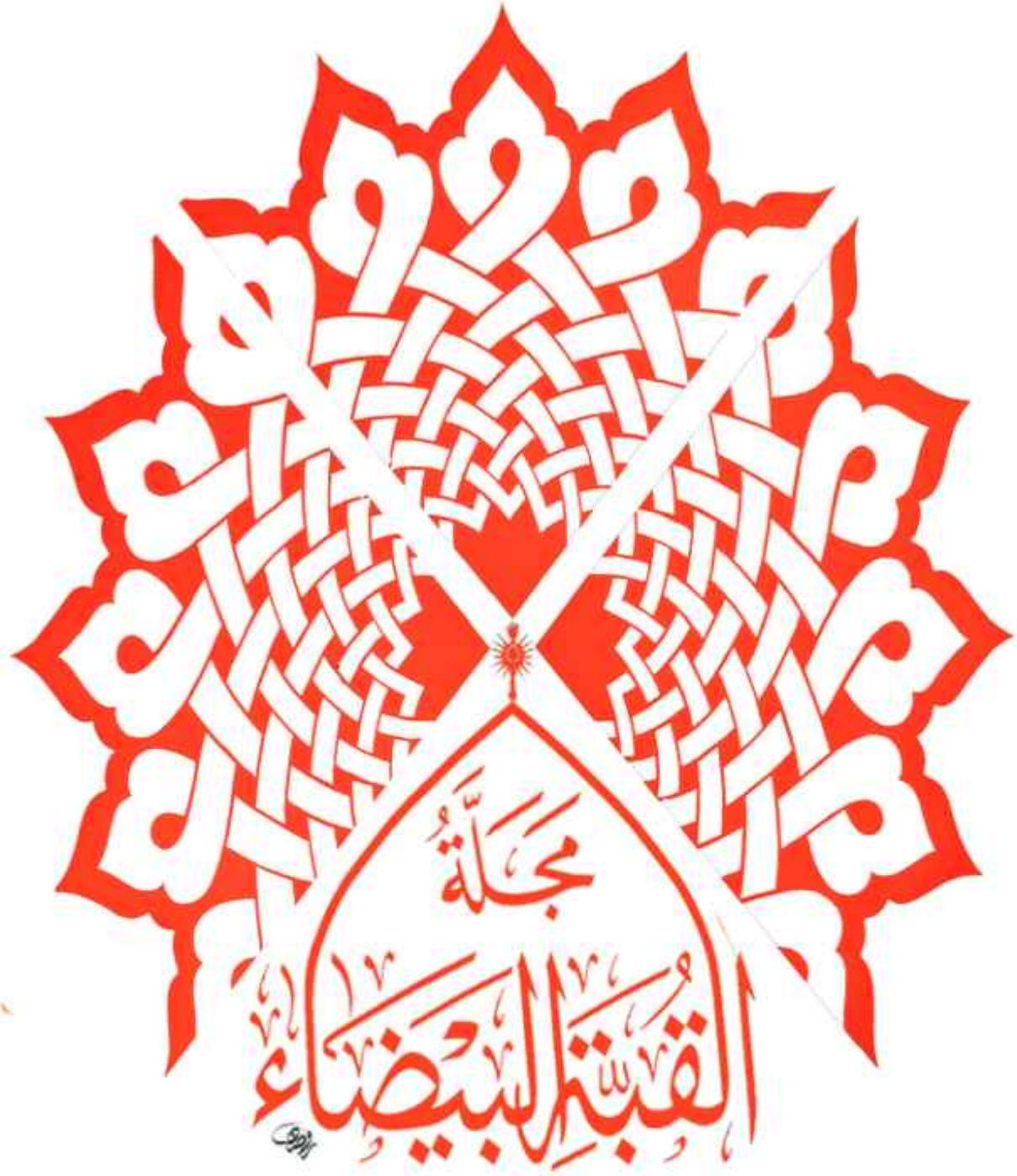
يا صاحبَ القُبَّةِ البيضاءِ

يـــا

صاحبَ القُبَّةِ البيضاءِ في النَّجـفِ
مَن زارَ قبرَكَ واسْتَشفى لَدَيكَ شَفِي
زوروا أبا الحَسَنِ الهادي لَعَلَّكُـــمُ
تُحظَون بالأجرِ والإقبالِ والزُّلَفِ
زوروا لِمَن تُسْمَعُ النَّجوى لَديهِ فَمَنْ
يَزرهُ بالقَبرِ مَلهوفاً لَديهِ كُفِـــي
إذا وَصَلْ فَاحْرِمْ قَبْلَ تَدْخُلَهُ
مُلَبِّيـاً وإسْعَ سَعْياً حَولَهُ وطُـفِ
حتَّى إذا طِفْـتَ سَبْعاً حولَ قُبَّتِهِ
تأمَّـلْ البابَ تَلْقى وَجْهَهُ فَقِـفِ
وقُل سَلامٌ من اللهِ الســلامِ على
أهـلِ السلامِ وأهلِ العلمِ والشـرَفِ



فصلية تُعنى بالبحوث والدراسات الإنسانية والاجتماعية العدد(٩)
السنة الثالثة جمادى الأولى ١٤٤٦هـ تشرين الثاني ٢٠٢٥م

Republic of Iraq
Ministry of Higher Education & Scientific Research
Research & Development Department

جمهورية العراق
وزارة التعليم العالي والبحث العلمي
دائرة البحث والتطوير
قسم الشؤون العلمية

No.: الرقم: ب ت/ ٨١٦٥/٤
Date التاريخ: ٢٠/٧/٢٠٢٥

ديوان الوقف الشيعي/ دائرة البحوث والدراسات

م/ مجلة القبة البيضاء

السلام عليكم ورحمة الله وبركاته...

اشارة الى كتابكم المرقم ١٣٧٥ بتاريخ ٢٠٢٥/٧/٩، والحاقاً بكتابنا المرقم ب ت ٤/ ٣٠٠٨ في ٢٠٢٤/٣/١٩، والمتضمن استحداث مجلتكم التي تصدر عن دائرتكم المذكوره إعلاه ، وبعد الحصول على الرقم المعياري الدولي المطبوع وانشاء موقع الكتروني للمجلة تعتبر الموافقة الواردة في كتابنا اعلاه موافقة نهائية على أستحداث المجلة.

...مع وافر التقدير

أ.د. لبنى خميس مهدي
المدير العام لدائرة البحث والتطوير
٢٠٢٥/ ٧ /١٧

نسخة منه الى:
- قسم الشؤون العلمية/ شعبة التأليف والترجمة و النشر.... مع الاوليات
- الصادرة

مهند ابراهيم
١٥/ تموز

إشارة إلى كتاب وزارة التعليم العالي والبحث العلمي / دائرة البحث والتطوير
المرقم ٥٠٤٩ في ٢٠٢٢/٨/١٤ المعطوف على إعمامهم المرقم ١٨٨٧ في ٢٠١٧/٣/٦
تُعدّ مجلة القبة البيضاء مجلة علمية رصينة ومعتمدة للترقيات العلمية.

فصلية تُعنى بالبحوث والدراسات الإنسانية والاجتماعية العدد(٩)
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العنوان الموقعي
مجلة القبة البيضاء
جمهورية العراق
بغداد /باب المعظم
مقابل وزارة الصحة
دائرة البحوث والدراسات

الاتصالات

مدير التحرير
٠٧٧٣٩١٨٣٧٦١
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الرقم المعياري الدولي
(3005-5830)

دليل المؤلف.....

١-إن يتسم البحث بالأصالة والجدة والقيمة العلمية والمعرفية الكبيرة وسلامة اللغة ودقة التوثيق.

٢- إن تحتوي الصفحة الأولى من البحث على:

أ. عنوان البحث باللغة العربية .

ب . اسم الباحث باللغة العربية . ودرجته العلمية وشهادته.

ت . بريد الباحث الإلكتروني.

ث . ملخصان أحدهما باللغةِ العربية والآخر باللغةِ الإنكليزية.

ج . تدرج مفاتيح الكلمات باللغة العربية بعد الملخص العربي.

٣-أن يكونَ مطبوعًا على الحاسوب بنظام(office Word) ٢٠٠٧ او ٢٠١٠) وعلى قرص ليزري مدمج (CD) على شكل ملف واحد فقط (أي لا يُجزَّأ البحث بأكثر من ملف على القرص) وتُزوَّد هيأة التحرير بثلاث نسخ ورقية وتوضع الرسوم أو الأشكال، إن وُجدت، في مكانِها منَ البحثِ، على أن تكونَ صالحةً مِنَ الناحيةِ الفنيَّة للطباعة.

٤-أن لا يزيدَ عدد صفحات البحث على (٢٥) خمس وعشرين صفحة من الحجم (A4).

٥. يلتزم الباحث في ترتيب وتنسيق المصادر على الصيغة APA

٦-أن يلتزم الباحث بدفعِ أُجُور النشر المحدَّدة البالغة (٧٥،٠٠٠) خمسة وسبعين الف دينار عراقيّ، أو ما يعادلها بالعملات الأجنبية.

٧-أن يكونَ البحثُ خاليًا مِنَ الأخطاءِ اللغوية والنحوية والإملائيَّة.

٨-أن يلتزم الباحث بالخطوط وأحجامِها على النحو الآتي:

أ. اللغة العربية: نوع الخط (Arabic Simplified) وحجم الخط (١٤) للمتن.

ب . اللغة الإنكليزية: نوع الخط (Times New Roman) عناوين البحث (١٦). والملخصات (١٢). أما فقرات البحث الأخرى؛ فبحجم (١٤) .

٩-أن تكونَ هوامش البحثِ بالنظام التلقائي (تعليقات ختامية) في نهاية البحث. بحجم ١٢.

١٠-تكون مسافة الحواشي الجانبية (٢,٥٤) سم والمسافة بين الأسطر (١) .

١١-في حال استعمال برنامج مصحف المدينة للآيات القرآنية يتحمل الباحث ظهور هذه الآيات المباركة بالشكل الصحيح من عدمه، لذا يفضل النسخ من المصحف الالكتروني المتوافر على شبكة الانترنيت.

١٢-يبلَّغ الباحث بقرارِ صلاحيَّة النشر أو عدمها في مدَّةٍ لا تتجاوز شهرين من تاريخ وصولهِ إلى هيأةِ التحرير.

١٣-يلتزمُ الباحث بإجراءِ تعديلات المحكّمين على بحثهِ وفق التقارير المرسلة إليهِ وموافاةِ المجلة بنسخةٍ مُعدَّلةٍ في مدَّةٍ لا تتجاوزُ (١٥) خمسة عشر يومًا.

١٤-لا يحق للباحث المطالبة بمتطلبات البحث كافة بعد مرور سنة من تاريخ النشر.

١٥-لاتعاد البحوث الى أصحابها سواء قبلت أم لم تقبل.

١٦-دمج مصادر البحث وهوامشه في عنوان واحد يكون في نهاية البحث، مع كتابة معلومات المصدر عندما يرد لأول مرة.

١٧-يخضع البحث للتقويم السري من ثلاثة خبراء لبيان صلاحيته للنشر.

١٨-يشترط على طلبة الدراسات العليا فضلاً عن الشروط السابقة جلب ما يثبت موافقة الاستاذ المشرف على البحث وفق النموذج المعتمد في المجلة.

١٩-يحصل الباحث على مستل واحد لبحثه، ونسخة من المجلة، وإذا رغب في الحصول على نسخة أخرى فعليه شراؤها بسعر (١٥) الف دينار.

٢٠-تعبر الأبحاث المنشورة في المجلة عن آراء أصحابها لا عن رأي المجلة.

٢١-ترسل البحوث على العنوان الآتي: (بغداد – شارع فلسطين المركز الوطني لعلوم القرآن)

أو البريد الألكتروني: (off_research@sed.gov.iq) بعد دفع الأجور في الحساب المصرفي العائد إلى الدائرة.

٢٢-لا تلتزمُ المجلة بنشر البحوث التي تُخلُّ بشرطٍ من هذهِ الشروط .

مجلة انسانية اجتماعية فصلية تصدر عن دائرة البحوث والدراسات في ديوان الوقف الشيعي
محتوى العدد (٩) جمادى الأولى ١٤٤٦هـ تشرين الثاني ٢٠٢٥م

A CONTRASTIVE ANALYSIS OF THE CONSONANTAL AND VOCALIC SYSTEMS OF ENG–

Assistance Lecture: Khuloud Waleed Majeed Mahmood
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Master Of Arts English Language
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Abstract:

The term of Phonetics is meant the production study of sounds[speech sounds] by humans. It is about physical sounds aspect, which are called phones. In phonetics, sounds are classified for many categories that depend up their articulatory properties. Two important categories are contoids (consonant sounds), and vocoids (vowel sounds).

This current paper aims at conducting a "Contrastive Analysis" for the consonantal and vocalic language {English} and Portuguese. This might be provided an analysis which is a descriptive analysis with the study of a contrastive one between consonant sounds and vowels related to these languages, clarifying the featuers of similar and dissimilar features to these two sound systems. In order to achieve the aims of this paper, the researcher conducted a comprehensive review of existing literature on phonetics, focusing on the consonantal and vocalic systems of English and Portuguese, and carried out a contrastive analysis of the consonantal and vocalic systems in both languages to identify the points of similarity and difference with regard to these phenomena.

The results of this paper show that both languages utilize voiced and voiceless contrasts for consonants, the presence of similar categories of consonantal sounds (stops, fricatives, nasals, etc.), both languages exhibit a range of vowel sounds, albeit in different quantities and qualities, Portuguese includes nasal vowels and has a more stable vowel quality in unstressed syllables, English has a larger vowel inventory with many diphthongs and a more complex system of vowel reduction and the stress patterns in English are more variable compared to the more predictable stress rules in Portuguese.

Keywords: Contrastive Analysis, Phonetics, Portuguese, English, Consonantal System, Vocalic System.

Introduction

Portuguese and English are two of the most widely spoken languages in the world today. According to Wikipedia, Portuguese is a part of a broader group known as West Iberian, which contains several minor languages or dialects with fewer speakers all of which are mutually intelligible among them to some degree and derived some words from

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English, On the other hand, English is a modern language that has a list of words potentially borrowed or derived from Portuguese too. Moreover. both languages have some common origins adapted from Latin, Although they are closely related, there are also important differences between them.

To start with, "phonetics is the scientific study of speech", Conventionally it is divided into articulatory phonetics, acoustic phonetics and auditory phonetics. Instrumental phonetics studies all the above mentioned branches by means of instruments to measure, record or analyze data. Phonetics is purely scientific., It is commonly considered to be a distinct discipline from linguistics (Trask, 1996: 270).

Furthermore, Roach (2002: 58) agrees with Trask and most phoneticians, if not all, that phonetics is "the scientific study of speech". He (Ibid.) adds that the principal concerns of phonetics are firstlythe discovery of how speech sounds are produced (articulatory and kinaesthetic observation). Secondlyhow they are used in spoken languages. Thirdly, the need for agreed conventions for using phonetic symbols that represent speech sounds. This function is well done by the „International Phonetic Alphabet" (henceforth IPA).

Accordingly, Yule (2014: 99) states that phonetics is a production syudy of speech sounds by humans. It is about physical aspect sounds, which are called phones. As for Ogden (2009: 1)) points that study of the sounds of speech is a systematic study named (phonetics), which is observed physically and directly . and sometimes mightn't be pointed for linguistic , for it is the outward, since the first basic point of the research[linguistic research-] is physical manifestation that isn't speech but it is language because language is abstract .A classification of speech sounds into contoids, and vocoids is essential for understanding phonetic structures and their articulatory properties. However, the distinctions among these categories can sometimes be unclear, leading to confusion in phonetic.

Contrastive phonetics means the study of different phonemic systemsm, that might be side by side for finding out similarities and dissimilarities between the phonemes concerneing these two languahes , in which each one differs from the other in its own phonemic system, that holds [unique] as well as a {common features}. some pho-

nemes might be shared among languages, sure without having the same phonemic inventory in two languages. So, the paper is intended to conduct a Contrastive Analysis of consonantal systems and vocalic of :"English also Portuguese".

1.1 The Statement of the Problem

The phonological systems of English and Portuguese present unique challenges and opportunities for linguists and language learners. While both languages share Indo-European roots, their consonantal and vocalic systems differ significantly in terms of phoneme inventory, articulation, and phonotactic constraints. These differences can lead to difficulties in pronunciation, comprehension, and language transfer for learners transitioning between the two languages. This paper seeks to systematically analyze the consonantal and vocalic systems of both languages to identify their similarities and differences, providing insights that can inform teaching methodologies and learning strategies.

Based in what have mentioned above this paper tries to answer the following question: What are the key similarities and differences in the consonantal systems of English and Portuguese?

1.2 Goals of the Study

With the connection for the preceding statements, basically this research aims at conducting Contrastive Analysis –for vocalic and consonantal English systems and Portuguese and for finding out differences and similarities which underlie these sound systems.

1.3 Hypotheses

It is hypothesized that:

1. The consonantal and vocalic systems in English is more difficult to deal with than in Portuguese.
2. English and Portuguese have certain points of similarity in terms of the consonantal and vocalic systems.
3. English and Arabic have certain points of differences in terms number of the consonantal and vocalic systems.

1.4 Procedures

In the course of fulfilling the objectives of this paper, the following steps are to be followed:

1. Conduct a comprehensive review of existing literature on phonet-

ics, focusing on the consonantal and vocalic systems of English and Portuguese.

2. Carry out a contrastive analysis of the consonantal and vocalic systems in both languages to identify the points of similarity and difference with regard to these phenomena.

3. Results of the comparison will be given.

4. Drawing some conclusions.

1.5 Limits

The present study is limited to those aspects of phonetics: the consonantal and vocalic systems of English and Portuguese.

1.6 Value

It is expected that the current study is of great value for those interested in the consonantal and vocalic systems in English and Portuguese.

2. English Consonantal and Vocalic Systems

2.1 ///Consonant Sounds"

Crystal (2008: 51) points that consonants are speech sounds category created by blocking or partially blocking airflow through the mouth which differs from vowels, formed with an unobstructed vocal tract, consonants necessitate some level of closure or constriction. This closure can happen at different points, including: throat,, teeth,, lips, , tongue, leading to diverse array sounds which are consonant sounds. These Consonants are essential language elements , crucial for differentiating words and conveying grammatical and syntactic meaning(Crystal, 2008: 51).

According to Kelly (2001: 112), consonants are produced by interrupting, restricting, or redirecting airflow in different manners, based on their manner and place of articulation. This definition can be condensed to indicate that consonants are created through closed or nearly closed articulations that disrupt -airflow in various ways, most widely spoken international languages recognized and , consists of twenty four sounds named consonant sounds which are :

:{ /p/, /b/, /m/, /w/, /f/, /v/, /ð/, /θ/, /t/, /s/, /d/, /z/, /n/, /l/, /r/, /ʃ/, /ʧ/, /y/, /ʤ/, /k/, /g/, /ŋ/, and /h/}.

According to Ferre et al. (2012, p. 288), consonant sounds are typically characterized by their manner articulation and place articulation . producing consonant sounds involves not only the points of articula-

tion but also the extent to which " the vocal tract" obstructs . Consonants are essential elements of spoken language and are identified by their articulation methods. They define as //speech sounds// created either completely or partially blocking airflow through mouth using various speech organs such as the lips, tongue, and teeth.

In English, consonant sounds are differentiated by several factors, including their point of formation in the mouth, their articulation method, voiceless or voiced . The constriction occurs indicated by [place of articulation] while describing how tightly and in what way the airflow is restricted could be by [manner of articulation] Additionally, during a production of a "consonant sound voicing pertains to whether the" vocal cords" vibrate". (Liu & Liang, 2016, p. 23).

2.1.1 The Articulation of Consonants

In general, consonants are one of the two fundamental components of speech, with the other being vowels. The production of consonants requires some form of obstruction to the airflow in the vocal tract, as air is expelled from the lungs, passing through the glottis {a space between the {vocal cords}and out through {the mouth}.

2.1.2 Types of Articulation

Articulation is divided into two types: primary and secondary. When the segment articulates in constricting with two variant places of articulation, the more fundamental constriction (that is, which involves the tighter closure) is regarded as a primary articulation whereas secondary articulation refers to the point of articulation involving a lesser degree of stricture, e.g. labialisation, palatalisation, pharyngealisation (Trask, 1996: 288). It is the" primary articulation" that determines the choice of a symbol of representing a segment, while "secondary articulations" are indicated with [diacritics]. For example, a „labialised" sound is transcribed with the diacritic [ʷ] under which the main symbol is placed, as in the initial /k/ in coop [kʷu:p]. Another example is the pharyngealised sound which is represented by the diacritic[ˤ] as in [dˤ] and [tˤ],the emphatic consonants in Arabic are so articulated (Ibid.: 262).

2.1.3 ///{–place of articulation}

the location means the place of articulation where airflow from sound or the lungs produced in a larynx that constricts with the

articulators. Articulators are the speech "Organs" involved in sound production. Phonetically, the main speech organs include eight components: the lips, teeth, tongue, palate, uvula, and the nasal and oral cavities, as well as the vocal cords (Hossen, 2017: 43). In producing consonant sounds, two articulators typically move (Wagner, 2005: 5). These articulators are categorized into (active)and(passive) types.{ Active articulators} include the tongue and lower lip, while{ passive articulators} consist of :

a. "upper lip",
b. "upper teeth",
c" the roof of the mouth", and
d "the rear wall" (Roach, 2002: 16).

Kelly (2000: 47) refers for each sound generated by the organs speech, or [articulators], is termed a distinctive speech sound. . A speech sound could be classified into "8" categories based on the[place of articulation] of consonants, including :

1. Bilabial: The primary constriction is at the two lips articulators, e.g. / p, b, w /.
2. Labio-dental: The active articulator is the lower lip with the passive articulator the upper teeth,
e.g. / f, v /.
3. Dental: The active articulator is the tip of the tongue with the passive articulator the upper teeth, e.g. / θ, ð /.
4. Alveolar: The active articulator is the blade, or tip and blade of the tongue with the passive articulator the alveolar ridge, e.g. / t, d, l, n, s, z /.
5. Post-alveolar: The active articulator is the tip of the tongue with the passive articulator the backward part of the alveolar ridge, e.g. the initial sound in 'read' that is /r/.
6. Retroflex: The active articulator is the bottom of the tip of the tongue and the passive articulator is the front of the hard palate immediately behind the alveolar ridge. The tip of the tongue is curled back in such a way that only its lower part articulates, e.g. /r/ that is found in south-west British and American English of pronunciation.
7. Palato-alveolar: The blade, or the tip and the blade of the tongue (active articulator) articulates against the alveolar ridge (pas-

sive articulator), and the front of the tongue (active articulator) is raised towards the hard palate (passive articulator), e.g. / ʃ, y, tʃ, dy /.

8. Palatal: The active articulator is the front of the tongue with the passive articulator the hard palate, e.g. /j/.

9. Velar: The active articulator is the back of the tongue with the passive articulator the soft palate, e.g. /k, g, ŋ/.

10. Uvular: The back of the tongue articulates with the uvula, e.g. /y/ as in French 'rouge'.

11. Glottal: The two vocal cords are the articulators for the glottal sounds. The sounds are produced by an obstruction, or a narrowing causing friction, but not vibration between the vocal cords, e.g. /h/. The following figure below aims to conclude an explanation of the eight articulators.

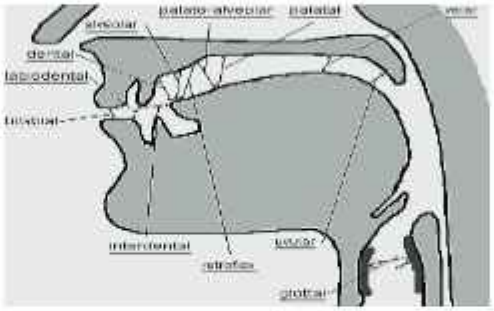


figure: [1]
English Consonants
Place of Articulation

2.1.4 Manners of Articulation

Manner of articulation is typically included in phonology courses, detailing how sounds are created and produced. According to Rogers (2000: 23), consonants in English can be categorized for six distinct kinds that is based on their [manner of articulation]: "plosive", "fricative", "affricate"," nasal"," lateral", and "approximant", for the following :

1. (Plosive Consonants): Also known as stop consonants, these sounds are produced by a complete blockage of the airflow in the vocal tract, followed by a sudden release of the air. Examples of plosive consonants in English include /p/, /b/, /t/, /d/, /k/, and /g/.

2. (Fricative Consonants): These sounds are produced by forcing the air through a narrow opening in the vocal tract, creating a turbulent

airflow and a hissing or buzzing sound. Examples of fricative consonants in English include /f/, /v/, /s/, /z/, /ʃ/, and /y/.

3. (Affricate Consonants): These sounds are produced by a combination of a plosive and a fricative sound, where the plosive blockage is released into a fricative sound. Examples of affricate consonants in English include /tʃ/ as in "church" and /dy/ as in "judge".

4. (Nasal Consonants): These sounds are produced by lowering the velum (the soft tissue at the back of the mouth) to allow air to flow out of the nose. Examples of nasal consonants in English include /m/, /n/, and /ŋ/ as in "sing".

5. (Lateral Consonants): These sounds are produced by allowing the air to flow along the sides of the tongue, while blocking the airflow through the center of the mouth. Examples of lateral consonants in English include /l/ as in "like".

6. (Approximant Consonants): These sounds are produced by bringing the articulators (tongue, lips, etc.) close together, without creating enough obstruction to produce a turbulent airflow. Examples of approximant consonants in English include /w/ as in "water" and /j/ as in "yes". (Roach, 2009: 74)

Manner of Articulation	Place of Articulation							
	Bilabial	*Labio*	*Dental*	*Alveolar*	*Palato-Alveolar*	*Palatal*	*Velar*	*Glottal*
Plosive-	p b			td			Kg	
Fricative		f v	θð	sz	ʃʒ			h
Affricate-					ʧ ʤ			
Nasal	m			n			ŋ	
Lateral				l				
Approximant	w				r	j		

Table [1] place and Manner of articulation of English Consonants (horizontally) and (vertically)

2.1.5 /Voiced" and Voiceless" Consonants

(Yule: 2014: 45) points that the sound named' the voiceless' sound is when vocal folds are spread 'apart', the air flows between them. (No vibration) While voiced sound when the vocal folds are drawn to-

gether, the air from the lungs pushes them apart as it passes through, creating vibration.

-Voiced phonemes :-

"b", "m", "v", "ð"", "d"," z"," n"," l", "ʤ",y", "r", "j", "g", "w","ŋ" –

Voiceless .phonemes :–

"b", "m", "v", "ð"", "d"," z"," n"," l", "ʤ",y", "r", "j", "g", "w","ŋ" –

Voiceless .phonemes :-

p, f, θ, t, s, ʃ, k, h

Table (2): Phonemic Chart Voiced and Voiceless Consonants

Manner of Articulation	Stops (Plosives)	Fricatives	Affricates	Nasals	Liquids	Glides
-voiced consonants	/b/, /d/, /g/	/v/, /z/, /y/	/dy/	/m/, /n/, /ŋ/	/l/, /r/	/w/, /j/
-voiceless consonants	/b/, /d/, /g/	/v/, /z/, /y/	/dy/	---	-----	/w/, /j/

2.2 Vowel Sounds

In the production of Vowels speech sounds there are no obstacle to the flow of the air, (Roach, 1992: 76).

Similarly, Crystal (2008: 517) states that vowels articulation in case of the- air flows out from the mouth without any completed closure. „"the vowels would be oral when air escapes solely through the mouth, and in such case, the vowels are nasals when some air is simultaneously released through the nose.

According to the Oxford Dictionary (2000: 483), a vowel is a speech sound produced with an open mouth, where the tongue does not make contact with the roof of the mouth, teeth, or other structures. Vowels are sounds generated without any obstruction to the airflow through the mouth. The tongue is crucial in shaping these vowel sounds.

An English vowel is categorized for two main classes,, {simple vowel} (also known as {pure vowel} or {monophthongs} and [diphthongs] (Puspita, 1997: 36).[Simple vowel] maintain a consistent quality, as seen in the vowel of words like "pit," "cat," "dog," "set," "but," "put," adding the first vowel in "suppose." In contrast, diphthongs are[vowels] which demonstrate a quality change within a[single syllable].

2.2.1 The Articulation of Vowels:

The other basic segment of speech sound is the vowel. The articula-

tion of vowels involves no significant stricture of the air stream (Trask, 1996: 382). They might be classified according to height part of the tongue, which is involved, with lips shape : rounded or unrounded. A tongue may be "high", "mid", or" low"; also the tongue part might be[front], [central] or[back].

2.2.2 Classification of Vowels

English has twelve pure vowel sounds. They are divided phonetically into seven short and five long vowels. Pure vowels (monophthongs) and gliding vowels are other dimensions for describing vowel sounds taking into account the quality of the sound during articulation .The first term is used when the quality is stable as in / iː,ɪ, e, æ, ɑː ɒ, ɔː,ʊ, uː, ʌ, ɜː, and ə/whereas the latter is used when a change is noticed in the quality, and if two vowels are involved, the term diphthong is used instead and in Received Pronunciation (henceforth RP) English they are eight i.e., /eɪ, aɪ, ɔɪ, əʊ, aʊ, ɪə, eə, ʊə/ (Crystal, 2003: 496).

The vowels may also be arranged in a table. Here is an example of a simple table: Table (3): Chart of (RP) pure vowels adopted from (Wagner, 2005:8)

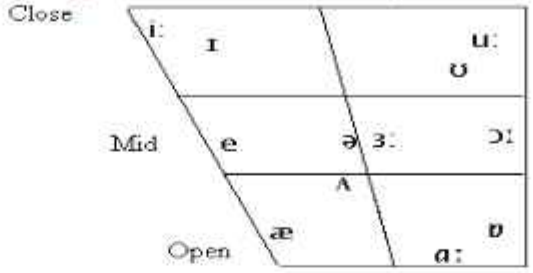
Height of the tongue	Part of the tongue used		
	Front	Central	Back
Close	ɪ iː		ʊ uː
Mid	E	ə sː	ɔː
Open	Æ	ʌ	ɒ ɑː

1.1.1 Description of RP Pure English Vowels

Vowels are those sounds with which the air passes without major obstruction from the vocal folds to the lips. Vowels can't describe [place, manner] of articulation because they are made with a vocal tract open, so no articulators are touching or even coming close together (Fromkin and Rodman, 1988: 48). The major determinants in describing RP vowels as mentioned by (Todd, 1987: 21) are:

a. Vowel which is length, if it is short or long
b. Vowel either [oral] vowel or [nasal],
c. The tongue , {The highest point of the tongue},
d. Degree, the closeness degree, and
e. Shape, the lips shape.

Figure (2): Diagram RP Pure Vowels (Taken from Kelly, 2000:5).



3. Portuguese Consonantal and Vocalic Systems

3.1 Consonant Sounds

The consonant inventory of Portuguese is characterized by a moderate degree of contrastiveness. Historically, the language has retained certain phonemes since the medieval period, particularly the affricates /ts/, /dz/, /tʃ/, and /dy/, which coexisted with the fricatives /s/, /z/, /ʃ/, and /y/, respectively. These sounds were able to combine with their corresponding fricatives but did not merge with each other. Despite this relative stability, significant dialectal variations and allophonic developments have emerged across different regions, illustrating the dynamic nature of the language.

One prominent feature in the phonetic landscape of Portuguese is the palatalization of the consonants /t/ and /d/. In many Brazilian dialects, these sounds are articulated as /tʃ/ and /dy/ before the vowel /i /]. For example, [president] the word (president) might be pronounced as [prezi'dyẽtʃi] at some areas of Brazil, contrasting with the more traditional European pronunciation [prezi'diti]. This palatalization reflects broader trends in Brazilian Portuguese, where regional variations contribute to phonetic diversity

Another notable feature is the treatment of the phoneme /l/ with an end of syllables. For European Portuguese, /l/ often has an allophone [ɬ], while in Brazilian Portuguese, it tends to be vocalized to [w], a phenomenon known as L-vocalization. This shift represents a significant phonetic change that influences the accent and rhythm of Brazilian speech.

Additionally, in various parts of Brazil and Angola, the phoneme /n/ can be realized as a nasal glide [5.], which nasalizes the preceding vowel. For example, the phrase /'ni u/ is pronounced as ['n. i u], show-

casing the intricate relationship between vowel and consonant sounds in these dialects.

The phoneme /r/ exhibits considerable dialectal variation across Portuguese-speaking regions. In Portugal and parts of Africa, the predominant variant is the alveolar trill [r]. In contrast, Brazilian Portuguese features a range of realizations, including [χ] voiceless uvular fricative and [h] the voiceless glottal fricative These differences pronunciation not only affect the texture of spoken Portuguese but also contribute to the distinctiveness of regional accents.

Sibilants in Portuguese, particularly /s/ and /z/, demonstrate a complementary distribution in syllable-final positions, akin to patterns observed in English. In many Brazilian dialects, these sounds vary based on the voicing of the following consonant. For example, /s/ is pronounced as [s] before voiceless consonants and as [z] before voiced ones. In contrast, in most regions of Portugal, final sibilants shift to post alveolar articulations, with the voiceless post alveolar fricative /ʃ/ appearing before voiceless consonants or at the end of utterances, while the voiced counterpart /y/ occurs before voiced consonants.

The letter "x" in Portuguese has a characteristic pronunciation of /ʃ/ when situated between vowels. However, in loanwords derived from Greek or Latin, it may correspond to other sounds, such as /ks/ (the most common), /z/ (start in hex or - ex- followed by a vowel), or /s/ (a few specific words like trouxe and próximo) in which consistently pronounces as /ʃ/ occurring after consonants at the beginning of words .

The consonantal system of Portuguese exhibits a rich tapestry of sounds influenced by historical development, regional dialects, and phonetic variations. Understanding these nuances is essential for linguists and language learners alike, as they highlight the complexity and adaptability of Portuguese as it evolves across different cultures and regions. The interplay of phonetic features, such as palatalization, syllable-final sibilants, and the treatment of specific phonemes, underscores the dynamic nature of language and its capacity to reflect the identity of its speakers.

	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Palatal	Velar	Uvular
Plosive	p b		t d				k g	
Nasals	m			n		ɲ		
Fricatives		f v		s z	ʃ ʒ			ʁ
Laterals				l		ʎ		
Flaps				ɾ				

3.1.1 Place of Articulation

Hence, the place of articulation is too important in categorizing the consonant sounds in Portuguese in which the sounds depend on their articulation and how the obstracting of the airflow is different for producing sounds.

1. Bilabial

Description-:- Upper and lower lips are being together for blocking the pass of airflow.

/p/ as in "pato" (duck)

/b/ as in "bola" (ball)

/m/ as in "mãe" (mother)

2. Labiodental

Description: The lower lip touches the upper teeth.

/f/ as in "faca" (knife)

/v/ as in "vaca" (cow)

3. / ''Dental

Description: The tongue contacts the upper teeth.

/t/ like"taco" (stick)

/d/ like "dado" (dice)

/n / (nasal variant) as in "dente" (tooth)

4. Alveolar

Description: Contacting tongue with the alveolar ridge [the bony ridge behind the upper front part of teeth].

/t/ like "tá" (is)

/d/ like "dá" (gives)

/s/ like"sapo" (frog)

/z/ like "zebra" (zebra)

/n/ like "nuvem" (cloud)

/l/ like "lua" (moon)

5. Postalveolar

Description: A placing tongue behind an [alveolar ridge].

/ʃ/ like "xaxim" (a type of fern)

/y/ as in "jato" (jet)

6. / [Palatal]

Description: The tongue body is raising to the [hard palate].

/5/ as in "senhor" (Mr.)

/j/ as in "pai" (father)

السنة الثالثة جمادى الأولى ١٤٤٦هـ تشرين الثاني ٢٠٢٥م

7. Velar

Description: The back of the tongue contacts the soft palate (velum).

/k/ as in "casa" (house)

/g/ as in "gato" (cat)

/ŋ/ as in "banco" (bank)

8. Glottal

Description: Producing sound d with a level of the vocal cords.

/h/ as in "hotel" (hotel) (not common in all dialects of Portuguese)

3.1.2 Manner of Articulation

The manner of articulation refers to how airflow is manipulated during the production of consonant sounds. In Portuguese, consonants can be categorized based on the manner in which they are articulated.

1. Stops (Plosives)

Description: The airflow is completely obstructed, and then released suddenly.

- **/ p / such as "pato" (duck)**
- **/ b / such as "bola" (ball)**
- **/ t / such as "taco" (stick)**
- **/ d / such as "dado" (dice)**
- **/ k / such as "casa" (house)**
- **/ g / such as "gato" (cat)**

2. Fricatives

Description: The airflow is partially obstructed, creating turbulence as it passes through a narrow constriction.

- **/ f / such as "faca" (knife)**
- **/ v / such as "vaca" (cow)**
- **/ s / such as "sapo" (frog)**
- **/ z / such as "zebra" (zebra)**
- **/ ʃ / such as "xaxim" (a type of fern)**
- **/ y / as in "jato" (jet)**

3. Affricates

Description: Begins as a stop and releases as a fricative, combining both manners.

/tʃ/ as in "tchau" (bye)

/dy/ as in "jogo" (game)

4. Nasals

Description: The airflow is directed through the nasal cavity while the oral cavity is obstructed.
/m/ as in "mãe" (mother)
/n/ as in "nuvem" (cloud)
/5/ as in "senhor" (Mr.)
5. Liquids
Description: an airflow is obstructed partially, allowing for a flow which is a smooth of air.
/l/ as in "lua" (moon)
/r/ as in "caro" (expensive) (also varies regionally)
6. Glides (Semivowels)
Description: These sounds have a vowel-like quality and involve a relatively open vocal tract.
/j/ as in "pai" (father)
/w/ as in "quero" (I want)
Fricatives:
/f/ as in faca (knife)
/s/ as in sapo (frog)
/ʃ/ as in xaxim (a type of fern)
Affricates:
/tʃ/ as in tchau (bye)
1. Voiced Consonants Stops (Plosives):
/b/ as in bola (ball)
/d/ as in dado (dice)
/g/ as in gato (cat)
Fricatives:
/v/ as in vaca (cow)
/z / as in zebra (zebra)
/y/ as in jato (jet)
"Nasals":
/m-/ just like mãe (mother)
/n-/ like nuvem (cloud)
/5/ as if with senhor (Mr.)
Liquids:
/l/ as in lua (moon)
/r/ as in caro (expensive) (the pronunciation may vary regionally)

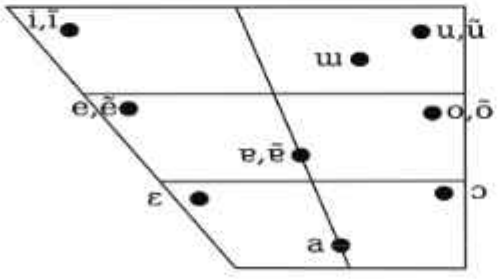
3.2 Vowel Sounds

Portuguese boasts one of the most intricate vowel systems{ oral}{ nasal} vowels among Romance languages, featuring as well as[- triphthongs], [diphthongs] .The language distinguishes between close-mid vowels /e/ and /o/ and open-mid vowels /ɛ/ and /ɔ/, similar to distinctions found in" French" , "Italian", "Catalan", .However, vowel degree alternation that can occur.

In European Portuguese, two central vowels are present, with one often being elided, akin to the e caduc in French., a closed vowel [central] [ɨ] appears Portuguese language primarily if the letter 'e' might be unstressed, as seen in the word presidente [prɨziˈðẽtɨ]. In Angola, this vowel also occurs, but it is limited to final syllables, resulting in a pronunciation like presidente [preziˈdẽtɨ]. Notably, the vowel [ɨ] is absent in Brazilian Portuguese, where presidente is articulated as [preziˈdẽtʃi].

In Angola, there is a merging of the vowels /ɐ/ and /a/, which result in the sound [a]. The vowel /ɐ/ is typically found just at"" final syllables", as in rama /ˈʁamɐ/. Additionally, the nasal vowel /ɐ̃/ is pronounced as the more open sound [ã].

Portuguese vowel sounds are distinguished by their richness and complexity, encompassing a wide variety of oral and nasal forms. This diversity allows for nuanced pronunciation and significant phonetic variety, particularly when comparing different dialects, such as those spoken in Portugal, Brazil, and Angola. The presence of nasal vowels adds another layer of richness to the phonology, making Portuguese vowel sounds unique among its Romance language counterparts. The differences in vowel realization, particularly the absence of certain sounds in Brazilian Portuguese and the merging of vowels in Angolan Portuguese, highlight the dynamic nature of the language as it adapts to different regions and contexts. Understanding these vowel distinctions is essential for both language learners and linguists interested in the phonetic characteristics of Portuguese.



3.2.1 Vowel Classification

Factually, the role of Portuguese vowel is so clear for differentiating between [stressed syllables and unstressed] syllables with various contexts. There are many key characteristics of vowel behavior that across different dialects noticed below:

Respectively, the sound like /a/, /e/, and /o/ all of these are unstressed vowels which tend to be raised to /ɐ/, /i/, and /u/, which is use in European Portuguese, . In contrast, the open-mid vowels /ɛ/ and /ɔ/ remain unchanged. In final syllables, only the vowels /ɐ/, /i/, and /u/ are typically found. In European Portuguese, a similar pattern exists, although in some regions, /ɐ/ and /a/ form minimal pairs, particularly in specific morphological contexts, such as verb conjugation. For instance, the first-person plural present form pensamos ("we think") contrasts with the past perfect pensámos ("we thought"). Spahr suggests that this distinction may represent a form of crasis rather than a phonemic difference. In Brazilian Portuguese, both forms merge, while in Angola, although the sounds merge, the spelling maintains differentiation.

Mateus and d'Andrade point that stressed /ɐ/ occurs only in three specific contexts in European Portuguese: (2000: 19), .Additionally, [/ʌ/ or /ɜ:r/] stressed loanwords in English often influence the pronunciation of the" pre-nasal" vowel{ □ a□ }, such as the word [rush], or are affected with an orthographic conventions, such as seen in {clube (club), { both}, just like{ surf}/[/surfe]. The classification of vowel sounds in Portuguese is complex and varies significantly across different regional dialects. It is too important for linguists and learners to understand the distinctions which highlights the phonetic richness and variability that inherent in the language. Though, an interplay of vowel height, patterns wih the stress of patterns, so the dynamic nature of Portuguese phonology might be underscored by regional variations..

3.3 Stress in English and Portuguese Stress in English

1. variable stress-: In English language the position of stress could be changed depending on the word or its form as if the word is noune or verb so that English is known for its variable stress patterns, meaning.

2. Function Words VS content: ((‘prepositions, ‘conjunctions, ‘articles)) all of these are function words that considered unstressed whereas, [‘nouns, ‘verbs, adjectives, ‘adverbs] considered as content words that carry stress, while function words are often unstressed.

3. ;stress placement-: This placement is dending on the word, it could be occurred at first syllable may be at second syllable , or third , For example:

- **First syllable: TAble**
- **Second syllable: de CIDE**
- **Third syllable: unbelievable**

4. Conclusion

It is concluded , there are some differences and simlilarites between two languages Portuguese and English which are noticed in this research about a contrastive study of the consonantal and vocalic systems of English and Portuguese language. In addition of some features and differences that are shared in the system of the two languages for the purpose of being clear and understand the phonological characteristics of each language.

Hence. Features of the two languages might be categorized as the following, fricatives, liquids, stops and nasals ;therefore, the differences could be noticed in specific phonemes and their realization. Portuguese includes nasal vowels and consonants, which are phonemic and play a critical role in meaning, while English does not utilize nasalization in the same way. Voicing is a distinct feature in both languages, but Portuguese exhibits instances of devoicing in certain contexts, particularly at the end of words.

English has a greater number of vowel phonemes, including various diphthongs, whereas Portuguese maintains a more stable set of vowel sounds with fewer phonemic distinctions. The quality of unstressed vowels in English often shifts to schwa, whereas Portuguese tends to preserve the quality of its vowels, even in unstressed syllables.

English displays variable stress patterns, which can affect the meaning of words (e.g., noun vs. verb distinctions). Conversely, Portuguese has more predictable stress rules, typically falling on the penultimate syllable. Both languages have specific rules governing permissible sound combinations, but English allows for more complex consonant

clusters than Portuguese, which often simplifies clusters in certain environments.

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