

Typological markedness in Ukrainian students' ELF production

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Abstract

This paper employs Eckman's (2008) Markedness Differential Hypothesis (MDH) for the study of pronunciation in academic English as a lingua franca (ELF) performance. Its objective was to explain some regular features of Ukrainian students' ELF, focusing upon the differences between Ukrainian and English marked and unmarked consonant structures. The ELF production of consonant variables was analyzed for 27 students on the basis of their performance in a series of unprepared reading tasks. It is argued that voice contrasts cause much difficulty for Ukrainian students because of semantically marked voice discrimination in obstruents in English. As a result, they transformed English marked structures into less marked ones in their native language. No intelligibility problems were caused, however, by the semantically unmarked articulation position variables. The analysis also showed that the students' pronunciation demonstrated a traditional, norm-bound trend of sticking to standard native-speaker models in teaching English as a foreign language in Ukraine.

1. Introduction

English is widely regarded as an international contact language, and this undoubtedly implies that there is a need for speakers to understand each other's Englishes. English is a genuine lingua franca, generally defined as a language

adopted widely for communication between speakers whose native languages are different from each other's and in situations where one or both speakers are using it as a 'second' language (Harmer 2007: 13). Even though pronunciation is obviously just one of several factors contributing to intelligible speech, research into 'error gravity', which has attempted to isolate the role of particular linguistic features relative to others in the determination of intelligibility and interpretation of meaning, has consistently pointed to the importance of pronunciation (Rajadurai 2006: 45). Second language acquisition and marked native language accent are related to the concept of ethnic identity, from both a psycholinguistic and sociolinguistic perspective. Proficiency in English as a lingua franca (ELF) presupposes that nonnative speakers (NNS) of English may negotiate on ethnically neutral sounds beyond the RP and GA phonemic inventories. In this way, ELF pronunciation could be more meaningful and more teachable for the world ownership of English as an International Language (EIL).

2. Implications of pronunciation models in teaching English

The findings of the research conducted to date indicate that Ukrainian teachers tend to adopt a traditional, norm-bound perspective in teaching standard native-speaker (NS) pronunciation models in their classroom practices. On the other hand, however, many teachers are of the opinion that standards are not as important as the necessity of creating opportunities for discourse that is comprehensible in the routine communication practices of non-native speakers (NNS) (cf. Borodina 2012: 134-136). Nonetheless, Borodina (2012: 137) implies that, although there is an increasing de-emphasis of native-speaker norms, they are still in evidence in Ukrainian teachers' beliefs about pronunciation teaching. There is also copious evidence, however, for a dramatic shift in thought in the Ukrainian English teaching community, which might signal the possibility of adjusting pronunciation instruction to local conditions.

Jenkins (2002: 83) argues that there is a "need for empirically established phonological norms and classroom pronunciation models for English as an international language, in which intelligibility for NNSs rather than for NS receivers is the primary motivation". She also proposes that a Lingua Franca Core (LFC), rather than Received Pronunciation (RP) and General American (GA), should be used as a basis for the construction a phonological syllabi for EIL learners. Jenkins (2002) suggests that classroom instruction should follow such a core syllabus by targeting items that have been demonstrated to affect intelligibility the most and at the same time ignoring non-core items. Her study of NNS interactions indicates that consonants are the most important, except for the [th] sounds and the dark [ɪ]. This is because no evidence for NNSs having problems

understanding substitutions for [θ] and [ð] was found in her data. In most instances, the [th] sounds were replaced by plosives or fricatives, because these dental fricatives are very difficult to produce for NNSs, but that did not cause any misinterpretation of the message on the part of its receiver (Jenkins 2000 : 137). Moreover, she points out that many native-speakers of English also use substitutions for [θ] and [ð] (Jenkins 2000 : 138).

Schwartz (2005) maintains that interlocutors will often recognize the /θ/ and /ð/ sounds, irrespective of the way in which they are articulated. He also states that these sounds are characterized by formant transitions and friction noise, pointing out that in this case the articulation formant changes, which determines whether a sound is dental or labial (Schwartz 2005: 190). Furthermore, dental production causes a low amplitude friction noise. Taking this into account, Schwartz (2005 :190-191) states that [f] and [v] would be the best substitutions for [θ] and [ð]. The problem is, however, that the LFC does not specify which sounds should replace the [θ] and [ð] (Jenkins 2000: 137-138).

According to Jenkins, the replacement of the dark [ɪ] by an [ɔ] or a clear [i] does not result in intelligibility problems either. In a conversation between a Taiwanese and a Korean non-native speaker of English, the dark [ɪ] was replaced by an [ɔ] by the Taiwanese speaker, but he was still understood perfectly by the Korean listener (Jenkins 2002: 95). Moreover, Jenkins (2000: 139) claims that in Welsh English the dark [ɪ] does not even exist. Schwartz also argues that replacing the dark [ɪ] with a clear [i] or with the vowel [ɔ] should not be problematic, since both of these sounds resemble the dark [ɪ] in many ways. This is because the clear [i] is also lateral and the [ɔ] is produced as low and in the back of the mouth as the dark [ɪ] is (Schwartz 2005: 191). As a result of such considerations, Jenkins (2000) decided to exclude [θ], [ð] as well as the pre-consonantal and syllabic [ɪ] from the Lingua Franca Core.

Another example is also relevant for Ukrainian learners of English who tend to make no distinction when pronouncing [v] and [w]. Jenkins (2002: 88-89) found that if you are looking for a blue-colored pencil and ask another NNS for "the blue [vun]", they will not give you "the blue one". This indicates that it is highly important for Ukrainian learners to acquire the English [w]. In fact, Jenkins permits non-native speakers of English to slightly shift their pronunciation of English consonants towards their L1 habits. However, shifted pronunciations of this kind are not allowed to overlap other sounds (Jenkins 2002 : 96).

To ensure that consonants are perceived correctly in conversations between non-native speakers, Jenkins argues that NNSs should aspirate on [p], [t] and [k] word-initially and produce the vowels of appropriate length before voiceless and voiced consonants in word-final position. This is because she fears that unaspirated voiceless consonants in word-initial positions will be perceived

as their voiced counterparts and that voiced consonants in word-final positions will be perceived as their voiceless counterparts if the preceding vowel is not lengthened (Jenkins 2002: 96-97). Schwartz (2005: 192) confirms that aspiration and vowel length are very important for NSs of English to determine the voiced-voiceless contrast, but Jenkins states that it is even more important for less proficient NNSs because they are less tolerant than proficient ELF speakers or NSs (Jenkins 2000: 140). However, this is probably not true for NNSs who do not have aspiration of a word-final fortis-lenis contrast in their L1s.

Although Jenkins herself does not say much about the nasal [ŋ], Schwartz (2005: 192) believes that it is an important feature, since it is problematic for many Slavic learners of English. He argues that it would not be a problem if they substituted [n] for [ŋ] because listeners can hardly tell [n] and [ŋ] apart (Schwartz 2005: 192-193). However, adding a [k] to [ŋ] will cause intelligibility problems since words such as 'sing' and 'sink' will then sound the same (Schwartz 2005: 193). That is why, the articulation of [ŋk] in place of [ŋ] cannot be permitted in ELF. Van den Doel (2006: 287) found that NSs do not only base their judgments exclusively on intelligibility but also on the extent of irritation as well as amusement. Another interesting outcome of his study, with respect to the LFC, is the fact that NSs felt that substitutions of [f] for [θ], as in 'thin' and 'author', were severe errors (Van den Doel 2007: 35).

3. The study

3.1. Objectives and hypotheses

The present research was an attempt to explain some regular features of Ukrainian students' ELF accent with reference to the Markedness Differential Hypothesis (MDH) (Eckman 2008). MDH proposes that, within the areas of difference between the native language and the target language, marked structures are more difficult than the corresponding unmarked structures (Eckman 2008: 98). More specifically, the MDH claims that the difficulties that a language learner is likely to encounter can be predicted and stipulates that: (1) the areas of the target language which differ from the native language and are more marked than those in the native language will be difficult, (2) the relative degree of difficulty of the areas of difference of the target language which are more marked than those in the native language will correspond to the relative degree of markedness, and (3) the areas of the target language which are different from the native language but are not more marked than those in the native language, will not pose difficulty (Eckman 2008: 101).

What follows from the Markedness Differential Hypothesis is that English phonetic variables characterized by semantic markedness are predicted to cause production problems for ELF speakers. The degree of difficulty involved is predicted to correspond directly to the relative degree of semantic markedness. A *semantic marker* is any semantic feature seen as systematic in a given language, as opposed to *distinguishers* which are not seen as systematic (*Oxford dictionary of linguistics* 2007). Semantic markers are usually meant to indicate the relationship between statements, e.g. words expressing the relationship between sentences. In the research conducted by the present author, (phono)semantic markers were understood as articulation and voice identifiers, systematic presence or absence of which as part of the given sociophonetic variables seems to motivate changes of word semantics. Minor as they might seem, they are nonetheless aspects of sociophonetics.

Following the reasoning behind the MDH, it can be inferred that speakers of a language such as Ukrainian or Russian (U/R), in which coda consonants are voiceless, may experience some problems when trying to produce English final voiced consonants. They are supposed to experience no problem with consonants which are the same in both languages but they are likely to find much more problematic to articulate those which are not representative of U/R. This idea is closely related to the Markedness Differential Hypothesis and the concept of typological markedness. Final plosives are supposed to be more marked than fricatives. This is due to the fact that the existence of a voiced stop in a language implies the existence of a voiceless one. Therefore, the voiceless one will be unmarked, which means that it will be more universal and thus easier to learn by U/R speakers. Consequently, when U/R students are confronted with marked structures which are unknown to them, they will try to transform them into less marked structures, particularly those which are present in their native language. It can be predicted that every time a student finds a consonant which is more complex than the average consonant in his or her native language, he or she will try to simplify it and will tend to change it into a familiar form. Another assumption that can be made is that the more a speaker is instructed in English, the fewer problems he or she will face when producing consonants. Therefore, speakers with a better command of English who have been taught in a formal way and especially those who have received instruction with respect to phonetics and phonology will have fewer difficulties than learners who represent a lower level of English and have hardly any awareness of these areas. Consequently, the second hypothesis would be that the production of consonants can be improved by means of formal instruction

3.2. Participants

This study analyzed the ELF production of consonant variables by 27 Ukrainian graduate science students, for all of whom U/R were their native languages. The analysis was carried out by comparing two distinct groups of subjects. The first group comprised 18 students who represented a lower level of English and had received no formal instruction on pronunciation. The second group consisted of 9 students who, apart from demonstrating a better command of the target language, had received formal instruction in phonetics and phonology. Their ages were quite similar, ranging from 20 to 24. There were eight males and ten females in the first group, and four males and five females in the second group.

Even though the students in the first group had been studying English for around seven years at the secondary level and two years at the university, they had been taught by means of a grammar translation approach and therefore had developed poor speaking skills. The result was that they knew specialist terminology and could read specialized texts, but, on the whole, their level in English could be described as A2. By contrast, the second group represented a much higher level of the target language. Six of the nine subjects were studying at an English school, and three students were learning English with private tutors and had the benefit of pronunciation instruction. All of them had developed their communicative abilities and they could speak English quite fluently.

3.3. Procedures

In order to carry out the present study, the students were asked to read aloud a popular science text consisting of 120 words (446 occurrences of consonants) and a list of 60 specially selected words (298 occurrences of consonants). Individual production length was in the range of 90-130 seconds, depending on a particular student's speed of speaking. The students were instructed to stick to a formal manner and perform as if they were speaking before an EL professional or academic audience. The subjects knew that they were being recorded and their production would be analyzed later, but they did not know which particular aspects of their speech would come under scrutiny. Consequently, their level of anxiety can be said to have been medium since they might still have felt uncomfortable with the situation.

The recordings were forwarded to experts, that is English language teachers, who were instructed to identify deviations from the list of sociophonetic consonant variables, according to which Wells (1997) studied the contrasts between Estuary English and Cockney consonant production. The list comprised of:

1. L-vocalisation, i.e. labial articulation of [l] close to [w]. It is a dark allophone [ɫ] in Standard Pronunciation, which in Cockney and EE can transform into closed, back, labialized sound.
2. T-glottalisation, i.e. a glottal stop [ʔ] instead of [t] or a transition from alveolar to glottal articulation; glottalisation of final [p] and [k].
3. Yod coalescence or affricatisation of [tj] and [dj], i.e. transfer of bi-segmental clusters with the first alveolar formant [t+j] and [d+j] into post-alveolar affricates [tʃ] or [dʒ]. Sometimes [j] can be lost, as in [tju:n] and [dju:k] → [tu:n] and [du:k] instead of yod coalescence.
4. H-dropping in initial and intervocal position or a reverse hypercorrect tendency of keeping [h] in weak forms of pronouns.
5. Change of interdental fricatives [θ] and [ð] into labiodental fricatives [f, v] or th-fronting.
6. Transition of velar nasal [ŋ] into alveolar nasal [n] in -ing.
7. R-intrusion or inclusion of rhotic [r] in the word final position after a vowel, when the next word begins with a vowel and the preceding final [r] is used as a phonetic link between two words.

3.4. Results

As can be seen from Table 1, L-vocalisation or labial articulation of [l]→[w], which in British pronunciation varies between 34%-77.4% (Przedlacka 2001: 37), was in the range of 0-23% in the participants' reading. It was mostly identified after voiceless plosives, as in 'clearing', 'cloudy' or 'places' as well as in several final occurrences, e.g. in 'still' and 'will'.

Sociophonetic variables		Group 1	Group 2
L-vocalisation		0-11%	0-23%
T-glottalisation		–	–
Yod coalescence, Loss of [j]		–	–
H-dropping, hypercorrect [h]		0-12% 100%	– 22-96%
Th-fronting	[θ]–[f]	3-11%	–
	[ð]–[v]	4-10%	0-3%
	[θ]–[t]	0-6%	–
	[ð]–[d]	5-14%	0-3%
[ŋ]–[n] transition	[ŋ]–[n]	79-100%	5-27%
	[ŋ]–[ng]	0-21%	9-24%
R-intrusion		–	–
R-link		0-17%	0-61%

Table 1: Ratios of sociophonetic variables in the students' reading.

Th-fronting, the shift from interdental articulation of [θ] and [ð], was registered in three varieties out of which two are semantically unmarked in English: a) the shift to labiodental fricatives [f/v] – 11%, and b) the shift to dental plosives [t/d] – 14%. In fact, the shift is not fronting because the tip of the tongue moves to the alveolar position in English and to the back of the teeth in Ukrainian students' production. The shift also occurs as slight backing, that is c), from interdental to typical U/R dental fricatives [θ/ð]–[s/z] (17%) and in this case had a significant semantic marking ('think – sink', 'they – zey'). Both fronting and backing are identified in three positions: word-initially, e.g. 'think', 'thin', 'thick' or 'they', word-medially, e.g. 'something', 'brother', 'rather' or 'weather', and word-finally, e.g. 'mouth' or 'with'. Shifts b) and c) can hardly be considered fronting.

T-glottalisation or shift from the alveolar to the glottal position [t]→[ʔ], popular in EE pronunciation (Fabricius 2000: 116; Ramsaran 1990a: 179), failed to be registered in the students' reading. Neither was yod coalescence or shift of bisegmental alveolar clusters to postalveolar affricates [tj/dj]→[tʃ/dʒ], e.g. 'tune' or 'dune'. The reverse phenomenon was registered for almost all students of Group 1 and – the split of the postalveolar affricate [dʒ] into the bisegmental cluster [d+j] with dental [d] and postalveolar [j], because in southern U/R pronunciation there is no voiced counterpart for [dʒ].

H-dropping was not registered in the students' reading but hypercorrect [h] was demonstrated by all the participants in the two groups. In the first group it was a typical U/R [X] as in German 'Nacht', while in the second group it was weaker and more aspirated. The shift [ŋ] –[n] in '-ing' was demonstrated by almost all the students of Group 1 and, in several occurrences, by two or three of the students of Group 2. The shift [ŋ] –[ng] in '-ing', accompanied with devoicing [g]–[k], was registered in the performance of the students in Group 2. Adding [k] to [ŋ] or [n] and the shift [θ]–[s] caused homophonic coincidence and intelligibility problems in words like 'sing' as well as 'sink' and 'thing' which sounded [sing]. Rhoticity in which [r] is pronounced before a consonant (as in 'hard') is not very common, but it is much more frequent at the end of words (as in 'far'). There were many situations when the postvocal final [r] was used as a phonetic link between two words, e.g. 'for_a time', 'brighter_ and' or 'later_in'.

As has been mentioned above, the degree of difficulty involved corresponds to the relative degree of semantic markedness. The opposition of voiced-voiceless final consonants, such as [g]–[k], [d]–[t], [b]–[p], [z]–[s], [v]–[f], is clearly marked in English but absent from U/R. Beyond the framework of sociophonetic variables proposed by Wells, devoicing of final voiced plosives and fricatives proves to be a factor most inhibiting intelligibility. All the students demonstrated either transfer of U/R full devoicing or distinct half-voicing for

voiceless obstruents and half-devoicing for voiced obstruents in word-final voiced-voiceless correlation, e.g. 'rib – rip', 'god – got' or 'love : laugh'.

4. Conclusion

The study presented in this paper aimed to analyze the ELF production of above-mentioned contrasts by 27 Ukrainian graduate science students in a series of unprepared reading tasks. The data obtained from the students' recordings confirms the predictions based on the MDH. It seems to be true that Ukrainian ELF speakers are prone to devoice final consonants because such a phenomenon is frequent in their native language. The difference between Ukrainian or Russian (U/R) and English consonants involving voice contrasts causes much difficulty for Ukrainian students because of semantically marked voice discrimination in obstruents in the case of English, word-initially, word-medially and word-finally. In the case of U/R, this contrast is exhibited only word-initially and word-medially but neutralized word-finally in favor of voiceless obstruents.

As was also predicted, when U/R students are faced with marked structures which are unknown to them, they try to transform them into less marked structures, especially those which are present in their native language. Every time they come across consonants which are more complicated than average consonants in their mother tongue, they attempt to change them into familiar forms. They do it by means of an articulation shift, fronting and backing, for [θ/ð]–[f/v]/[t/d]/[s/z] and for [ŋ] –[n], and split into a bisegmental cluster for [dʒ] –[d+j] and [ŋ]–[ng]/[nk]. This implies that Ukrainian students find certain consonants really difficult to pronounce and their strategy involves using familiar substitutes. However, no intelligibility problems are caused by the difference between U/R and English consonants involving semantically unmarked articulation position variables (th-fronting, yod coalescence, L-vocalisation, T-glottalisation). The case of [θ/ð]–>[s/z] has no analogy in fronted allophones of British pronunciation but it does not seem to inhibit EFL users' speech comprehension.

The students manifested variation in their performance depending on the task they were asked to carry out. In this study, these particular tasks were chosen because it was thought that the data would show more uniformity if controlled activities were used. As for the proficiency of the learners, it should be emphasized that formal instruction plays a significant part in the improvement of pronunciation. The students in Group 2 who had been more exposed to English clearly suffered from fewer pronunciation constraints. Even though they tended to display the same idiosyncrasies as students in Group 1 (they were all native speakers of the same language), their pronunciation provided evidence for a traditional, norm-bound trend of teaching standard NS models in Ukrainian classroom practices.

References

- Borodina, D. 2012. *English lingua franca in everyday and specialized communication*. Kiev: Center for Literature Teaching.
- Dziubalska-Kořaczyk, K. and Przedlacka, J. (eds). 2005. *English pronunciation models: A changing scene*. Bern: Peter Lang.
- Eckman, F. 2008. "Typological markedness and second language phonology". In Hansen, J. and Zampini, M. (eds). 2008. 95-116.
- Fabricius, A. H. 2000 "T-glottaling. Between stigma and prestige. A sociolinguistic study of modern RP". A doctoral dissertation, Copenhagen Business School, Copenhagen.
- Hansen, J. and Zampini, M. (eds). 2008. *Phonology and second language acquisition*. Amsterdam: John Benjamins.
- Harmer, J. 2007. *The practice of English language teaching*. (fourth edition). Harlow: Pearson Education.
- Jenkins, J. 2000. *The phonology of English as an international language*. Oxford: Oxford University Press.
- Jenkins, J. 2002. "A sociolinguistically based, empirically researched pronunciation syllabus for English as an international language". *Applied Linguistics* 23. 83-103.
- Jenkins, J. 2007. *English as a lingua franca: Attitude and identity*. Oxford: Oxford University Press.
- Przedlacka, J. 2001. "Estuary English and RP: Some recent findings". *Studia Anglica Posnaniensia* 36. 35-50.
- Rajadurai, J. 2006. "Pronunciation issues in non-native contexts: A Malaysian case study". *Malaysian Journal of ELT Research* 2. 42-59.
- Ramsaran, S. 1990a. "P: Fact and fiction". In Ramsaran, S. (ed.). 1990b. 178-190.
- Ramsaran, S. (ed.). 1990. *Studies in the pronunciation of English*. London: Routledge.
- Schwartz, G. 2005. "The Lingua Franca Core and the phonetics-phonology interface". In Dziubalska-Kořaczyk, K. and Przedlacka, J. (eds). 2005. 177-198.
- van den Doel, R. 2007. "International intelligibility in EIL". *Asian EFL Journal* 9. 28-38.
- Wells, J. C. 1997. "What is Estuary English?" *English Teaching Professional* 3. 46-47.