

# PERCEPTION OF ENGLISH ACCENT BY NATIVE BRITISH ENGLISH SPEAKERS AND SWEDISH LEARNERS OF ENGLISH

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**ABSTRACT** - Much research has been conducted into the perception of dialect variation in the country in which the language is spoken. This study extends this line of investigation by asking how well learners of English in a non-English speaking environment can perceive accent variation. The Swedish learner of English is exposed daily to many varieties of English in the media and it is unclear how much attention the learner pays the accent when listening to a film or television program in a foreign language. This investigation compares the discriminative ability of native British speakers to perceive variation in six world Englishes with the discriminative ability of the Swedish learner of English. On an accent identification task no significant difference was found, however on a discrimination task the Swedish learner's faired less well than the British English listeners.

## INTRODUCTION

Recent studies have been conducted into the individual's ability to identify the ethnic group and the country speakers come from (Doeleman, 1994), into the perception of dialectal variation by native and non-native speakers (Cunningham-Andersson, 1996) and attitude to accents in a foreign language (Dalton-Puffer, Kaltenböck & Smit, 1995). Doeleman's study concerned native Dutch speakers' perception of Dutch first-generation adult immigrants to The Netherlands, Cunningham Andersson's study investigated the perception of Swedish dialect variation by native and non-native Swedish speakers resident in Sweden and Dalton-Puffer, Kaltenböck & Smit's study dealt with the language attitudes learners of English have to a variety of English accents.

The goal of the present study is two-fold. First to assess native British English speakers' ability to discriminate between the accents of native speakers of a variety of world Englishes and second to compare this with the discrimination ability of Swedish learners of English on the same task. Swedish learners of English are continually exposed to a range of English accents through television soaps, films, documentaries and other similar sources. The media in Sweden does not dub, but rather uses sub-titles, thus the learner can read the Swedish sub-titles and listen to the film or television program in the foreign language even when their knowledge of the language is not advanced enough to understand the spoken word. Through the comparison of the ability of native British English speakers to discriminate between the accents of world Englishes with the discriminative ability of Swedish learners of English on the same task, it is hoped to also be able to assess how much attention the learner pays to accent when watching a film or television program in the foreign language.

## PROCEDURE

### The Material

The material consisted of recordings by two native English-speaking males from each of the following countries: Australia, England, New Zealand, The United States of America, Scotland and Wales. The material was either collected in the country in question or in the case of one of the US and Welsh recordings the material was collected in Umeå from newly arrived international students. Similarly in the case of one of the Australian accents the material was collected from the husband of a newly arrived visiting researcher. It was judged that none of these subjects had lived in Sweden long enough for their accent to have been contaminated.

So that dialectal variation was not a factor the stimuli were taken from the same read passage. The passage read by each of the subjects is listed as endnote 1.

## The subjects

In the British study there were 30 subjects aged 14–15 years. All were native speakers of English and attended North Chadderton School, Chadderton, Oldham, England. North Cadderton High School is a state comprehensive school for boys and girls between the ages of 11 and 18 years. Neither the school nor the students received any payment for their participation in the experiments.

In the Swedish study there were 15 subjects aged 20–40 who were all undergraduate students of the Umeå University, Sweden. The subjects responded to verbal requests for subjects and received no payment or course credits for their participation in the experiments. All the subjects were taking, or had taken, at least one course unit in a modern language or phonetics at the University level.

## THE RECOGNITION TASKS

The listeners first undertook a dialect discrimination task and then a dialect identification task. The entire test lasted around thirty minutes.

### Accent discrimination

The listeners hear pairs of sentences taken from the passage listed in endnote 1. Previous work has shown that speakers made up their minds about a speaker's dialect (Cunningham-Andersson & Engstrand, 1989); it was assumed that the same would apply to accent discrimination. The sentences used in this test were between 10 and 15 seconds long. The pairs of sentences were 'Then the North Wind blew as hard as he could, but the more he blew the more closely did the traveller fold his cloak around him, and at last the North wind gave up the attempt' and 'Then the sun shone out warmly and immediately the traveller took off his cloak. And so the North Wind was obliged to confess that the sun was the stronger of the two'. The difference in duration was due to reading speed. Each pair was separated by a beep, i.e. the subjects heard the sentence read by one voice, a beep and then the same sentence read by another voice. Forty-two pairs were constructed; a 6 by 6 matrix + 6 extra same pairs. For each voice there were six same pairs using one sentence and six using the other. The order of the pair construction was random, thus in the pairs containing Welsh voice 'a', this voice could occur in both initial and final position. Each pair was separated by a two second pause. The subjects were instructed to ring the word 'same' on their response sheet if they believed that the speakers came from the same country or the word 'different' if they believed that the speakers came from different countries. The listeners were told that the United Kingdom was divided up into England, Wales, Scotland and that no distinction was made between Northern Ireland and the Republic of Ireland. They were not told from which countries the speakers came.

### Accent identification

The listeners heard the entire text as listed in endnote 1 read once by each of the twelve speakers. The order of presentation was randomised and each speaker was separated by a seven second pause in which to write down the country the listener believed the reader came from. The subjects were told that they would hear twelve voices and that they were asked to write down the country they thought the speaker came from. It was made clear that the United Kingdom was divided up into England, Wales, Scotland and that no distinction was made between Northern Ireland and the Republic of Ireland. The subjects were not told which countries the speakers came from, thus the choice of response was an open one.

## RESULTS

### Accent discrimination

None of the British listeners correctly identified the twelve same accent pairs. The number of correct same accent identifications ranged from one to ten correct. For the Swedish listeners the range was three to nine. Thus the worst listener was better than the worst British listener, but the best was not quite as good as the best British listener. T-tests showed a significant difference between the British listeners and the Swedish listeners at the 5 per cent significance level ( $p(t) = 0.5$ ).

Both groups of listeners failed to notice accent differences and indicated that two different accents were in fact the same accent. The number of false 'same' responses by the British listeners ranged from two to thirteen. For the Swedish listeners the range was four to eighteen. The difference in the extent to which differences in accent were failed to notice was found to be significant between the two groups ( $p(t) = 0.03$ ) Although as the range demonstrates some Swedish learners of English were more able to discriminate and gave fewer false 'same' responses than some of the native British English speakers.

The sole accent pair not to be miss-judged by any of the listeners was a US/Welsh pair. Generally both groups of listeners had most difficulty with pairs containing a New Zealand, Welsh or Scottish speaker. The Swedish listeners also had problems with the pairs containing an Australian speaker.

Accent identification

The confusion matrices for the British and Swedish groups are shown in Tables 1 and 2, respectively. These tables as to be read as the accent heard in the left most column and the country the listeners believed the speaker came from along the top of the matrix. As the task was an open one the list of countries along the top of the matrices was determined by the listeners' responses. The correct accent identifications as indicated in the matrices by shading. Figure one shows the percentage correct of both listener groups. A T-test show that there is no-significant difference between the listener groups ( $p(t) = 0.004$ ). The only major difference in identification ability is for the Australian accent, where the British listeners have a correct identification rate of 93% and the Swedish listeners

	Aus	Can	Eng	Hong Kong	Ireland	NZ	Scot	SA	USA	Wales	Blank
Australia	56 93%		1 2%			1 2%				1 2%	1 2%
England		1 2%	51 85%		1 2%		1 2%			4 7%	1 2%
New Zealand	44 73%		13 22%		1 2%	2 3%					1 2%
Scotland					14 23%		36 60%			10 17%	
USA		3 5%			2 3%				55 92%		
Wales	1 2%	1 2%	29 48%		2 3%					26 43%	

Table 1: The confusion matrix for the English listeners.

	Aus	Can	Eng	Hong Kong	Ireland	NZ	Scot	SA	USA	Wales	Blank
Australia	15 50%	3 10%	5 17%		2 7%		1 3%	1 3%		2 7%	1 3%
England		2 7%	24 80%	1 3%	1 3%					2 7%	
New Zealand	19 63%		5 17%		1 3%	3 10%			1 3%		
Scotland			1 3%		8 27%		15 50%	1 3%		5 17%	
USA		5 17%			1 3%				24 80%		
Wales	3 10%		14 47%		3 10%			1 3%		8 27%	

Table 2: The confusion matrix for the Swedish listeners

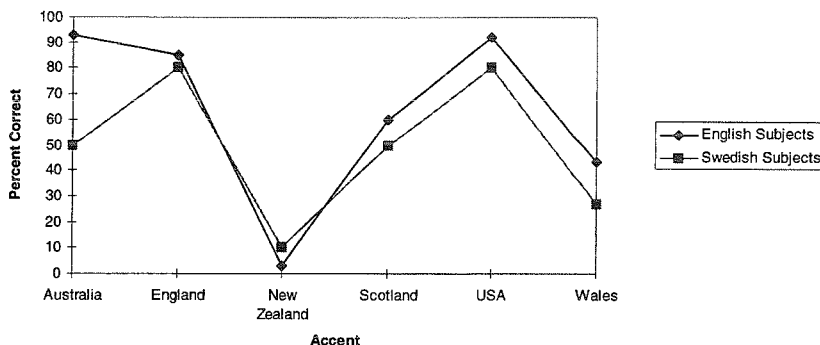


Figure 1: Frequency of correct identification of each accent by the two listener groups

## DISCUSSION AND CONCLUSION

The accent identification test, showed no significant difference between the two groups, and the accent discrimination test showed a significant difference. The correlation between correct accent identification and true 'same' discrimination is positive for both groups, although much more positive for the British group (Table 3). The correlation between false 'same' discrimination and correct identification is non-significant for the British listeners, whereas it is significantly negatively correlated for the Swedish listeners. Of comparative interest is the significant *negative* correlation for the correlation between false and true same for the British listeners and the insignificant correlation for the Swedish listeners. This difference shows that the British listeners were not only better at accent discrimination but that the individual listeners were more consistent in their judgements than the Swedish listeners.

	true 'same'	false 'same'	correct accent
true 'same'	1	<i>-.07</i>	<i>.26</i>
false 'same'	<b>-.26</b>	1	<i>-.59</i>
correct accent	<b>.61</b>	<b>-.19</b>	1

Table 3: Correlation between measured variables and results. Correlations in *italics* are those for the 15 Swedish listeners and the correlations in **bold** are those for the 30 British English listeners. Those in normal type are the same for both the British English listeners and the Swedish listeners.

Interestingly, the British listeners, in contrast to the Swedish listeners, had little problem with the New Zealand 'same' pairs. The British, on the other hand, had more errors on the Australian/New Zealand pairs, which can be seen as consistent with the Swedish listeners' difficulty in identifying New Zealand 'same' pairs. The British listeners presumably identified both speakers as being Australian, in the same manner as they did with the New Zealand/Australian pairs. The British English listeners have a better concept of an Australian accent than the Swedish listeners. This is probably due to the greater exposure to, and popularity of, Australian Soaps such as *Neighbours*, *Home and Away*, and *Flying Doctors* in Britain than in Sweden. However, they have no concept of the New Zealand accent and tend to be unable to discriminate it from an Australian one. The Swedish listeners, on the other hand, have a less well-defined concept of the Australian accent, and a similarly poor concept of the New Zealand accent, and were, thus, more willing to accept inter-speaker variation as inter-accent variation in the case of the New Zealand 'same' pairs and the Australian/New Zealand pairs.

The tests used were open tests, unlike those used by Cunningham-Andersson in her study of Swedish dialect perception. However, the number of English speaking countries in the world is a closed set and their boundaries more clearly defined than those for Swedish dialects. The use of an open test

extends the possibilities for accent confusion. The accents not including in the presented material were Canadian, Hong Kong, Irish and South African. The South African and Hong Kong accent were not identified by the British English listeners. The accent most frequently identified as Irish was the Scottish accent by both groups of listeners. The US accent was the one most frequently confused with the Canadian accent. Whether the listeners have a knowledge of these additional accents or whether they were unsure about the accent they were hearing is a question which can be addressed in a follow-up study which includes these additional accents. In such a follow-up study the listeners ability to identify these accents may result in the reverse of the confusion found here, which would confirm the confusion found in the present study.

Although the Swedish listeners' ability in English, the amount of time they watch English language television and movies amongst a number of other variables was not controlled in this preliminary investigation, it can be concluded that the Swedish learner does pay attention to the accent of the program they are watching in English to almost the same degree as the native British English student. The overall accent identification ability was found to be insignificantly different, yet there was a significant difference in accent discriminative ability. The Swedish learner is able to identify most accurately the accents they are most aware of, i.e. the English and the American accents. A couple of the Swedish subject commented that they recognised the Scottish accents because they had recently seen the film "Braveheart"! The large difference in the ability to recognise the Australian accent is undoubtedly associated with the lower degree of exposure to the Australian media in Sweden in comparison with the United Kingdom.

In order to confirm that access to un-dubbed English media is a crucial factor in the Swedish learner of English's ability to identify accents and to discriminate between them, it is planned to re-run this experiment in a country in which the learner of English is not continuously exposed to English language media. Such countries include Germany and France. Naturally access to English language cable and satellite television would need to be controlled for in such an experiment.

Further more controlled studies are also planned using a wider ability range for the Swedish learners of English, along with a detailed analysis of the English language media viewed by the listeners. It is also hoped to be able to track the development of the awareness of English accents and parallel the Swedish learner's awareness development with that of the British English speaker's awareness development.

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#### NOTES

(1) The North wind and the sun were disputing which was the stronger, when a traveller came along wrapped in a warm cloak. They agreed that the one who first succeeded in making the traveller take his cloak off, should be considered stronger than the other. Then the sun shone out warmly and immediately the traveller took off his cloak. And so the North Wind was obliged to confess that the sun was the stronger of the two.

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