## THE PHONOLOGICAL PROBLEMS ENCOUNTERED BY IGBO STUDENTS IN CHINESE LANGUAGE LEARNING

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## Abstract

Chinese language is said to be the hardest language in the world. This may be because of the difference in the phonology of Chinese language and other alphabetic languages. Chinese language is a logographic and tonal language which makes it hard to speak and write. This paper examines the phonological problems Nigerian students speaking Igbo language encounter in learning the Chinese language.

## Introduction

The Chinese language is one of the oldest languages in the world with its earliest written records going as far back as more than 3,000 years ago (Peihui, 1997:9). What is usually referred to as Chinese is in fact the language of China's largest nationality, the Hans. Hanyu or Mandarin is China's official language. Modern Chinese is spoken not only by people of the Han ethnic group, but also by all ethnic groups of the Chinese nation as the common vehicle of communication.

The variety of Chinese discussed in this paper is the standard variety. This standard variety is Mandarin, popularly called 'Putonghua' which literally means "common speech". Mandarin is spoken by about 900 million people that constitute almost three quarters of Chinese speakers and is mostly based on the pronunciation of Chinese speakers of Beijing.

The Chinese language belongs to a separate branch of the Sino-Tibetan language family. It is a contour tone language. It has many dialect groups. They include Mandarin, Wu, Min, Cantonese, Hsiang, and Hakka. In their spoken form most of the so-called
dialects are mutually unintelligible. We have earlier said that Mandarin is the most widely spoken of all the other dialects. It is, in fact, "a large and very diverse group of Chinese dialects spoken across northern and southern China". This is based on the information from Wikipedia online resources.

Ancient Egyptian and Babylonian characters were invented over 5,000 years ago and have gone through golden ages of development and use, but only the ancient Chinese characters have survived the test of time and continue to be used (Law, 2004:34).

Ancient Chinese people used simple pictographs to record events or record notes before the Chinese characters were invented. Peihui (1997:18) says that:

The Chinese character in use today developed from the pictographs cut on oracle bones dating from over 3,000 years ago and pictographs found on ancient bronze vessels dating a little later.

Over time, the pictographs become simplified to a basic outline and developed designs and meanings; this led to the beginning of pictographic characters. Most of the present-day Chinese characters are known as pictophonetic characters, each formed of two elements, with one indicating the meaning and the other the sound.

Chinese characters represent monosyllables, and generally each character represents a single morpheme. The total number of Chinese characters is estimated at over fifty thousand, of which only five to eight thousand are normally adequate for everyday situations (Shehui, 2004:25).

In order to provide phonetic notation for Chinese characters and to facilitate the consultation of dictionaries, phonologists drafted the "Scheme for the Chinese Phonetic Alphabet", and in 1958 the Chinese government passed an act to promote the application of this scheme, commonly known as the "pinyin" (arranged sounds)

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system. Pinyin adopts the Latin alphabet to transcribe Chinese sounds, and four diacritical tone marks to indicate the different tones of the Chinese characters. The use of pinyin in the study of Chinese provides many practical advantages for learning the language. Nevertheless, as shall be seen in the next section, learners still encounter all sorts of problems in the course of learning the language.

## The Phonological Problems

Most of the phonological problems which Nigerian students will face in learning the Chinese language stem from the presence of certain speech sounds in the language that are not in the Nigerian learners' indigenous languages. A comparison of the sound system of the Chinese language and a Nigerian language, Igbo language shall be used to as an example. First, an introduction of tones in Chinese language is important.

## Tones of the Standard Chinese

The Chinese language is a tonal language. In Chinese, one character has one syllable, so tone is also called character tone. One of the functions of the tones is to distinguish the meanings of the characters. For example;

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kànshû (to read a book)
kãnshù (to cut down a tree)
liànxí (to practice)
liánxì (to contact)
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The above examples have the same initials and finals, but with different tones marks which distinguish their meanings. There are four tones in standard Chinese: high-level tone, rising tone, fallingrising tone and falling tone. There is also a neutral tone which is unmarked. The tones are marked as follows:

|  | Tones | Tone marks |
| :--- | :--- | :--- |
| 1. High-level tone | - | Examples |
| 2. Rising tone | $/$ | mâ |
| 3. Falling-rising tone | v | má |
| 4. Falling tone | $\backslash$ | mã |
| 5. Neutral tone |  | mà |
|  |  | ma |

## Sound System of the Chinese Language

The sound system of the Chinese language consists of consonants and vowels. In the Chinese language, consonant sounds are called "initials" while vowel sounds are called "finals". The reason is simple. In the language, almost all words start with consonants, and vowels come finally. This is how the terms "initials and finals" emerged.

## Classification of the Initials

The consonant that begins a syllable is called an initial and there are 21 of them in standard Chinese: "b pmfdtnlgkhjq x zh ch sh r z c s"

In the production of the initials, the passage of the breath is obstructed. The parts that obstruct the breath are called points of articulation. The manners in which the passage of breath is obstructed are termed as manners of articulation. The differences of the initials are decided by two factors: the points of articulation and the manners of articulation.

According to the points of articulation, the initials of standard Chinese can be classified into 7 types; bilabials (b p m) dentilabial (f), dental (z c s), blade alveolar (d t n I), blade palatals (zh ch sh r), palatals ( $\mathrm{j} \mathrm{q} x$ ) and velars ( gk h )

According to the manners of which the obstructions form and how they are overcome, the initials can be classified as plosives (b p d t g k) assibilation, ( f h x sh s r) affricates (j q zh ch z c) nasal

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sounds (m n) and lateral sound (I)
With the vibration of the vocal cords, the initials can also be decided into two types: the voiceless and the voiced. The voiceless initials are produced merely by obstructing the flow of breath without the vibration of the vocal cords. When the voiced initials are produced, the vocals cords vibrate along with the obstruction of flow of breath. The voiced initials are louder and clearer. The voiceless initials: (b p fdtfgkhjqx zh ch sh zcs), the voiced initials: (m n Ir ).

According to the force of the pent-up breath, plosives and affricates can be classified into the aspirated and the unaspirated. In pronouncing the plosives and the affricates, the passage of the breath is obstructed. When pent-up air is released with little force, they are unaspirated. If the pent-up air is released with a strong puff, the initials are aspirated. The aspirated (p t k q ch c) the unaspirated: (b d g j zh z).

The following are the initials with word examples:

| Sound | Example |
| :--- | :--- |
| $\mathrm{b} / \mathrm{p} /$ | bâ (eight), bù (no/not) |
| $\mathrm{p} / \mathrm{p}^{\mathrm{h}} /$ | pí (skin), píngguo (apple) |
| $\mathrm{d} / \mathrm{t} /$ | dâo (knife), dà (big) |
| $\mathrm{t} / \mathrm{t}^{\mathrm{h}} /$ | tâ (he/she), tū (earth) |
| $\mathrm{g} / \mathrm{k} /$ | gâo (cake), gçn (to follow) |
| $\mathrm{k} / \mathrm{k}^{\mathrm{h}} /$ | kàn (to see), kou (mouth) |
| $\mathrm{m} / \mathrm{m} /$ | mâ (mom), mù (wood) |
| $\mathrm{n} / \mathrm{n} /$ | nán (male), ni (you) |
| $\mathrm{f} / \mathrm{f} /$ | fù (father), fãguó (France) |
| $\mathrm{s} / \mathrm{s} /$ | sâ (sand), sân (three) |
| $\mathrm{x} / \mathrm{/}$ | xié (shoe), xìnzhí (paper) |
| $\mathrm{sh} / \mathrm{o} /^{\circ}$ | shçntǐ (body), shàn (fan) |
| $\mathrm{h} / \mathrm{h} /$ | hç (drink), hé (and) |
| $\mathrm{z} / \mathrm{t}^{\mathrm{s}} /$ | zájì (acrobatics), châzi (fork) |


| $\mathrm{c} / \mathrm{ts}^{\mathrm{h}} /$ | cí (word), cèsuo (rest room) |
| :--- | :--- |
| $\mathrm{j} / \mathrm{t} /$ | jiâo (to teach), jînglĭ(manager) |
| $\mathrm{q} / \mathrm{t}^{\mathrm{h}} /$ | qî (seven), qîyuè (july) |
| $\mathrm{zh} / \mathrm{t} /$ | zhông (middle), zhè (this) |
| $\mathrm{ch} / \mathrm{t}^{\mathrm{o}} \mathrm{h} /$ | chûntiân (spring), chūkōu (exist) |
| $\mathrm{I} / \mathrm{C} /$ | lì (strength), liù (six) |
| $\mathrm{r} / \mathrm{V}$ | rè (hot), rì (sun) |

There are 38 finals in the language. They are grouped into three:

## Simple finals

Orthographic Representation Example

| a | ài (love), ân (peaceful) |
| :--- | :--- |
| o | ôuyuán (Euro), ǒurán (by chance) |
| e | è (hungry), èr (two) |
| i | bǐ (pen), dì (earth) |
| u | wu (five), fù (pay) |
| ü | nŭ (woman), lŭ (green) |
| -i [ ] | zì (oneself), cí (word) |
| -i [ ] | zhì (rule), chî (eat) |
| er | ì rduo (ear), èryuè (february) |

## Compound finals

| ai | dài (bag), lái (come) |
| :--- | :--- |
| ei | bì (north), fçi (fly) |
| ao | bào (newspaper), lão (old) |
| ou | dôu (both), lóu (building) |
| ia | jiâ (family), xiâ (shrimp) |
| ie | bù(not), jiç (road) |
| üe | lüè (omit), nüe (particle) |
| ua | guâ (melon), huâ (flower) |
| uo | guó (country), huó (live) |

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| iao | bião (form), diào (fishing) |
| :--- | :--- |
| iou/iu/ | yôuxiù (excellent), líuyou (oily) |
| uai | guãi (turn), kuài (fast) |
| uei/ui/ | huî (ash), chuî (blow) |

## Finals with Nasal Ending

| an | sân (three), nán (male) |
| :--- | :--- |
| en | hì n (very), gçn (follow) |
| ian | diãn (dot), qián (money) |
| in | yín (silver), xîn (new) |
| uan | luân (mess), guân (close) |
| uen/un/ | cûn (village), qún (group) |
| üan | yuán (dollar), xuãn (choose) |
| ün | yún (cloud), xún (ask) |
| ang | bâng (assist), máng (busy) |
| eng | fçng (wind), shçng (student) |

## The Sound System of Igbo language

Standard Igbo has a total of 28 consonant sounds and 8 vowel sounds. The consonant sounds are as follows:

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Sound Example
p/p/ puoo (go out), apa (scare)
b/b/ be (home), baa (enter)
t/t/ taa (today), ite (pot)
d/d/ dee (write), ude (pomade)
k/k/ kee (share), aka (hand)
g/g/ gi! (you), agụ (tiger)
kp/kp/ kp? (call), akpa (bag)
gb/gb/ gbu (kill), agba (jaw)
kw/kw/ kwe (agree), akwa (egg)
m/m/ mbe (tortoise), mba (no)
n/n/ nne (mother), anu (meat)
p/p/ pụo (go out), apa (scare)
b/b/ be (home), baa (enter)
d/d/
k/k/
kee (share), aka (hand)
kp/kp/
gb/gb/
kw/kw/ m/m/
nne (mother), anụ (meat)
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| ny/ / | nye (give), anya (eye) |
| :--- | :--- |
| n/n/ | nu (drink), anyurị (joy) |
| nw/nw/ | nwa (child), onwa (moon) |
| $\mathrm{f} / \mathrm{f} /$ | fe (worship), ifo (folktale) |
| $\mathrm{v} / \mathrm{v} /$ | Avi, Ivo (names of towns) |
| $\mathrm{s} / \mathrm{s} /$ | sie (cook), ise (five) |
| $\mathrm{z} / \mathrm{z} /$ | azu (fish), aziza (broom) |
| $\mathrm{sh} / \mathrm{s} /$ | isha (crayfish), asha (weaver bird) |
| $\mathrm{gh} /$ | ghe (fry), agha (war) |
| $\mathrm{h} / \mathrm{h} /$ | ha (they), aha (name) |
| $\mathrm{ch} / \mathrm{t} /$ | chi (god), uche (mind) |
| $\mathrm{j} / \mathrm{d} /$ | ji (yam), ijiji (housefly) |
| $\mathrm{l} / \mathrm{l} /$ | loo (swallow), ala (land) |
| $\mathrm{r} / \mathrm{r} /$ | rie (eat), ire (tongue) |
| $\mathrm{y} / \mathrm{j} /$ | ya(him/her/it), myo (sieve) |
| $\mathrm{w} / \mathrm{w} /$ | were (take), iwu (law) |

## Vowels

a Ada (name), akụ (wealth)
e ego (money), eke (python)
i isi (head), ite (pot)
i $\quad$ isa (to wash), asị (lie)
okwu (word), obi (heart)
onụ (mouth), ọnwụ (death)
ude (pomade), ube (peer)
ụka (church), atụ (suggestion)
For a comparative study and better analysis, let us put the consonant sounds in a table/ chart.

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## Consonant Chart of Igbo language

From the above examples and tables, it is now clear that there are differences in the sound systems of the Chinese and the Nigerian language, Igbo. This is not just a physical difference in the number of sounds in each language but also in their pronunciation.

The Nigerian students learning the Chinese language will find it difficult to pronounce most of the sounds, especially the following sounds: j q x zh ch sh r z c. Let us take the problematic sounds one after the other.

The initials " j " is a palatal, voiceless affricate. In the production of this sound, the front of the tongue is raised to the palate and tip of the tongue is dropped to obstruct the air, then the tongue is moved a little forward to form a narrow channel without the vibration of the vocal cords. This initial is unaspirated and the pent-up air is weak. For example:

```
jiânjù (hard)
jiljué (to solve)
jiâjìng (family circumstances)
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The initial " q " is a palatal, voiceless affricate. In the production of this sound, the same process is experienced as if " j " is produced only that the pent-up air of " q " is stronger and it is aspirated. For example:

```
qînqiè (kind)
qiàqião (by chance)
qiânqiáng (far-fetched)
```

The initial " $x$ " is a palatal, voiceless assibilation. In the production of " $x$ ", the front tongue is raised near the hard palate to form a narrow channel and then air is allowed to rush out without the vibration of the vocal cords. For example:

```
xiângxià (the countryside)
xíngxiàng (image)
xixùn (goodnews)
```

The initial "zh" is blade-palatal, voiceless affricate. When it is produced, the tip of the tongue is raised up against the front of the hard palate to obstruct the breath, then the top of the tongue is removed a little to form a narrow channel and the air is allowed to rush out through the vocal cords. It is unaspirated and the air flow is very weak. For example:

| zhçnzhèng | (authentic) |
| :--- | :--- |
| zhèngzhì | (politics) |
| zhâozhãn | (to flutter) |

The initial "ch" is a blade-palatal, voiceless affricate. In the production of "ch" sound, the same process is experienced as if "zh" is produced only that there is no vibration of the vocal cords. Compared with "zh", it is aspirated and the air flow is very strong. For example:
chóuchú (to hesitate)
chícheng (to gallop)
châochãn (over production)
The initial "sh" is blade-palatal, voiceless assibilation. When it is produced, the tip of the tongue is raised against the hard palate but a narrow slot is left between them and air is allowed to rush out without the vibration of the vocal cords. For example:
shçnshì (one's life experience)
shàngshçng (ascent)
shãoshù (minority)
The initial "r" is a blade - palatal, voiced assibilation. In the production of this sound, the tip of the tongue is raised up near the hard palate and air is allowed to pass through the channel between

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the tongue and the palate with the vibration of the vocal cords. For example:

```
réngrán (still)
róngren (to tolerate)
róuruãn (soft)
```

The initial " $z$ " is a dental, voiceless affricate. In the production of " $z$ ", the tip of tongue is raised against the back of the upper teeth to obstruct the air. The tongue is removed a little to form a narrow slot and air is allowed to rush through the channel without vibration of the vocal cords. For example:

```
zongzé (general principle)
zàngzu (Tibetan)
```

zuòzuò (affected)

The initial " $c$ " is a dental, voiceless affricate. In the production of " $c$ " sound, the same process is experienced as if " $z$ " is produced only that there is no vibration of the vocal cords. Compared with " $z$ ", the pent-up air of " $c$ " is stronger. For example:

```
cângcù (hasty)
céngci (gradation)
cuîcán (devastate)
```


## Conclusion

In this work, we saw the phonological differences between Chinese and Igbo languages. Although Chinese language is said to be difficult to learn, yet with constant practice it can be learnt. Again, a local Chinese teacher will help the students in bridging this gap.

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