Pronunciation of Vowels in Italian and Portuguese Anglicisms

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ABSTRACT

The purpose of this paper is to contribute to a better description of the nature of *anglicisms* in the Italian and Brazilian Portuguese languages from a phonetic-phonological point-of-view.

More specifically, our objective was, in the first place, to understand the major differences in North-American English (NAE), Italian and Brazilian Portuguese (BP)¹ vowel systems. For this purpose, a study has been carried out on the main vowel chracteristics of the languages involved, and contrastive analyses among these different vowel systems were drawn.

Also, some recordings were collected among native-speakers of the three languages so that acoustic analyses of real speech were possible and the results of these analyses were then included in this study.

Finally, according to the results that were achieved, some conclusions were presented along with proposals for further study.

1. On the nature of anglicisms

Much has already been discussed on those *anglicisms* that are spreading all around the world, conquering their space inside the most different languages and roughly trying to disguise themselves in their forms in such a way that, if they do not sound "English" any more, they also sound completely out-of-tune according to the melody of the native-language.

¹ Since in our paper we will only work with this variety of Portuguese laguage, any reference to Portuguese will always stand for Brazilian Portuguese (also referred to as BP).

This is exactly the reason why such a fuss has been created on this matter. For some, *anglicisms* represent a corruption of the native language, while for others they simply represent an enrichment. The ones against the penetration of *anglicisms* usually see them as something that is "foreign", "a threaten to the valuable heritage of the nation"² (Rajagopalan, 2003:99) that does not fit in the language; but those who see the positive implications of loanwords have a different perspective: for them, "natural languages constantly evolve and (...) meet other languages, incorporating new words and expressions"³ (ibidem) that actually enrich them. An example of this are the *anglicisms*, that enter the language and are slowly and homogenously incorporated in it.

Truth is that *angleisms* are not so "foreign" as some say, but are also not as "homogenously fit" in the native language as others would like to believe. They are something "in the middle" and hard to define; however, they still can be somehow classified in linguistic terms and are in fact defined as *borrowings*. According to Thomason and Kaufman (1991:37) "borrowing is the incorporation of foreign features into a group's native language by speakers of that language: the native language is maintained but is changed by the addiction of incorporated features", and the process of borrowing occurs this way: we have a "foreign language", also called *source language*, from which borrowings come, and a "native language", also known as *borrowing* or *receptive language*, into which borrowings are incorporated.

This process could cover many linguistic features, but, as D'Achille (2003:65-66) reminds us, "borrowing refers mainly to **lexicon**, and hardly ever (...) foreign influences cover

² "uma agressao a um valioso patrimônio da naçao"

³ "as línguas naturais evoluem constantemente e (...) entram em contato com outras línguas, incorporam outras palavras e expressoes".

the other levels of linguistic analysis^{**4}. And when we deal with *anglicisms* we are indeed dealing with lexical borrowing.

In lexical borrowing, the elements to enter the *receptive language* are words, which can be divided into several groups according to the process they undergo in entering the new language. Here we will focus our attention on two particular types⁵: *loan words* are those words that were assimilated by the receptive language changing their original form (e.g. the anglicism "gol" in Italian and BP changed the English form originally spelled as "goal"); and *loan shifts*, which, on the other hand, in spite of being assimilated in their meaning, maintain the same form they had in the source language (e.g. the anglicism "*chat*" in both Italian and Portuguese maintain the same form as in English). Many like to define the formers as "modiefied" borrowings, and the latters as "non-modiefied" borrowings.

We believe, however, that these definitions lack precision. There is one fundamental concept we need to understand when talking about loanwords in general: there is no such thing as completely "non-modified" loanwords. It is intrinsic to the very nature of these words to be modified, at least at the phononological level. And it is exactly on this kind of modification that we will concentrate from now on.

In our study we will then disconsider those anglicisms that were ortographically modified, because they are obviously phonetically altered as well, and will focus instead on *loan shifts*, whose pronunciation is claimed to be closer to that of the *source language* but that actually suffers adjustments as well.

⁴ "Il prestito riguarda prevalentemente il **lessico**, più difficilmente (e comunque molto lentamente) gli influssi stranieri riguardano gli altri livelli di analisi linguistica".

⁵ This division reflects part of Crystal's ideas (1997 apud Liza, 2005:30). Crystal in his book actually separates loanwords into four categories: *loan words, loan blends, loan shifts* and *loan translations*.

2. Overview of the three vowel systems

Before entering more deeply into vowel acoustic analyses, it is appropriate to introduce first what vowels are and how they are phonologically and phonetically described.

According to Canepari (1979), vowels have three main characteristics: first, they are voiced sounds; second, they are produced when the airstream coming from the lungs does not encounter any obstruction beside the vocal cords; and finally they are articulated in a position that can be maintained for long time without interruption.

The different vowels that can be found in natural languages are produced with various shapes and sizes of the oral cavity, which depend on the different positions that the tongue can take and on the rounding of the lips. Vowels are therefore classified according to three parameters: 1) the higher or lower position of the tongue, according to which vowels are divided in *high,mid-high, mid, mid-low, low*; 2) the horizontal position of the tongue, which can establish whether vowels are *front,central* or *back*; 3) the rounding and opening of the lips, which determines whether vowels are rounded or unrounded.

According to their "area of articulation", the vowels are distributed in the phonetic quadrant:

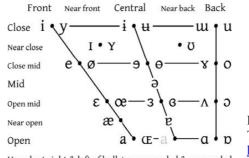


Fig. 1 The IPA vowel chart. Taken from <u>http://en.wikipedia.org</u>

Vowels at right & left of bullets are rounded & unrounded

The vowels that are in the IPA⁶ chart, though, do not give a full representation of all the natural languages vowel systems for two reasons: first, because this quadrant does not account for all the possible vowel sounds, but only for the main ones; and second, beacause, when dealing with different languages, we need also to deal with different phonological structures since "the vowel system of a certain language will never satisfactorily correspond to that of another language"⁷ (CANEPARI, 1979:26). As Canepari (1979) explains, different languages use the phonetic space in different ways, so that certain phones are given a distinctive value while other phones remain indistinct. This means that two phones which are sensibly different from each other in a language, may be perceived as the same sound in another language: this does not depend on the physical characteristics of the sound itself but on the "psycho-phonetic feeling" that it provokes on the listener. This "psycho-phonetic feeling" relies on the phonological structure of the native language of the listener.

All this introduction to vowel was to prove that sounds are in fact perceived and pronounced differently according to the speaker/listener's native language. This is why it is important to have a look at the three vowel systems, in order to see what are the major differences among them and make hypothesis of what would be the more "troublesome" sounds for Brazilian and Italian speakers. It is also important to point out that, as linguists comparing three different language systems, we need to have objective and scientific parameters to better classify the sounds we hear. In this study the vowels that were taken into consideration were acoustically analysed based on their formant frequencies⁸ and not only on our own perception.

⁶ International Phonetic Association

⁷ "nessun sistema vocoidale di una lingua corrisponde soddisfacentemente a quello di un'altra"

⁸ When it comes to analysing vowel sounds, the main qualities we need to refer to are *duration* and *frequency*. According to Canepari (1979), the main frequency of a vowel sound depends on the sum of all its formants. The

2.1 NAE Vowel System⁹

NAE, in spite of presenting only five graphemes indicating vowels, it presents a vast range of vowel sounds, with its eleven phonemes appearing in stressed position. Among these eleven phonemes we can distinguish seven simple vowels and four vowels followed by glide, as we can see in this chart:

	1	1 vowel phoneme	s:	
	Hit /hɪt/			
	Bet /bɛt/			
7 simple vowels:	Cat /kæt/			Heat /hiyt/
	Hot /hat/		4 vowels + glide: ¹⁵	Hate /heyt/
/Ι, ε, æ, α, ο, ə, υ /	Saw /sɔ/		glide:	Boat /bowt/
	Hut /hət/		/iy, ey, ow, uw/	Boot /buwt/
	Book /buk/			

These vowels are classified according to four parameters: 1) according to the higher or lower position of the tongue (*high, mid* and *low*), 2) according to the horizontal position of the tongue (*front, central* and *back*), 3) according to the shape of the lips (*rounded* or *unrounded*) and 4) according to the muscular tension (*tense* or *lax*). This last feature of American vowels is quite characteristic of this vowel system, so we can assume that Brazilians and Italians will have some troubles in differentiating sounds such as /I/ and /iy/.

It is also interesting to point out that NAE presents some vowel sounds which appear only in unstressed positions. These vowels are five: /I, i, u, Θ /, but the last one, called *schwa*, is probably the most important since it can substitute practically all the other reduced vowels.

frequency is actually composed by many formants, but the ones fundamental for vowel classification are just the first two: F1 and F2.

⁹ The choice of NAE over British English is due to the fact that nowadays the United States benefit from a much bigger *prestige* in comparison to the United Kingdom and, in our readings, we noticed that many linguists (D'ACHILLE, 2003; MENEZES, 1991; LIZA, 2005; THOMASON and KAUFMAN, 1991; DARDANO, 1993) agree in pointing to *prestige* as the main cause for borrowings.

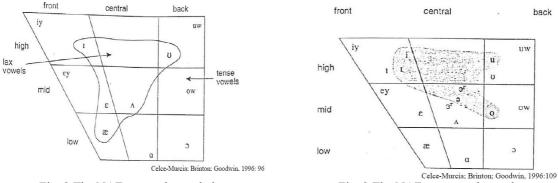
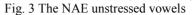


Fig. 2 The NAE stressed vowel chart



2.2 The Italian Vowel System

Italian, like NAE, presents only five orthographical signs to indicate vowels, i.e. <a, e, i, o, u>. In spoken Italian, however, the number of vowels amounts to 7: [a, e, ε , i, o, u], which are classified according to the vertical position of the tongue (*high, mid-high, mid-low, low*), its horizontal position (*front, central, back*) and the position of the lips (*rounded* and *unrounded*).

In Italian we also have reduced vowels, i.e. vowels that do not appear in stressed position, but they do not hold the same importance as in the NAE system. This can be explained referring to the prosody of the two languages: English is a stress-timed language, while Italian (and BP) have a syllable-timed nature. Usually, when appearing in unstressed positions, Italian vowels are pronounced as more centralized and more lax. However, there are some restrictions: the mid-low vowels ϵ and ρ only appear in stressed position.

Some words also need to be devoted to Italian diphthongs. In Italian we have two sounds which are considered glides: /y/ and /w/. Diphthongs are constructed with the aproximation of these glides and the seven vowels we have seen: when the glide comes first

and the vowel follows, the dipthong is defined ascending; vice-versa, the diphthong is classified as descending.

We will not go deep into the matter of diphthongs, since it will be too timeconsuming and this is not our purpose here, nonetheless we need to make a comparison between the NAE glided vowels, i.e. /iy/, /ey/, /ow/ and /uw/, and the Italian descending diphthongs:

a) first, in Italian the glide /y/ cannot come with the vowel /i/; and the glide /w/ cannot come with the vowel /u/. Thus, /iy/ and /uw/ are not possible in Italian.

b) Second, the vowels /i/, /o/ or /o/ cannot be followed by the glide /w/, so that in Italian the sound /ow/ does not extist.

2.3 The BP Vowel System

Portuguese too, like Italian and NAE, presents the same five orthographic signs to indicate vowels. The vowel phonemes, instead, are seven, and are the same we saw in Italian. Here is their distribution in the vowel quadrant:

	Front		Central		Back	
	Round.	Unround.	Round.	Unround.	Round.	Unround
high		i			u	
Mid-high		e			0	
Mid-low		ε			Э	
low				a		

A marked feature of BP phonology is the nasalization and nasality¹⁰ of its vowels. Sadly, we had to disconsider this important aspect of BP bacause it does not affect the vowel quality, therefore it does not appear in spectrogram analyses (Kikuchi, 2001:33 e 51).

¹⁰ According to Cristófaro (2001:91), nasalization and nasality are not the same. The former is cumpolsory in the language, while the second depends on dialectal or idiolectal variation.

As we have seen the relationship between NAE glided vowels and Italian diphthongs, we will also have a look at how this relationship works for NAE and BP. In Portuguese, as well as in Italian, diphthongs are classified in ascending and descending, but those we are interested in are those that resemble the NAE glided vowels, i.e. the descending ones. It is important to point out that /iy/ and /uw/ do not exist in Potuguese, while /ey/ and /ow/ both exist with the status of diphthongs. However, no reference to glided vowels either in BP or Italian was found, therefore we are bound to think that there is no such classification in these vowel systems.

After this brief overview of the three language systems, some conclusions can be drawn. First of all, one of the most striking difference is in the number of vowel phonemes: while in Italian and BP the five vowel graphemes account for seven vowel sounds, in NAE they need to account for more than eleven phonemes. This results in the famous lack of correspondence between English orthography and pronunciation, which creates quite a lot of problems for native and, specially, non-native speakers. It is thus probable that Brazilians and Italians are misled by orthography in their attempts to pronounce English vowels.

Another difference between NAE and the romance languages are tense and lax vowels. Italian and BP do not seem to give much value to this distinction, which is rather a matter related to stressed and unstressed position (Kikuchi, 2001). Besides, tense sounds made of glided vowels, e.g. /iy/, do not figure in Italian and Brazilian vowel systems. Consequently, we can presume that glided vowels may be a pitfall for Brazilians and Italians.

Finally, other sounds that are not present in the romance language systems, and are therefore likely to be "mispronouced" in Italian and Brazilian anglicisms, are the low-front /æ/, the low-central /a/ and the mid-central /A/.

3. Method

In this section we will briefly explain how we carried on our research, which was divided into two parts: the first and theoretical part was already explored above and had to do with a better understanding of the three vowel systems, that would give us a for creating hypotheses. It was thanks to these hypotheses, that we started collecting data for our recordings. Therefore, we set three parameters for our collection of anglicisms: first, we needed a corpus that was common to all the three languages, so that we could compare our results; then, the loan shifts had to account for all NAE vowels that we wanted to explore¹¹, and finally they had to be taken along with the context in which they appeared in the online newspapers¹² that were used as a source.

Afterwards, the sentences taken from the newpapers were sent by e-mail to the informants (four Italians, three Brazilians and an American), who read and recorded them on their own computers. The recordings were then analyzed using PRAAT, a program that allows vowel analysis and the identification of their formant frequency.

Only based on reliable acoustic descriptions, the vowels of the three languages were then compared.

4. Some results

Since the beginning of the study, we had in mind some questions we wanted to answer with our research. In this section we will present two of our initial questions along with the answers we think are more remarkable to mention.

a) Do speakers of the same nationality agree on the pronunciation of loanshift?

¹¹ Only the glided vowel /ey/ was left out since it is not considered a vowel in BP and Italian, but a diphthong.

What we found in our recording is that, generally, they agree, but this does not apply to all the *anglicisms*. In Italian the digreements were mainly on the words *ranking* and *lag*, in which the vowel /æ/ was reproduced by someone according to the English pronunciation, but bu others as $/\epsilon$ / or $/\Lambda$ /. In BP the disagreements concerned the words *lag* and *chat*. In the first, the vowel /æ/ was pronounced as $/\epsilon$ / or /ey/, while in the second word the same sound was reproduced as $/\epsilon$ / and /a/. It is interesting to notice that the word *lag* is not very common in BP and this may explain the unexpected use of /ey/, while the orthography of the word *chat* obviously influenced the use of the vowel /a/.

b) What are the most striking differences between NAE pronunciation of the selected words and their pronunciation in BP and Italian?

From our analyses we came to the conclusion that there is almost always an adaptation of the anglicisms, since in both borrowing languages sixteen out of seventeen loan shifts were pronounced differently from Standard NAE. Most of the differences we noticed were those we had expected: the difficulty in distinguishing lax from tense vowels, the glided vowels in general, the mid-central vowel / Λ / realized according to the NAE pronunciation, but also according to its orthographical form in some BP anglicisms or substituted with the sound /a/ in Italian, the difference between the sounds /p/ and /a/, and finally the various realizations of the sound /æ/, of wich we wrote above.

5. Conclusion

¹² We referred to the main newpapers in their online versions: for NAE we visited The New York Times (<u>www.nytimes.com</u>); for BP we visited Folha de Sao Paulo (<u>www.folha.uol.com.br</u>); for Italian we visited La Repubblica (<u>www.repubblica.it</u>). For the reasons why we referred to newpapers, see Dardano (1993).

With this paper we wanted to approach the study of anglicisms in Portuguese and Italian, focusing on the adaptation or non-adaptation of NAE vowels.

We based our research on theoretical studies of the Vowel Systems, and on practical analysis of native speakers' pronunciation in the three languages involved.

Our objective was to better understand vowel behaviours in general, and, more specifically, to contrast Italian, English and Portuguese, so we hope that this research will contribute to the study of pronunciation in cross-linguistic studies.

We also tried to give a general overview of anglicisms presenting them from a quite

unexplored angle, as it was based on the contrast between Portuguese and Italian.

This topic certainly presents many opportunities for further studies because, in spite of

being a broadly discussed topic, we are sure that many facets of its facets are still unexplored.

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