Intelligibility of English as a Lingua Franca (ELF): Perception by Speakers of Brazilian Portuguese

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Abstract

This paper presents the results of intelligibility experiments performed with Brazilian students of Languages (Portuguese/ English) at a public university in southern Brazil. Four groups of twenty listened to the English spoken by a young man and a young woman from each of four different nationalities— American, Chinese, German and Japanese. The main research questions had to do with the evaluation of intelligibility for Brazilian Portuguese speakers of the English produced by the speakers of the above-mentioned groups, who all read the same text taken from the Speech Accent Archive, George Mason University. The results showed that the intelligibility of Germans, Americans and Chinese was independent of the speakers' nationality (and any accent carried into English from their mother tongues), whereas the Japanese group showed the lowest intelligibility scores.

English has undoubtedly become the language for international communication, and as Leffa (2002) puts it, "Although knowing English does not automatically guarantee the benefits of globalization, not knowing English is a guarantee to exclusion." Never has a language been so widely dispersed on earth, and a two-way phenomenon is happening:

"the availability of English as a global language is accelerating globalization. On the other hand, the globalization is accelerating the use of English." (Graddol, 2006, p. 22)

In this scenario of a globalized and globalizing world, English is the lingua franca of interactions. This name, English as a Lingua Franca or ELF, is one of several used to refer to it. Erling (2005) mentions what she calls a compulsion to rename the language. She suggests that, "…proposals have arisen in response to postcolonial ambiguity about the spread of English and a desire to shape a new ideology for English language teaching (ELT) which more accurately reflects the global nature of the language and its diverse uses and users." (Erling, 2005, p. 40)

The term "lingua franca", Latin in origin, means basically a contact language used among people with different mother tongues, and several advantages are clear in its use, as Jenkins mentions:

> ELF emphasizes the role of English in communication between speakers of different L1s, i.e. the primary reason for learning English today; it suggests the idea of community as opposed to alienness; it emphasizes that people have something in common rather than their differences, it implies that "mixing" languages is acceptable […] and thus that there is nothing inherently wrong in retaining certain characteristics of the L1, such as accent; finally, the Latin name symbolically removes the ownership of English from the Anglos[…]These outcomes are all highly appropriate for a language that performs an international function. (Jenkins, 2000, p.11)

Brazil, a country in the expanding kachruvian circle[1], with a population of over 194 million people, has English still taught and learned as a foreign language[2], despite its growing use as a real lingua franca in international interactions. According to its Educational Guidelines and

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[1] Kachru (1985) visualized the expansion of the use of English in the world in the figure of concentric circles. In the center, what he called the *inner circle*, are speakers from countries which traditionally have English as their mother languages. The following is the *outer* or *expanding* circle, with countries in which English has the role of a second language in a multilingual environment. The third, and most growing, is the *expanding* or *extending* circle, with countries which recognize English as an international language, but within their borders it does not have a special status.

[2] Basically, what is observed when talking about EFL (English as a Foreign Language) is that the aim is communication with speakers of the inner circle, whereas in ELF the idea is communication among speakers mainly of the outer and expanding circles.

Directives Law (LDB), in Brazil, a foreign language—English, in by far the most cases—must be taught from the fifth grade upwards. So, state records (INEP, 2012) show that 30 million students in mandatory levels of education (22 million in public institutions and 8 million in private ones) should be learning English in Brazil. These students are mostly taught by Brazilian teachers, whose oral command of the language, in most cases, is far from ideal. And, if we consider intelligibility as the aim for learning English nowadays, and not sounding like a native speaker, we should worry about the English being taught and learned in the country. Is it providing intelligibility to Brazilian learners?

The aim of this paper is to present a study which involved undergraduate students of English, teachers-to-be, as informants— listeners—in an experiment of perception of intelligibility, in which English had been produced by people of four different nationalities: Americans, Chinese, Germans, and Japanese (Becker, 2013). They were chosen as being from countries which are major commercial partners with Brazil, and with whom English is likely to be used as the lingua franca in business interactions. The tests were based on Munro and Derwing (1995a, 1995b, 1999), Derwing and Munro (1997), and Isaacs (2008a, 2008b). Its main research questions had to do with the evaluation of intelligibility for Brazilian Portuguese speakers of the English produced by the speakers of the above-mentioned groups, who all read the same text taken from the Speech Accent Archive, George Mason University.

INTELLIGIBILITY

The discussion of the intelligibility of English is complex and there are several factors which influence it, since there are at least two people involved in oral interactions.

> …[communication] is between two (or more) individuals who bring their own experiences with English, their own attitudes toward English and English speakers (whether Inner, Outer, or Expanding Circle), and their own cultural norms—all of which impact the outcome of the interaction. […] communication is a two-way street […]. Each [speaker and listener] carries the responsibility to be understood; each must make an effort to understand. (Berns, 2008, p. 329)

If we take into consideration the number of mother languages of the speakers who use English as their language of communication, and the

aspects of these languages which are eventually carried into the English they speak, we will have the dimension of these difficulties. Besides, there is the lack of a commonly accepted definition. And if intelligible language is to be taught, the problem of definition is followed by ways to measure it, what to concentrate on. As Isaacs (2008a) puts it:

> Intelligibility has been widely regarded as an appropriate goal for second language pronunciation teaching. Yet there is no universally accepted definition of intelligibility, nor any field-wide consensus on the best way to measure it. Further, there is little empirical evidence to suggest which pronunciation features are crucial for intelligibility to guide teachers in their instructional choices. (Isaacs, 2008a, p. 555)

There are also different names for intelligibility, and sometimes different aspects of it receive the same names. Cruz (2007) points out up to ten names for the construct, from intelligibility itself to accessibility, acceptability, communicativity and even comprehensibility and interpretability, the last two being considered different dimensions by most researchers. Intelligibility is the most commonly used name, and a definition which is up to now paradigmatic is that of Smith in his tripartite paradigm: intelligibility being "word/utterance recognition", comprehensibility, "the meaning of a word or an utterance", and interpretability, "the meaning behind the word or utterance" (Smith & Nelson, 1985, p.334) . In the study here reported, the definition of intelligibility adopted will be the one as in the Smith paradigm, and the same as that used by Munro and Derwing (1995a, 1995b): "Intelligibility refers to the extent to which an utterance is actually understood" (Munro & Derwing, 1995b, p. 291).

Based on this definition, the evaluation of intelligibility is usually carried out by means of an orthographic transcription of what has been said, with the counting of correct words.

METHODOLOGY

The biggest body of research on intelligibility prioritizes speakers of the inner circle as evaluators of the productions of members of the other two kachruvian circles. This is not exactly a lingua franca point of view (Jenkins, 2000), despite the fact English is not a prototypical lingua franca, since studies related to it usually include speakers of the inner circle, too.

In this study, the oral stimulus came from a corpus of ELF—Speech Accent Archive (Weinberger, 2013). A text of 69 words[3] was read by eight speakers of four different L1s (two speakers for each language, a man and a woman): Americans, the only ones who had English as their mother language, Chinese speakers of Mandarin, Germans and Japanese. The idea here was to use speakers coming from countries with which Brazilians usually have business interactions in English. The text was divided into eleven excerpts, with a maximum of eight words each, to avoid overloading the listeners' memories with information.

The speakers, chosen from the Speech Accent Archive, were all young adults (average age 21.2 years), almost the same age as their corresponding listeners (average age 22.3 years), and were from cities not far apart from each other (sometimes the same, as in the case of the Japanese, who were both from Tokyo). All of them (except the Americans) reported having learned English academically and to have been living for a short period in countries of the inner circle. Preference was given, whenever possible, to speakers who did not know any other foreign language besides English.

The listeners, 10 for each speaker, were students of Languages (Portuguese/English) at a public university in southern Brazil, all speakers of Brazilian Portuguese. All of them had had, at least, 450 hours of English classes, and needed to have had, in their intelligibility texts, a performance of, at least, 50% of that of a group of American listeners used to validate the text (one American listener for each speaker). The majority of the listeners were women (73.75%, a characteristic of the major the students are enrolled in).

The test consisted of first listening to the text once, to have a global idea of what it was about. The second time, the excerpts were played one at a time and students had time to write down what they had understood. The tests were applied individually and they had as much time as they wanted to write. After the last excerpt, they listened to the whole text once more and had to indicate, from five options, which aspect(s) had led to intelligibility problems[4]: voice quality, speech rate, sentence rhythm, word stress, individual vowel/consonant sound. Data were treated statistically.

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[3] The text was: *Please call Stella. Ask her to bring these things with her from the store: Six spoons of fresh snow peas, five thick slabs of blue cheese, and maybe a snack for her brother Bob. We also need a small plastic snake and a big toy frog for the kids. She can scoop these things into three red bags, and we will go meet her Wednesday at the train station.*

[4] The term *intelligibility* has not been used, however.

RESULTS AND DISCUSSION

Table 1 shows the results for the four pairs of production. In it, the number of correct words for each is reported. The total number of words is 69. Intelligibility corresponds to the percentage of correct words.

The Kruskal-Wallis test was used to check if the results—intelligibility—were significantly different among the four pairs for the Brazilian listeners, which turned out to be the case ($X^2 = 20.863$; $p<0.001$). The Mann-Whitney test was then run ad-hoc for every two pairs, and it was observed that all results were meaningful when the Japanese pair was involved. Thus, considering the total of words involved in the test (69), for Brazilian listeners the pairs of Germans (77.2%), Americans (70.0%) and Chinese (80.1%) presented statistically similar results for intelligibility, whereas the Japanese pair (61.3%) was significantly a distinct group, with the lowest figures.

Table 1. Number of Correct Words

Pairs	Number of listeners	Minimum number of correct words	Maximum number of correct words	Average number of correct words	Intelligibility %	Standard Deviation
Germans	20	37	66	53.3	77.2	8.773
Americans	20	37	66	53.1	77.0	9.706
Chinese	20	35	64	55.3	80.1	7.328
Japanese	20	31	58	42.3	61.3	7.637
All	80	31	66	51.0	73.9	9.716

As expected, each pair of speakers brought into English the characteristics of their mother tongue, which resulted or not in problems of intelligibility for the Brazilian listeners. This fact proved to be very relevant to intelligibility analyses: results showed specificities to that specific pair with two different L1s who were interacting (the speaker and the listener). The question "who is intelligible to whom?" therefore needs to be carefully considered. This leads to one of the limitations of this research, since just two speakers of only four different mother languages were analyzed by the Brazilian listeners. Examples of the influence of speakers' L1 on their production and intelligibility were the Germans' word final devoicing in words as Bob, frog, slabs, kids, big, five, red, and the Japanese lack of consonant clusters.

Consonant and consonant clusters appeared to be fundamental for intelligibility in this research, and also according to Jenkins (2000) and her Lingua Franca Core (LFC)[5], except that here the dental fricatives are also included as important segments for intelligibility, while they were missing from the LFC. Walker (2010), with interlocutors in an ELF context, also points out the importance of "understanding the message on the basis of individual sounds that they may or may not have heard correctly." (Walker, 2010, p. 19)

The production of individual vowel/consonant sounds was, indeed, pointed out by the Brazilian listeners as the main factor of unintelligibility for Germans, Chinese and Japanese. For Americans, it was the speech rate. Rhythm was considered the second factor for lack of intelligibility.

FINAL CONSIDERATIONS

ELF in fact represents a community of users of English, whose members are mostly non-native speakers. The members who are native, in joining this community, "can only do this by respecting ELF norms. What native speakers cannot do in ELF contexts is to impose their particular set of native-speaker norms. Nor can they expect the members of the ELF community to adjust to these norms."(Walker, 2010, p.7). All, however, whatever circle they belong to, should strive to be mutually intelligible, which is the fundamental goal.

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[5] The 'Lingua Franca Core' (LFC) was a pedagogical core of phonological intelligibility proposed by Jenkins (2000) for speakers of English as an International Language. Among the features of this core, individual consonant sounds and clusters seem to be fundamental for intelligibility.

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