Common Problems with English Pronunciation by Norwegian Learners

Hanne Hakonsen

Hawaii Pacific University

AL 6110 English Phonology and the Teaching of Pronunciation

Dr. Kenneth Cook

December 09, 2011
Common Problems with English Pronunciation by Norwegian Learners

Introduction

The purpose of this paper was to study some specific pronunciation problems that are common for Norwegian learners of English. The paper begins with explaining some aspects of the Norwegian vowel system. This knowledge will make it easier to understand why potential pronunciation problems occur. According to the Contrastive Analysis Hypothesis, errors can be the result of transfer from a learner’s first language (Lightbown & Spada, 2006). Meaning, some Norwegians may replace a target English sound with a similar native sound. Further in my paper, specific examples of errors will be discussed. The errors considered are typical generalization errors for vowels, consonants, and suprasegmental features, such as rhythm and stress.

The Standard Eastern Norwegian Vowel System

There are many different dialects in Norway, but the dialect generally taught to foreign speakers is the Standard Eastern Norwegian (SEN) dialect. In addition, the sources used in this paper wrote about SEN. That is why the SEN system was used to compare Norwegian to North American English (NAE).

Compared to NAE, SEN is very complex, because it has eighteen monophthongs (Gjert, 2007), whereas NAE has eleven (Celce-Murcia, 2011). Norwegian vowels can either be short or long. The long vowels are: /iː, yː, uː, eː, øː, æː, aː, ɔː, uː/; and the short vowels are: /i, y, u, e, ø, æ, a, u/ (Gjert, 2007). There is little difference in quality between the short and long vowels. However, long vowels tend to be more tensed and narrow, compared to short vowels (Nilsen, 1989). The short vowels in open unstressed
syllables do not have the usual tense quality that is often associated with long vowels (Gjert, 2007). Nilsen (1989) explained that the vowel length and quality is not that important in Norwegian. He used the Norwegian term *jamvekt* to describe how all syllables in Norwegian receive equal length. For instance “a short vowel in Norwegian is always followed by a long consonant, whereas a long vowel is followed by a short consonant” (Nilsen, 1989, p. 6). For example, pronouncing a long consonant sound after a short vowel might be transferred into English words like *letter, coffee, cuff* (Swan & Smith, 2001). In NAE length differences can be a distinctive feature for vowels. That is why the NAE vowel /iy/ can sometimes sound too short. Minimal pairs like *beat and bid*, or *eyes and ice* can be pronounced the same by learners of English (Celce-Murcia et al. 2011).

According to Gjert (2007), a special feature with SEN was the presence of four contrastive high vowels, /i, y, u/ and /ʉ/. The last high vowel /u/ has an unrounded quality, often pronounced with compressed lips. Nilsen (1989), argued that learners would sometimes replace the NAE’s /ɔ/ with the SEN /u/. In other words, Norwegians might pronounce a word like *school* /skol/ too far forward, and without the back quality associated with /ɔ/. Lastly, SEN does not have the central vowels /ə, ø/. Norwegians will therefore often substitute the NAE central vowels with native vowels that are similar in quality, which will often be front vowels (Nilsen, 1989). This will be further discussed under vowel generalizations on page seven.
Results from errors

Six speech samples of Norwegian accents in English were analyzed at the Speech Accent Archive (website). This source revealed actual pronunciation errors made by six Norwegian subjects. The most common errors were: *Final obstruent devoicing, interdental fricatives to stops, retroflex /r/ to trill, and non-aspiration of pʰ, kʰ, tʰ.* Other errors included vowel shortening, vowel raising and consonant insertion. These errors can be called generalizations. According to Weinberger (2011), generalizations are general rules that describe a speaker’s accent. The generalizations are based on a comparison between the speaker’s accent and the General American English dialect. The errors were detected by having Norwegians read the following text:

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 (Weinberger, 2011).

Consonant generalizations

According to Weinberger (2011), the most common error for Norwegians was final obstruent devoicing. This is when non-nasal stops, fricatives, and affricates become voiceless (Fromkin et al. 2011, p. 250). Almost all the subjects had trouble pronouncing the fricative /z/ in final position. Especially in these words *please, these, things, spoons, peas, slabs, cheese, kids,* and *bags.* Many also had trouble pronouncing the labiodental fricatives /v/ and /f/ in *five* and *of.* They were pronounced as stops. Moreover, the voiced
stop consonants /g/ and /b/ in frog, big, Bob were also devoiced. Lastly, some struggled with pronouncing the voiceless affricate /tʃ/ in the word cheese. The /tʃ/ would be substituted by /ʃ/. Turning an interdental fricative into a stop was also a common problem. As mentioned earlier the labiodental fricatives /f/ and /v/, were pronounced as stops. In addition, the dental fricatives /θ/ and /ð/ were also pronounced as stops. This often occurred with the following words the, with, things, three, and these (Weinberger, 2011). An explanation for this can be that Norwegian has no voiced fricatives (/z, v, ð, ʒ/). The alveolar voiced fricative /z/ would therefore be substituted by the voiceless fricative /s/. When it came to the /v/ sound, Norwegians did not substitute it with an /ʔ/. Instead they pronounced it as the SEN /v/, which is not a fricative, but an approximant (Nilsen, 1989). “If the airstream moves around the tongue and out the mouth in a relatively unobstructed manner, we call the sound an approximant” (Celce-Murcia et al. 2011, p. 59). Another discovery was that Norwegians found it hard to pronounce the dental fricatives /θ, ð/. The voiced /ð/ was especially difficult. Nilsen’s (1989) results revealed that the phone /ð/, was replaced by a /d/. The reason for these difficulties could be that SEN does not have any dental fricatives (Nilsen, 1989). Again the Contrasitive Analysis Hypothesis comes into play. According to Swan and Smith (2001) even after learning to pronounce these two dental fricatives Norwegians might mispronounce the th as /θ/ in words like smooth, and with.

There are many different /r/ sounds in the world that are different from the NAE /r/. In France, many speakers pronounce the initial sound in rouge as a uvular trill, which means that the uvula’s vibrations create the sound. In Scotland, the /r/ can be pronounced as a flap, and it can sound like a very rapid /d/. This sound is produced by flicking the
tongue against the alveolar ridge. Finally, there is also a trill /r/ which is produced by the tongue tip vibrating against the alveolar ridge (Fromkin et al., 2011). In NAE, the /r/ is described as a retroflex. A special characteristic of this sound is that the tongue tip does not touch the roof of the mouth. Instead, it is produced by the tongue tip curling back to the hard palate (Celce-Murcia et al., 2011). In SEN the /r/ is pronounced as a trill. Many Norwegians would therefore use the trill instead of the retroflex /r/. The analysis revealed that the retroflex was often substituted by a trill in the following words bring, frog, train, three, red, from (Weinberger, 2011).

Weinberger’s (2011) analysis also revealed that Norwegians had trouble with aspiration. Aspiration is “the brief puff of air that accompanies the allophones of /p, t, k/ in words such as pan, tan, and key” (Celce-Murcia et al., 2011, p.78). The /pʰ/ in the words please, plastic, peas was not pronounced, they just articulated the phone /p/. In addition, the allophone /kʰ/ was not aspirated either in the words kids, and call. Nor was the /tʰ/ aspirated in train.

**Vowel generalizations**

Vowel shortening and vowel raising often occurred in Weinberger’s (2011) analysis. A vowel often shortened was the /iː/ in words like please, these, peas, we, need, she, meet, and maybe. Shortening of the vowels /ow, uw, ey/ also occurred in snow, blue, and Wednesday. This showed that the shortening often occurred in vowels with an adjacent glide. In other words, these included vowels accompanied by /w/ and /y/ (Celce-Murcia, 2011). The vowels that were raised include /ɪ/ /æ/ and /ɔ/. They were raised in words like six, thick, and, snack, at, can, call, and Bob. These results correspond well with Nilsen’s (1989) theory of jamvekt on page three.
As previously mentioned, the NAE central vowels /ə, ʌ/ do not exist in SEN. According to Nilsen (1989), Norwegians replaced these English central vowels with native vowels similar in quality. When it came to the central vowel /ʌ/, results from Nilsen’s (1989) study revealed that Norwegians would often substitute it with vowels that had lip rounding. For instance, in the word *country* Norwegians would replace the /ʌ/ with the SEN mid front vowel /ø/, or the back low vowel /ɔ/. The results also reveal that Norwegians had trouble with the *schwa* /ə/ sound. According to Celce-Murcia et al (2011), the *schwa* is difficult for many learners of English, because it is a unique characteristic of this language. Nilsen (1989) also mentioned that there were no clues in the spelling. The *schwa* can be spelt with almost any combination of vowels or consonants. Many do not know that the *schwa* is used in unstressed syllables. Nilsen’s results showed that many Norwegians did not reduce the unstressed syllables, in words like *compartment*.

**Rhythm, Stress and Intonation Generalizations**

When it came to stress, Norwegians may misplaced stress with function words like *and*, *a(n), but, the, than, as, have, was*. These can often receive too much stress because Norwegian does not have many weak forms. This often makes it hard to acquire a natural rhythm in sentences. In Norwegian, unstressed syllables are pronounced on a higher pitch than a preceding stressed syllable. Norwegians therefore tend to use too many rising tone units, and make their *upglides* too long and too high. (Swan & Smith, 2001).
Conclusion

The SEN vowel system was very different compared to NAE. It had as many as eighteen monophongs, in contrast to NAE’s eleven monophongs. The reason being that a SEN vowel can be long and short. Comparing these two vowel systems revealed that many of the errors could be related to the Contrastive Analysis Hypothesis. In other words, when there were differences between the two systems, Norwegians would often find a substitute for the target sound. For instance, SEN does not have the NAE vowel /ʊ/. Norwegians might therefore substitute this target sound with a native sound similar in quality, like /ʉ/. The NAE vowels Norwegians struggled with were the central vowels /o, ʌ/, and the high back vowel /ʊ/. Vowel raising and vowel shortening was also a problem. For instance, some results showed that Norwegians shortened vowels with an adjacent glide, like /iy/. When it came to consonants, many struggled with interdental and dental fricatives. These were often substituted by a native sound similar in quality. The retroflex /r/ was also problematic. Norwegians tended to substitute this sound with the SEN trill /ɾ/. Furthermore, many were not aware of aspiration. Meaning, the brief puff of air accompanying the consonants /p, t, k/, was left out. Lastly, there was the Norwegian phenomena jamvekt where short vowels are followed by long consonants, and long vowels by short consonants transferred into English, causing errors with stress.

Writing this paper was a bit challenging, since there were few relevant research articles on the topic. Very few had done research specifically on Norwegians’ problems with English pronunciation. Many research articles talked about Scandinavian problems with English. Meaning, Norwegian, Swedish, and Danish were put under the same
category. Even though the Scandinavian languages can be considered to be mutually intelligible, assuming that they have the same problems with English is too simple. One should keep in mind that these languages are very different in terms of phonology. I therefore had to eliminate many sources because they did not represent errors that could be common for Norwegian learners of English.

Another challenge was defining the Norwegian vowel system. There were many different variants presented, probably because there are big differences between Norwegian dialects. Most of the sources talked about SEN, which is why it was used to compare Norwegian to North American English. Evidently, more research on this field should be conducted. As a future teacher, doing some action research on this topic would be a good way to collect actual pronunciation errors made by Norwegians learning English.


References


