TEACHING TIP

TEACHING THE PRONUNCIATION OF SWEDISH EXOTIC VOWELS

Elisabeth Zetterholm, Stockholm University

INTRODUCTION

Learning a new language as an adult is often a hard task, particularly the pronunciation of new speech sounds. Earlier research has shown (e.g., Bannert, 1990; Zetterholm & Tronnier, 2017) that second language learners of Swedish have difficulties learning to pronounce some Swedish vowels, especially the front rounded vowels, and distinguishing them from each other and from unrounded vowels. For intelligible speech, it is of importance that there is an audible distinction in the pronunciation of the different rounded vowels. Otherwise a native listener might misunderstand the speaker referring to the number of minimal pairs with the vowel as the distinctive feature. In comparison with languages around the world, the Swedish vowel inventory is relatively large (Ladefoged, 2005), and some are exotic from a worldwide perspective. These vowels are one of the most difficult pronunciation features of Swedish pronunciation for second language learners to master.

The aim of this paper is to provide information about the vowels of Swedish with a focus on rounded vowels that are challenging for L2 learners of Swedish and to present some techniques to facilitate the accurate pronunciation of the exotic vowels.

Background

Swedish is a Germanic language closely related to the other two Scandinavian languages, Danish and Norwegian. It is not only the national language in Sweden (with approximately 9 million speakers) but also one of the national languages in Finland where 6 % of the population are Swedish-speakers. There are several regional dialects in Sweden that differ concerning the pronunciation of phonemes as well as the prosody, but the orthography is based on standard Swedish. The description in this paper follows the standard Swedish variety. However, second language learners of Swedish often learn the spoken variety in the area where they live and where they study Swedish.

What the teacher needs to know about Swedish vowels

There are nine basic vowel phonemes in Swedish (Bruce 2010; Riad 2014). The long vowels are phonemes and each phoneme has a short variant as an allophone, making in total 18 different vowel sounds (see Table 1). One could suggest that the vowels should be counted as 18 different phonemes. We follow Bruce (2010, p. 111) in this paper, who claims that there should be nine distinctive vowel phonemes and nine allophones.

There is not always a one-to-one correspondence between pronunciation and orthography in Swedish. However, it is a more transparent correspondence compared to the relationship between orthography and pronunciation in English (Katz & Frost, 1992). For example, the short vowel [e] is mostly realized as $[\varepsilon]$ even though there is both an individual and dialectal variation. The short vowels $[\emptyset]$ and $[\varepsilon]$ are pronounced differently depending on the following consonant as well as dialectal variation. The more open allophones $[\varpi]$ and $[\varpi]$ respectively are commonly used

before an /r/. This is shown in words like $h\ddot{o}na$ [hø:na] (hen) and $h\ddot{o}ra$ [hæ:ra] (hear) and $h\ddot{a}l$ [he:l] (heel) and $h\ddot{a}r$ [hæ:r] (here). The long /a:/ is slightly rounded, and not as unrounded as the short [a]. The letter <o> can be pronounced like in son [so:n] (son) – sol [su:l] (sun) – som [so:m] (as/relative pronoun who/which) – Olle [ol: ϵ] (a male name).

Table 1

The Swedish vowels, IPA and orthography

	_	Long vowels, phonemes unrounded rounded		Short vowels, allophones unrounded rounded		Orthography	
Front	i:	y:	I	Y	i	V	
	e:	ø:	e/ε	ø/œ	e	Ö	
	ε:		ε/æ		ä		
			a		a		
Central		u:		θ		u	
Back		u:		υ/ɔ		o	
		o:		Э		å	
		a:			a		

Exotic Swedish vowels

The two Swedish front rounded vowels /y:/ and /ø:/ and the central rounded vowel /u:/ are quite uncommon among languages around the world. Referring to the theory of markedness (Eckman, 2008) these vowels could be described as marked. The three rounded back vowels /u:/, /o:/ and /a:/ occur in many languages, but can be pronounced with great variation both by L1 and L2 speakers of Swedish.

Front unrounded vowels

As seen in Table 1, there are three front unrounded phonemes but six short allophones. The difference between them is mainly the degree of opening of the lower mandible. Notice that the short unrounded [a] is a front vowel and the long half-rounded $/\alpha$:/ is a back vowel. The difference between the four opening degrees is of importance for the distinction between the vowels. The highest, and most closed vowel is /i:/ followed by /e:/, $/\epsilon$:/ and [a], when lowering the jaw. Some examples:

lika [li:ka] (alike) – leka [le:ka] (play) – läka [le:ka] (heal)

rita [ri:ta] (draw) – *reta* [re:ta] (tease/make fun of) – *räta* [re:ta] (straighten) – *ratta* [rat:a] (to drive a car with the steering-wheel), but *rata* [ra:ta] (reject) with a long back vowel.

Front and central rounded vowels

The two front rounded vowels /y:/ and /ø:/ have almost the same articulation as /i:/ and /e:/ respectively, except for the rounded lips. When the learner is aware of the different opening degrees of the jaw he/she can articulate the unrounded vowels and just make the lips rounded. The lips have to be outrounded for the two vowels /y:/, see Figure 1, and /ø:/ and the tongue close to the teeth in the lower mandible. When producing the vowel /y:/ some would say that the learner might think of the protrusion used when trying to kiss someone or sucking the thumb.

The least common vowel among languages worldwide is the Swedish /u:/ in words like *hus* [hu:s] (house). To achieve a pronunciation that is separate and different from the back rounded vowel /u:/ the learner has to shape the lips like when whistling i.e, see Figure 2. A rather tense upper lip but not too outrounded lips like the pronunciation of /y:/, but the tongue at the same position close to the teeth in the lower mandible. However, the opening of the jaw should be at almost the same degree as for /i:/ and /y:/ respectively.





Figures 1 and 2. Lip protrusion when producing /y:/ (to the left) and /u:/ (to the right).

Back rounded vowels

The Swedish back rounded vowel phonemes are /u: o: a:/. The back rounded vowel /u:/ is pronounced with inrounded lips and /o:/ has outrounded lips but closer than /ø:/. When pronouncing the /o:/ the lips can be rounded as when blowing a candle carefully, see Figure 4. The long vowel /a:/ is slightly rounded with outrounded lips, see Figure 3. Except for the rounding, the opening degree of the jaw is of importance. It is observed that second language learners have difficulties with the distinction between front and back or more central vowels, such as /ø:/ and /o:/ as well as /ɛ:/ and /ɑ:/. There is a great distinction concerning both the meaning and the pronunciation of the minimal pairs: $l\ddot{o}n$ [lø:n] (salary) and $l\mathring{a}n$ [lo:n] (loan) as well as $v\ddot{a}l$ [ve:l] (well) and val [va:l] (whale or election).





Figures 3 and 4. Lip protrusion when producing /a:/ (to the left) and /o:/ (to the right).

General approach

To be aware of and feel the articulation in the mouth – the opening degree of the jaw and the different types of lip rounding is a good starting point. Hyper articulation and a mirror are helpful. A native speaker of Swedish does not always exaggerate the lip rounding but still changes the lip protrusion for inrounded and outrounded vowels. However, for a second language learner it might be hard to perceive and pronounce the subtle, but important, differences in articulation. Therefore, perception is crucial for the production of the Swedish vowels, at least for some vowels that are quite uncommon among languages worldwide. Imitation and shadowing are useful tools for teaching. Recordings and a careful and critical listening of one's own voice and pronunciation as well as other second language learners are often fruitful ways to consciousness.

Proposed teaching tips

Learners of Swedish often think they do change the protrusion of the lips and maybe they do, but only to some degree. Most learners do not produce a clear difference between the vowels. Therefore, a mirror is very useful. To be aware of the articulation, the position of the jaw and the lip-rounding you can use these teaching tips:

- 1. Say /i: e: ε :/ and [a] (the quality of the short [a]) and focus on the opening of the jaw.
- 2. Say /i: y:/ and focus on the difference between the unrounded and the rounded vowel.
- 3. Say /e: \varnothing :/ and focus on the difference between the unrounded and the rounded vowel.
- 4. Say /y: u: u:/ and focus on the protrusion of the lips.
- 5. To be aware of the difference between a long slightly rounded /a:/ and the short unrounded [a] you may listen to the difference and imitate word pairs. Here some examples of words with one syllable: tal [ta:1] (speech or number) tall [tal:] (pine); mat [ma:t] (food) matt [mat:] (faint); words with two syllables and the stress on the first syllable: haka [ha:ka] (chin) hacka [hak:a] (chop), baka [ba:ka] (bake) backa [bak:a] (reverse). In these examples, the orthography is a clue for the duration of the vowel as well as the consonant.

Look in a mirror to be aware of how much you have to open the jaw and round the lips to produce a clear difference between the vowels. In order to exaggerate the lip protrusion you can put a pencil above the upper lip, keep it there when pronouncing an /y:/ for outrounded lips, as in Figure 1. Change the lip protrusion of the upper lip for the pronunciation of an /u:/ and you will drop the pencil, see Figure 2. For the pronunciation of /u:/ the lips are more inrounded. Now you will probably change the tongue position and lower the jaw as well. This vowel, /u:/, is a phoneme in many languages and therefore it might not be a pronunciation problem for second language learners of Swedish in general.

Practice minimal pairs to hear the differences and be aware of the meanings that could lead to misunderstandings. A picture of a vowel chart is helpful, especially for comparison with vowels in the learners' first language. This is often helpful in pronunciation teaching in many languages for awareness of articulation and production of sounds that might be similar or different.

Minimal pairs with rounded and unrounded vowels

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fira [fi:ra] (celebrate) – fyra [fy:ra] (four)
bita [bi:ta] (bite) – byta [by:ta] (change) – bota [bu:ta] (cure)
len [le:n] (smooth) – l\ddot{o}n [lø:n] (salary) – l\ddot{a}n [lɛ:n] (county) – l\ddot{a}n [lo:n] (loan)
har [hɑ:r] (have) – h\ddot{o}r [hœ:r] (hear) – h\ddot{a}r [hæ:r] (here) – h\ddot{a}r [ho:r] (hair) – hur [hu:r] (how) – hyr [hy:r] (rent)
l\ddot{a}sa [lɛ:sa] (read) – l\ddot{o}sa [lø:sa] (solve) – l\ddot{a}sa [lo:sa] (lock) – lysa [ly:sa] (shine)
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Minimal pairs and contrasts with the vowels /u:/ and $[\theta]$

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utan [u:tan] (without) - ytan [y:tan] (the surface)
sur [su:r] (sore or soggy) - syr [sy:r] (sewing)
sila [si:la] (drain) - sula [su:la] (sole) - sola [su:la] (sunbathe)
lycka [lyk:a] (happiness) - lucka [lek:a] (gap)
flyga [fly:ga] (to fly) - fluga [flu:ga] (fly, an insect)
ryta [ry:ta] (roar) - ruta [ru:ta] (square)
fil [fi:l] (file) - ful [fu:l] (ugly)
full [fel:] (drunk) - fall [fal:] (fall) - fäll [fel:] (fleece) - fåll [fol:] (hem) - föll [føl:] (fell)
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CONCLUDING REMARKS

The pronunciation and the contrast between unrounded/rounded and front/back vowels are not difficult for a native speaker of Swedish. The articulation and protrusion is not exaggerated, but still, a distinctive lip-rounding is of importance. However, for a second language learner of Swedish, one of the most difficult pronunciation features among the vowels seems to be the front and the central rounded vowels. Many learners, regardless of their first language, do not round the lips to a degree that makes an audible distinction between the unrounded and the rounded vowels. Exceptions are found in recordings with L1-speakers of Albanian and Finnish (Zetterholm & Tronnier 2017) where the distinction is clear. The short front vowel [y] is often replaced with an [i], cykla [sykla] (to bike) – *sikla [sıkla] (the symbol * means a non-word in Swedish). The central /u:/ is often replaced with the back vowel /u:/, hus [hu:s] (house) – hos [hu:s] (among) and the short variant in buss [bus:] (bus) is replaced by *boss [bus:] (a non-word). Both /i:/ and /u:/ occur in other languages and that might be one explanation for the substitute and mispronunciation in Swedish. Another observation concerning the rounded vowels is that the learner has to be aware of the differences between outrounded and inrounded lips as

well as the degree of the rounding. In the Swedish movie *Se upp för dårarna* (Nutley & Bergström 2007) (English title *Mind the Gap*), this was noted and pointed out in conversations between a father and his daughter, both second language learners of Swedish. The father has a heavy accent and has a job as an underground train driver (although he is a heart surgeon from Turkey). The driver announces that the door will be closed and should say *Se upp för dörrarna* [se: ep: fœ:r dœ:ana] (mind the doors). Unfortunately, with his accent and his lip-rounding he says *Se upp för dårarna* [se: ep: fœ:r do:rana] (mind the fools). In this context you will understand his message about the doors, but it could be misunderstood as another kind of warning as well. There is also a quantity distinction between the two highlighted vowels [æ] and [o:]. This mispronunciation of rounded vowels seems to be a challenge to overcome for many second language learners of Swedish. However, there are some clues and teaching tips that might be helpful. As a starting point, the use of a mirror to be aware of the protrusion of the lips is helpful.

ABOUT THE AUTHOR

Elisabeth Zetterholm is a Senior Lecturer and Associate Professor in Swedish as a second language at the Department of Language Education, Stockholm University, Sweden. Her research interests are second language learning, literacy, multilingualism, phonology and pronunciation, both from the teachers' and the learners' viewpoints. When teaching, most of her students are prospective teachers of Swedish as a second language.

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