who wanted to take part in the coaching. Sometimes the teacher, for nature's sake, recorded without telling the students and asked them to watch what the spectrograms looked like, explaining the differences and letting them experience the differences between the sounds of the two languages.

A portion of the students' data in CPC during the academic years 2008-2011 was selected for analysis of sound categories and discussion about tone perception. The corpus is the actual natural speech and the tests were conducted in the classroom. It appears that some of results are consistent with PAM.

Difficulties with phonemes and tonemes

Generally, the Chinese affricates are the most difficult sounds to acquire, then follow the fricatives and finally come the stops. The stops are the contrastive pairs [p]/[pʰ], [t]/[tʰ], and [k]/[kʰ] respectively and, that is, the two sounds [p]/[pʰ] are interpreted as a Swedish [pʰ], a phenomenon called Single-Category Assimilations (SC Type). The Chinese fricatives [ɕ], [s], and [ʂ] are close to the Swedish [ç], but not exact, Category-Goodness Difference (CG Type). Individual perception discrepancies are different, some students have a problem only with [ɕ] and [s]. Some misinterpretations occur only in one direction, for instance [ɕ]→[ʂ] but not the opposite way (other examples are [ɕ]→[s]→[ʂ], [s]→[ʂ],

[ɕ]→[ʂ] vice versa or in all possible directions). The Chinese affricates are [tɕ]/[tʰɕ], [ts]/[tʰs], and [tʂ]/[tʰʂ]. The data show that the confusions occur not only within these affricates, there is also a clear tendency for them to be perceived as plain fricatives. PAM can, to some extent, categorize these confusions as different patterns like CG Type, SC Type ect, but where to find the cause of the misidentificaitons? A plausible explanation is that in the Swedish phonological system there is redundance for the Chinese feature [-aspiration] and [-voice] for the stops and also for the Chinese [+apical] and [+apical-velar]. In short, features that L2 utilizes as different phonemes are perceived in the students' as allphones. The student's individual perception capacity can not be the only reason for mis-interpretations, also the syllable structures, the context (CV(C), where the C can be either an [n] or an [ŋ] *and nothing else*), lexical/non-lexical status, and their positions in the sentence have great influence.

PAM can be also utilized for tone perception. The situation of tones is more sophisticated than only sound category. Information only upon the [+High], [+Middle], and [+Low] features does not give practical help to the students. It might be suggested that they should compare Chinese tones and a segment of Swedish inotation instead of comparing in first stage only at CV level for instance Chinese **bù** [⁵¹pu(:)] with Swedish **bo** [´bu(:)]. Let them then discriminate only Chinese tones in citation form. It is impossible for Chinese to image how difficult Swedes perceive these tones and why are they so difficult for them.

Individual tone confusions are very different, like sound categories. Some of them make confusions between T1 and T2, some have problem with T2 and T4. Some have a stable confusion model, or T2 is misidentified as T3, whereas, on the contrary, some have different confusion types. Some change the confusion patterns after a period, some do not. However, they get better result if tone contours (Level, Rising, Dip, and Falling) are introduced.

The data show that both perception and production of the four citation tones on individual level are easily acquired. More than 85% modern Chinese words are disyllabic ones so the situation will be more complicated than only to perceive tones in citation forms. Some of students, however, have the same confusion model even though they listen to the disyllabic words. It appears that tones are perceived stably in actul

speech even they are misidentified, which shows that L2 listeners could even perceive the citation tones perform stably on the level of intonation.

The teacher's task does not stop at collecting the data, the important phase is to analyze them scientifically and explain a pedagogic way for the students. But not even this is enough. The teacher should have the capacity to hypothesize not only the expected difficulties of next academic year's students but also build models, for example for confusions of affricatives and tones. The students will not like to come to the lab only for listening to the synthetic sounds, they need to listen to an actual speech.

Research and Practice

Earlier tone research were concentrated on both acoustics and perception with different L1 listeners. Gandour (1978) summarize that according to the common results (a) T2 is the tone that is most difficult identify, (b) the mix-up of T2 and T3 is frequent also for the L1 Chinese, and (c) T1 and T4 are relatively more easily identified. In terms of perception, Yip (2002) states that F0 is not the one and only perceptual cue even though it plays a crucial role. The timing of turning point of F_0 constitutes a salient perceptual cue for discriminating T2 from T3 (Shen and Lin, 1991) and T3 from T4 (Gårding Eva et al., 1986). Gandour (1981, 1984) builds different perceptual dimensions of tones contour, direction, high and so on, which was examed by Lether (1987). It is worth mentioning that all material above consists of sythesitic monosyllabic sounds in citation form.

The data from CPC show that it is evident that first of all tone confusions do not occur randomly, secondly that certain types of tone confusions occur only within the environment of certain consonants and vowels, respectively (Hu & Lindh, 2010). The question for nowadays in CPC at least in contrast with Swedish lies in how a hypothesis should be established.

First of all, CPC model shoul not be only based on tone reseach nor should not like synthetic in ramdom order. The model should be a kind of normal distribution or a regression, under the conditions where different students and various stimulus in diverse linguistic status (lexical, non-lexical, stimuli in different places like narration, interrogation) are presented during a certain study processes. We know that F_0, duration, amplitude, tone contours in both the Chinese and the Swedish prosodic systems are

important, but what more might play roles is unknown today. It is also important to know how perception occurs within a syllable and over a syllabic boarder (in particular, how the vowel and final sound of the previous syllable may affect a Zero initial (initial consonant missing), for instance V/VC, [n]/VC, and [ŋ]/VC, therefore, how and to which extent consonant initials and vowels interfere with tone perception.

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