# An Analysis of Pronunciation Mistakes and Second Language Strategy in the Case of Italian and Mandarin Speaking 

 Learners of EnglishC. Fonda

Montreal, Canada

## 1. Introduction

Among the phonetic errors that a learner of English is bound to make, a faulty pronunciation of English obstruents is most conspicuous. What is not clear, however, is to what extent, if any, this may be attributed to a phonetic interference of the mother tongue. From a phonological point of view, English and Italian share the same stops although in English the range of the allophones is, in each instance, wider than in Italian. English differentiates its stops into aspirates and unaspirates, exploded and unexploded, glottals, taps and so on. Conversely, in Italian, stops, whether voiced or voiceless, do not offer such a gamut of phonetic variations. Indeed, their striking characteristic is that they are always exploded. This is the case because of Italian syllabic constraints which demand that all syllables be always stressed, although one syllable is more stressed than other ones. As a result, co-articulation, syllabicity, vowel coloring and the like, which play such an important role in English pronunciation, are of no consequence in Italian. Should we lend a careful ear to the anomalies of the peculiar accent of Italian speaking learners of English, we would quickly discover that there is an indiscriminate, universal use of exploded stops. This peculiarity is easily perceptible in the case of monosyllabic words ending in a stop as, for example, big and spot pronounced respectively /"bih-ga/ and /'spoh-ta/. Such shifts of course alter not only the phonetic quality of the stops involved but also the phonological structures of the words themselves.

This indiscriminate use of exploded stops is responsible for other phonetic changes, some of the most striking being the loss of aspiration of stops in syllable initial position, the absence of lateral and nasal plosion and the resulting loss of syllabicity in words such as bottle ['botl], kitten ['kitn], which the near-bilingual pronounces as ['boh-tol], and ['kih-ton]. These peculiarities seem to suggest that the negative transfer that takes place in these instances does not operate at the level of the individual phoneme as, to mention one example, the replacement of aspirates with unaspirates, but it involves the entire phonological system. What appears to support this, is the reverse process whereby words which the near-bilingual borrows from English and incorporates into his everyday lexicon, undergo exactly the same process of phonetic adaption: plumber ['plom-bje-rə], garbage ['gae-rae-bih-
¿ə2］．Not without humour，Professor Clivio of York University has suggested that the use of such phonetically re－structured loan－words from English has brought into existence a new language which he called Italiese or Italish． Further evidence that the learner of English is transferring phonological constraints of his mother tongue rather than individual phonemes seems to be supported by the peculiar treatment of English intervocalic／s／and dorso－velar／ $\mathrm{g} /$ ．In Northern Italian dialects，voiceless $/ \mathrm{s} / \mathrm{in}$ intervocalic position shifts into voiced $/ \mathrm{z} /$ ．In Southern dialects no shift occurs，while in the case of speakers who conform with the so－called Tuscan usage（Central Italy）the voicing of intervocalic $/ \mathrm{s} /$ is anything but regular or systematic． For example，／s／is voiced in Cosimo，rasente，presagio but is voiceless in cosi， rasoio，presa．In English，unlike French where intervocalic／s／is regularly voiced，the shift is not positional as witnessed by pose／powz／and result $/ \mathrm{rizalt} /$ where intervocalic $/ \mathrm{z} /$ coexists with intervocalic／s／as in case／kets／ and base／bers／．As a result，Italian learners of English fail to display any consistency with respect to these English alternations．For example，my informants from Central Italy alternate the voicing of $/ \mathrm{s} /$ quite capriciously． Those of the North almost regularly voice intervocalic／s／while those of the South seldom if ever do it．There is no doubt that this apparently erratic linguistic behaviour in my subjects which reflects the treatment of intervoca－ lic $/ \mathrm{s} /$ in the Italian dialects of the North，Centre，and South，points to the presence of phonetic constraints which operate at the level of underlying phonemic structures．

English has three nasals：$/ \mathrm{n} /, / \mathrm{m} /, / \mathrm{y} /$ ．Italian has also three nasals：$/ \mathrm{n} /$ ， $/ \mathrm{m} /$ ，and dorso－palatal $/ \mathrm{n} /$. In English，phonemes $/ \mathrm{n} /$ and $/ \mathrm{g} /$ do not cluster together in the same syllable．This accounts for the fact that the spelling in words such as sing，singer is nothing but a convention to represent phoneme $/ \mathrm{g} /$ ．This spelling，of course，proves，in the case of the learners of English， extremely misleading in words such as，for example，lingua，linguist which， actuaily should be spelled ling－gua and ling－guist．All my informants pro－ nounced mono－syllabic words such as ring，sing，as［rın］［sin］or［ring］［sing］ but never as［rıg］［sıy］．However，words，with $/ \mathrm{y} /$ in medial position such as singer，lingua were consistently pronounced as［＇sin－ger］，［＇lin－gwo］．If we keep in mind that also in Italian $/ \mathrm{n} /$ and $/ \mathrm{g} /$ do not cluster together in the same syllable we can see that the negative transfer（NT）the learner is subject to is not simply a transfer from the mother tongue of individual phonemes which approximate the target sound but a more encompassing NT involving the underlying phonological structure of the Italian language．

## 2．Analysis

To test my assumption that phonetic NTs operate at the level of underlying phonemic structures and phonological constraints，I conducted some addi－ tional experiments using other languages．The following findings concern the extent of phonetic interference made by the first language（Mandarin）on the
class of fricatives in the second language English．In column A of Table I are listed the English fricatives，in column $B$ the corresponding sounds in Man－ darin and in columns C，D，E the shifts，if any，undergone by each phoneme in word initial，medial and final position when pronounced by Mandarin speaking learners of English in the experiment．
We can see that fricatives which occur in both Mandarin and English，do not suffer any discernible shift．However，English fricatives which are non existent in Mandarin，show definite signs of phonetic interference except for the phoneme $/ \mathrm{v} /$ which is correctly pronounced in word initial and medial positions，probably because in both instances it occurs in a voiced environ－ ment．
When a shift occurs in word initial position，the same shift can be seen in word medial intervocalic position but not in word final position．This suggests that in these instances we are not dealing with NTs of individual phonemes whose use is then extended by overgeneralization buth with a negative transfer of much more overriding importance．Indeed，the inconsis－ tencies of these shifts between final position and elsewhere can be easily accounted for if we take into account the fact that in the Mandarin morpho－ logical system a word or syllable is made up of an initial consonant，a final vowel sound，and the tone．For example，鳦（mother）can be transcribed as $/ \mathrm{mæ} /$ and 中国（china）can be transcribed as／čunguo／，where each word has an initial consonant，a final vowel and a tone．Therefore，a Mandarin speaker

Table I Corresponding Mandarin phonemes according to environment

| A <br> English phonemes | B <br> Mandarin phonemes | C <br> Word initial position | D <br> Word medial position | E <br> Word final position |
| :---: | :---: | :---: | :---: | :---: |
| h | － | h | h | b |
| f | $f$ | f | f | f |
| $v$ | － | $v$ | $v$ | f |
| s | $s$ | $s$ | s | s |
| 2 | － | d3 | d3 | s |
| 5 | J | J | 5 | j |
| 3 | － | － | 5 | 15 |
| $\theta$ | － | $t$ | $t$ | f |
| б | － | d or d3 | d or d3 | f |


| $\theta>t$ | word initial | think［tıgk］ |
| :---: | :---: | :---: |
|  | word medial | lethal［lutol］ |
| $\theta>\mathrm{f}$ | word final | path［pæf］ |
| $\delta>\mathrm{d}$ or $\mathrm{d}_{3}$ | word initial | that［daet］or［dzaet］ |
| $\boldsymbol{\delta}>\mathrm{f}$ | word final | bathe［betf］ |
| $\mathrm{v}>\mathrm{f}$ | word final | give［gif］ |
| $\mathrm{z}>\mathrm{d}_{3}$ | word initial | zoo［d3u］ |
| $3>1$ | word medial | illusion［lufon］ |
| $3>15$ | word final | garage［garatf］ |

tends to divide English words into segments of a consonant followed by a vowel or a diphthong to make it coincide with the structure of Mandarin syllables. When this occurs, any change that takes place in word initial position is also repeated in word medial position. The different treatment of these phonemes in word final position simply conforms to the underlying morphological structure and phonetic constraints of Chinese, a language characterized by its large number of monosyllabic words.

## Acknowledgement

For the experiment with Mandarin speaking learners of English, I am indebted to Mr. Jin Yang Tion, a student in my Honors Linguistics programme.

## References

Breitenstein, P.M. (1978). The Application of Contrastive Linguistics. In: English Language Teaching, 33(1): 21-26.
Clivio, G.P. (1978). 'When in Canada do as the Canadese do.' MacLean's, (February 6, 1978), p. 49.

Soudek, Leo I. (1977). Error Analysis and the System of English Consonants. In: English Language Teaching, 31(2): 125-130.

