PHONOLOGICAL SKILLS ACQUISITION WITH REFERENCE TO ENGLISH CONSONANTS IN NIGERIAN SCHOOLS

Lubasa N’ti Nseedi
Department of Arts and Social Science Education
Nasarawa State University, Keffi, NIGERIA

&

Sunday Okakwu Ape
Department of English/French
Nigeria Police Academy
Wudil, Kano, NIGERIA

ABSTRACT

Speaking is one of the language skills that has proven a serious level of difficulty to the second language learner of English. This is the skill that the teaching of English phonology tries to develop in the learner-speaker of English language. Phonology is taught in segmental and supra-segmental dimensions, and the segmental phonology, particularly the consonant types have been influenced adversely by the fossilized aspects of the mother tongues of the learners. This paper is intended to proffer solutions to such linguistic problems by identifying the criteria for the description of the consonant types in English and embarking on the concise and comprehensive description of each consonant type. It is expected that the description of the consonant types will aid the learner in acquiring the speaking skill in English language. To do this, the researchers have relied more heavily on the library type of research, though some important cues have been taken from some language laboratory works.

INTRODUCTION

According to traditional linguistic studies, there are forty-four (44) sounds in English language. Chomsky and Halle (1968), however, posited that there are other sounds that traditional linguists had not considered. According to them, apart from the pure vowels and the diphthongs, there are triphthongs which are also vowels. The addition of such sound units will amount to something more than the forty-four (44) sounds recognized by the traditional linguists. However, out of the forty-four sounds recognized by traditional grammar, there are twenty (20) that are called vowels. According to Uzoezi (1992; 30), the vowels are distinct sounds of English made ‘without any partial or total obstruction of the egressive pulmonic air as it passes from the lower pharynx up, through the oral cavity, into the outer atmosphere’. Counting out the twenty vowel sounds from the total sound system of English language, one will be left with twenty-four (24) more sounds usually referred to as consonants. Our focus is on the consonant sounds because of the difficulty they pose to the second language learners of English. Most mother tongues of the second language learners differ from English in terms of orthography; their consonant systems are quite unlike that of English. The Hausa language, for instance, does not have some of the consonant sounds that English language has. This situation causes interference in the Hausa speaker's English speech, a problem that he can conquer if adequately taught the English consonant types. How are the English consonants classified and what are the characteristics of each of them? How could they pedagogically be approached? These are the two basic questions that this paper is set to answer. In other words, this paper intends to address the basic issue of how English consonant sounds could pedagogically be approached. However before that, it is pertinent to take a look at the classification and the characteristics of the sounds.
CLASSIFYING THE ENGLISH CONSONANT SOUNDS

Gimson (1970) identifies two categories of the English consonant sounds. These include those articulations in which there is a total closure, or a stricture causing friction and the articulations in which there is only a partial closure or an impeded oral or nasal escape of the air. Where there is a total stop, the sound is called plosive while the stricture produces fricatives and affricates. The plosive consonant sounds (which are made with plosion) include \[p, b; t, d; k, g\]. The fricative consonant sounds (which are made with friction) include \[f, v; s, z; ŋ, ô; h\]. Each of the affricate consonant sounds is a combination of a plosive and a fricative and the two in English are \[tʃ\] and \[dʒ\].

The articulations in which there is only a partial closure or an impeded oral or nasal escape of the air account for the nasal, lateral and frictionless continuants called semi-vowels. An argument here may be that there should be no sitting on the fence when describing the consonant sounds. They are distinct from vowel sounds in the sense that they are made with clear obstruction(s) to the egressive pulmonic air; why then are some referred to as semi-vowel sounds even when their production involves clear obstruction(s)? All the English sounds should be either consonant or vowel sounds, no ‘semi-’, no sitting on the fence. The above categorization runs contrary to Uzoezi’s (1992) model which sees the nasals as stops and calls the other members of the second category approximants. Whichever is the case, the nasals are \[m, n, ŋ\]; the lateral is \[l\] and the continuants are \[r, w, j\]. From the foregoing it can be seen that the consonants are classified according to their manner of articulation – how they are produced and perceived.

According to Uzoezi (1992; 61), and Omachonu (2010; 32 – 41), consonants can also be identified and/or classified according to place of articulation. In each case, there is a point at which two organs meet to articulate a given consonant sound. O’Connor (1967), and Roach (2000) identify the organs of speech in two major parts: the upper and the lower organs of speech. According to O’Connor, the upper organs include the parts ranging from the vocal cords to the upper and lower lips while the lower organs include all the parts from the vocal cords down to the lungs. The lungs are erroneously excluded by some scholars from the organs of speech, but it should be noted that without the air which emanates from the lungs there would not be any sounds. Since the lungs generate the air with which sounds are made, they are parts of the organs of speech (Roach: 2000; 27 – 37).

Focusing on sound articulation which involves the upper section of the organs of speech, the following places and the sounds produced are identified:

- The bi-labial which is the meeting of the lower and the upper lips, as in \[p, b, m, w\].
- The labio-dental which is the contact between the lower lip and the upper teeth, as in \[f, v\].
- The inter-dental which involves the tongue coming between the lower and the upper teeth, as in \[0, ό\].
- The alveolar which is the tip of the tongue interacting with the teeth ridge to produce \[t, d, n, s, z, l, r\].
- The palato-alveolar which involves the tongue making contact with the hard palate to produce \[tʃ, dʒ, ʃ, ʒ\].
- The palatal which involves the tongue making contact with the area between hard and the soft palate to produce \[j\].
• The velar which involves contact between the back of the tongue and the soft palate, as in [k, g, ŋ].
• The glottal which involves contact between the root of the tongue and the epiglottis, as in [h].

Apart from the parameters of manner and place of articulation, Jones (2010) explains the roles of the velum and the vocal cords in the articulation of the consonant sounds. If the velum is raised in the articulation of a sound, the air escapes through the mouth cavity; and if it is lowered, the air escapes through the nasal cavity and the sound is described as nasal, as in [m, n, ŋ].

The vocal cords can either vibrate or run up and down in the production of a sound. If they vibrate in the process of production, the sound is described as voiced; but if they run up and down, the sound is voiceless. From some laboratory investigations made in pursuit of this paper, it has been observed that nine (9) of the English consonant sounds are voiceless while fifteen (15) are voiced. They are presented below.

### DESCRIBING EACH TYPE OF THE ENGLISH CONSONANT SOUNDS

Following the above criteria of classifying the consonant sounds, the following table can be constructed for easy description of each consonant type.

<table>
<thead>
<tr>
<th>Place of articulation</th>
<th>Bi-labial</th>
<th>Labio-dental</th>
<th>Inter-dental</th>
<th>Alveolar</th>
<th>Palato-alveolar</th>
<th>Palatal</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manner of articulation</td>
<td>p, b</td>
<td>t, d</td>
<td>k, g</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>plosive</td>
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</tr>
<tr>
<td>fricative</td>
<td>f, v</td>
<td>0, ð</td>
<td>s, z</td>
<td>j, ʒ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>affricate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>tʃ, dʒ</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>nasal</td>
<td>m</td>
<td>n</td>
<td>ŋ</td>
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<td>lateral</td>
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<tr>
<td>approximant</td>
<td>w</td>
<td>r</td>
<td>J</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Adapted from Uzoezi (1992) model

From this table each consonant type can be comprehensively described thus:
- [p] is voiceless bi-labial plosive consonant sound
- [b] is voiced bi-labial plosive consonant sound
- [t] is voiceless alveolar plosive consonant sound
- [d] is voiced alveolar plosive consonant sound
- [k] is voiceless velar plosive consonant sound
- [g] is voiced velar plosive consonant sound
- [f] is voiceless labio-dental fricative consonant sound
- [v] is voice labio-dental fricative consonant sound
- [θ] is voiceless inter-dental fricative consonant sound
- [ð] is voiced inter-dental fricative consonant sound
- [s] is voiceless alveolar fricative consonant sound
- [z] is voiced alveolar fricative consonant sound
- [ʃ] is voiceless palato-alveolar fricative consonant sound
[3] is voiced palato-alveolar fricative consonant sound
[h] is voiceless glottal fricative consonant sound
[tʃ] is voiceless palato-alveolar affricate consonant sound
[dʒ] is voiced palato-alveolar affricate consonant sound
[m] is voiced bi-labial nasal consonant sound
[n] is voiced alveolar nasal consonant sound
[ŋ] is voiced velar nasal consonant sound
[l] is voiced alveolar lateral (approximant) consonant sound
[r] is voiced alveolar central (approximant) consonant sound
[w] is voiced bi-labial central (approximant) consonant sound
[j] is voiced palatal central (approximant) consonant sound.

OBSERVATION

The English consonant types have been classified into three major groups. These are the stops which include the plosives, the nasals and the affricates; the fricatives and the approximants which include the lateral and the central. These three groups are the products of the criterion of manner of articulation. Each type of the consonant sounds can also be described according to the state of the vocal cords – whether they are vibrating or not. By these, three major criteria for the description of the consonant sounds have been identified – criteria according to manner of articulation, place of articulation and state of the vocal cords. There is a fourth criterion which distinguishes between oral and nasal sounds: the state of the velum - raised to produce oral sounds or lowered to produce nasal sounds.

PEDAGOGICAL IMPLICATIONS

From the observation above, two approaches to the teaching/learning of phonology both at tertiary and secondary levels of education can be taken - the linguistic which is basically structural and the psychological which is basically pedagogical. The linguistic or language-based approach to the acquisition of 'phonological skills' or language sounds consists of studying the linguistic characteristics of the sounds together with their manner(s) of production as presented above with the view of implementing them in practice for communication purposes. As such it is more concerned with learning with teaching as a corollary than acquisition for communication purposes. At best, it is concerned with acquisition through learning. This is the approach mainly used throughout the last century and even now in the twenty first century. The psychological or pedagogy-based approach is concerned with providing the learner or student with Psychology-and-Pedagogy-based strategies for communication and therefore supersedes learning mainly concerned with storing knowledge with the view of retrieving and using it in due course. The Psychological approach might not be favored in an examination-based and oriented educational system but should be desired to help students develop independent thinking and turn from memorization learning strategizers and solution-enjoyers to persevering inquirers and activity-enjoyers (Lubasa 2000, 2002 and 2012).

CONCLUSION

This study has been able to identify phonology as a difficult aspect of the English language as a course of study in Nigerian higher institutions. Apart from this difficulty, the dearth of language laboratories and technicians to handle the very few available ones is a major concern to language teachers and lecturers. To make the teaching of phonological skills
feasible in the presence of the present challenges, the study has proffered the description of English consonant sounds and other criteria as a way forward. It is therefore suggested that lecturers and teachers in higher institutions should emphasize these criteria to help the learner-speaker of English to articulate the English consonant sounds appropriately. It is also believed that by so doing, the learners will make conscious efforts to conquer the mother-tongue interference in their English speech. The use of a well built language laboratory is also a sine qua non for successful acquisition of phonological skills in higher education. This paper is a product of some level of research in language laboratory. It is therefore suggested that good language laboratories should be built in all the departments of English in Nigerian universities and other higher institutions in the country.

REFERENCES


Gimson, A.C; An Introduction to the Pronunciation of English; London: Richard Arnold; 1970.


Lubasa N'ti Nseendi; "Reducing Communication Breakdown and the Learner's Attitude of Partisant de Moindre Effort" in P. A. Eniayeju and P.T. Ortese (ed.) Contemporary Issues in Education; a Publication of the Faculty of Education, Nasarawa State University, Keffi; 2012.


(eds.) NSUK Texts in General Linguistics Vol.1; Enugu: Rossen Publications Ltd; 2011.
