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## TURNING A DIDACTIC EXPERIENCE INTO SCIENCE, AND BACK: TEACHING SWEDISH PRONUNCIATION TO ADULT IMMIGRANTS

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This chapter describes a journey from a tentative teaching practice, via experience, through didactic wrestling with linguistic theory, back to a more conscious and qualified teaching practice. The chapter will be of interest to any teacher teaching pronunciation, and in particular to those who work in the field of Swedish as a second language. The terms *first language* and *second language* will henceforth be referred to as L1 and L2 respectively. It should also be noted that younger L2 learners often achieve a native-like pronunciation with very little or no instruction and that this chapter mainly draws on experiences and research based on adult learners. A quote from Bannert (1984:7) expresses a central issue in the chapter:

Many attempts have been made to improve pronunciation when learning a foreign language, and in these attempts *linguistic correctness* has been the guiding principle. It seems however, that hardly any consideration has been given to the native listener's problems of understanding foreign accent.

In the late 1970s I was a young linguist student in need of extra money. I found extra work as a teacher of Swedish to adult immigrants. At the time many refugees from Chile populated the courses and soon there would be students coming from Iran and other parts of the world. I had some university credits in general linguistics and phonetics and felt rather comfortable with the theoretical part of the job but a bit anxious, or rather frightened to death, about facing a group of students. I was also a victim of a primitive perspective on learning, saying that "what you know explicitly, you can perform linguistically", which led me to explain a lot to my students. I realized however that my students spoke (mostly) neither Swedish nor English and everything that was to be conveyed to the students had to be somehow illustrated by tables, pictures or by oral examples. Anyway, most of my students stayed patiently in the classroom and experiences could be accumulated. Moreover, due to my prior linguistic studies, my manager put me in charge of an evening course in Swedish pronunciation with adult intermediate/advanced students.

Against this background I will now focus on the teaching of pronunciation. My pronunciation teaching was at first a mixture of associating speech sounds with the correct letters of the alphabet and making the students understand how the shape of the tongue divided the pharyngeal and oral cavities into three main parts, giving resonance to specific parts of the complex sound wave of the voice, thus giving the specific timbre to each vowel sound. I realize that the latter teaching objective may explain a slight decline in the number of students in the evening course. My teaching was more a matter of 'advanced acoustics' than useful communication skills.

I focused on correcting the students' erroneous pronunciations of single words: vowel quality, consonant quality, reduced consonant clusters, stress patterns, length patterns in vowels and tonal word accents. I had no tools or plans when it came to phrases or sentences, and no idea as to the priority of one or other phonetic property. The job was interesting but I lacked a comprehensive grasp of the subject and a strategy for teaching a functional pronunciation. There was a strong focus on correcting small details that were assumed to be crucial to the degree of foreign accent with an implicit goal of eliminating the phonetic traces of the students' L1. For some students it even became an explicit goal. One student, who was a native speaker of Swedish from Finland, told me at the beginning of the course that she wanted to get rid of her accent even though she spoke a dialect that most native speakers of Swedish perceive as beautiful and easier to understand than many other Swedish dialects.

### A new book

In 1979 my manager handed me a book that – according to him – seemed to be relevant for the teaching of pronunciation and asked me to have a look at it. The title was *Svensk prosodi i praktiken (Swedish Prosody in practice)* (Kjellin 1978) and the message of the book can briefly be described as the prosody of a language (the intonation and speech rhythm) being a more important factor than separate sound segments for the reception of intelligible and listener friendly L2 pronunciation. Kjellin describes Swedish speech rhythm and intonation in a simplified and pedagogical way. For example, he illustrates and exaggerates the phonetic feature of segment duration by spelling a long sound – vowel or consonant – with 3-5 repetitions of one letter (in certain figures up to 22 repetitions). Everything is written in a non-academic language intended to appeal to both learners and teachers. I read the book and tried the method, following the instructions to the letter in the remainder of my evening class and I was overwhelmed. How could these people go from having a strong foreign accent to sounding near native within minutes? This chapter is an attempt to address this issue.

### The potential of prosody

Since the focus on speech prosody, with few or no corrections of segmental errors, resulted in such a substantial improvement of my impression of most students' pronunciation, I concluded that improved prosody contributed more to the overall impression of pronunciation than did corrected qualities of separate vowels and consonants. It is somehow logical, since prosody spans over longer sequences than vowels and consonants, and a prosodic approach is the only way to account for longer stretches of speech. However, it seemed that an improved rhythm and intonation could even mask segmental errors. Kjellin (ibid.) compared prosody to the carrier wave of radio or TV transmission; a superimposed structure that renders the speech a pattern that complies with the expectations of the receiving device, in this case the native listener.

One of Kjellin's contributions was to summarize the rhythmical system of Swedish in the phrase: *All-la starr-ka staaa-velser måss-te vara långng-ng.* (*all strong syllables must be long*) (Kjellin, 1978: 28). Most readers might suspect that the quotation does not comply with normal spelling rules. The suspicion is correct and this deviation is significant. The word *allla*, normally spelled *alla* has one <l> too many and a hyphen between the second and the third <l> (letter within <> signifies a grapheme. This indicates extra length in the /l/

sound and it also marks the syllable boundary. It could be interpreted as the /l/-sound being very long, most of it belonging to the first syllable but then it continues and constitutes the onset of the second syllable. *Starr-ka* (strong/stressed) has double <rr> indicating that the /r/-sound is long but does not continue into the second syllable, the latter starting in a /k/. *Staaa-velser* (syllables) tells us that /a/ is very long and that the total duration belongs to the first syllable. This can be compared to *all-la* where the /l/-sound has the same phonological length as /a/, but stretches over a syllable boundary. *Måss-te* (*must*) follows the pattern of *starr-ka* and *långng-nga* (*long*) follows the pattern of *all-la*. The phrase *all strong syllables must be long*, also reminds the reader/learner that the increased syllable length sometimes lies in the consonant and sometimes in the vowel. The unconventional spelling tells the reader that the long sounds are longer than expected. Many readers of different languages may have encountered double vowels and/or consonants, but probably not triple ones.

The phrase can be compared to various descriptions I had encountered earlier, both in text books for immigrants and during my studies of phonetics, that could be summarized as: Stressed syllables have either a long vowel followed by short consonant or a short vowel followed by a long consonant, long and short vowels differ in timbre and in writing a short vowel is often followed by double consonant. If we compare this with Kjellin's phrase *All-la starr-ka...* we can speculate which one might be perceived by learners as more user-friendly. In his short slogan Kjellin has ignored the spectral (timbre) differences between long and short vowel allophones, which in turn may indicate that he does not consider this feature very important. Whether it is or not, we know from e.g. Reuter (1982) who showed that the variety of Swedish spoken in Finland has minor or no such spectral differences between long and short vowel allophones. We also know that the spectral differences between long and short vowel allophones are manifested differently in different regions, and sometimes may even be non-existent. One of my own studies (Thorén 2003) also shows that, when testing native listeners' perception of quantity categories, duration in vowels and consonants can overrule the spectral differences. One detail that made Kjellin's method so successful probably relates to the merging of the quantity contrast with the signaling of stress. The complementary consonant length – short after long vowel and long after short vowel – has been known for centuries but almost totally neglected in pronunciation teaching. It has been shown by researchers such as Hadding-Koch & Abramson (1964) and Behne et al. (1998) that post-vocalic consonant duration alone cannot change the native listeners' perception of the quantity category, but that it probably regulates the total length of stressed syllables.

What about intonation? Swedish has two categories of tonal word accents, generally known as accent 1 (acute) and accent 2 (grave). They are signaled mainly by the timing of pitch falls and rises in relation to the stressed syllable of the word. Kjellin's book offers a set of rules for pitch movements and these were included in my first attempts to teach according to the book. The pitch rules elegantly connected syllables, words and phrases and described for example, how a pitch fall could signal either accent 2 or utterance boundary. After some time spent developing my teaching according to temporal and tonal rules I found that the tonal patterns were harder for the immigrant students to master than the temporal features. I also found the pitch rules somewhat

complicated and not always in agreement with my intuition. I also noticed that the students tended to overuse accent 2 if they learned it at all. Just to make things easier for me and for the students, I started to teach prosody leaving tonal patterns to be imitated according to each student's best ability. I found that I was just as pleased with the students' pronunciation when I taught rhythm only. After a few years and out of pure inspiration I wrote *Betoningshandboken* (Thorén 1988/1994) (*The handbook of Swedish stress patterns*) a thin booklet of 25 pages, that was basically a rewrite of Kjellin's rules for stress and length. A few years later I was able to attend a master's course in phonetics at Umeå University where I came across the doctoral thesis of Bruce (1977). He had investigated the tonal patterns of Swedish at much the same time as Kjellin had published his book and I found that Kjellin had defined too many pitch rises. I also realized that cutting down on pitch rises was not enough to match Bruce's description. In order to describe pitch movements in Swedish it seems necessary to include four levels of prominence (stress): unstressed, secondary stress, accentuation and focus. In addition to this you have to deal with 4-5 different regional basic word-accent patterns. However, to handle the stress patterns and the quantity distinction (i.e. the speech rhythm), one needs only to distinguish unstressed syllables and words from stressed syllables and words, and to lengthen one segment in each stressed syllable. Language teachers and learners need robust descriptions and I was eager to find out more about my simplified temporal approach.

### Learning more about what I was doing

In autumn 2001 I was accepted as a doctoral student at Stockholm University and given great freedom in what to investigate. My plan was to look deeper into the simplified prosodic model, evaluating it and hopefully find an explanation for the perceived success of 'rhythm only' as a strategy for teaching Swedish pronunciation. Kjellin's slogan *All-la starr-ka staaavelser måss-te vara långng-nga* (Kjellin 1978: 28) comprises two prosodic contrasts: stress (strong syllables) and quantity (long sounds). The word stress contrast, or the possibility of contrasting word stress patterns (a feature which also occurs in English in such words as '*record-re'cord*') is not explicitly present in the slogan, but nevertheless implied by the rule. The quantity contrast is not directly present in the slogan, but is implied by the urge to make the proper sounds very long. English is sometimes said to have a quantity contrast and sometimes not. It can however be illustrated by the contrasting words *beat-bit*, which, depending on the English variety, is manifested either mainly by duration or mainly by timbre in the vowel. Swedish quantity is mainly signaled by duration (Hadding-Koch & Abramson, 1964; Tranmüller & Bigestans, 1988; Behne et al. 1997; Thorén, 2003). The novel idea that Kjellin introduced was to combine two prosodic contrasts and give them a joint rule that would not focus on the possibility of contrasting meanings, but rather to give the utterance a proper rhythm by means of proper length allocation. If learners follow the rule for rhythm, or just imitate it properly, they will signal the proper stress and quantity pattern without knowing it, or without having to know it.

Through previous research (e.g. Fant & Kruckenberg 1994) and my own experiments during my PhD education I learned that both the stress- and the quantity contrasts depend on duration in sounds and syllables to a greater degree than what had previously been presented in textbooks. Stress was often

described as signaled by intensity and tone (or just ‘stress’ presupposing that its manifestation would be obvious or trivial), and quantity was often described as signaled by vowel length and spectral (timbre) differences between long and short vowel allophone. Consonant length, for example, was an exotic and unfamiliar concept to many practitioners.

Furthermore I learned that Swedish dialects often differ in spectral and tonal features at the same time as they share the same temporal features. The realisation that, for example, vowel quality in long and short vowel allophones differs substantially between regional varieties while the temporal relations between long and short vowels and consonants are more similar over the speech community, including Finland-Swedish was an important new piece of evidence. The realisation and distribution of accent 1 and 2 is, as mentioned above, also a feature that differs across dialects while stress allocation and the compulsory lengthening of stressed syllables is present in all varieties. There are however remnants of short stressed syllables in certain parts of Dalarna (a province in mid-west Sweden), in South Sweden and in the variety of Swedish spoken in Finland.

The reader may consider that it was a clever move to combine stress and quantity in one rule, but we should ask whether we really know that these features are important for communication. Apart from anecdotal evidence about changed stress allocation, Bannert (1987) showed that a foreign accented utterance with distorted stress allocation was often misinterpreted by native Swedish listeners and then more accurately interpreted after the stress pattern had been corrected by means of speech synthesis. Gårding (1979:13) described what is assumed to happen when the native Swedish listener is confronted with a word that has a distorted stress pattern:

How about [ɕə́lá:re] (instead of [ɕɛ́l:ɐ̀rə] ‘cellar’)? The word loses its identity. The listener searches for a similar word, i.e. *a word with the same stress pattern*, rummages around in the brain-lexicon, but finds no correspondence/equivalence. As you see (Gårding refers here to an illustrative table) it is supposed to mean *källare* ‘cellar’(author’s translation, italic emphasis by original author).

At a later stage I read Jenkins (2002) and liked her ideas about a Lingua Franca Core, suggesting there are some phonetic features that are more crucial than others for promoting mutual intelligibility among the world’s millions of native and non-native speakers of English. I felt I was about to find features of Swedish pronunciation that were more or less independent of dialect and aiming at rendering foreign accented Swedish intelligible rather than erasing traces of the learners’ mother tongue. Swedish is not a world language like English, but the idea of core features is a relevant concept, since immigrants from China and Poland may live in northern, western or southern Sweden and can all benefit from learning linguistic features that are shared by all native Swedish varieties.

It should be noted however that the findings and simplifications concerning Swedish as a second language discussed here, are not automatically valid for other languages, or rather I know they might be valid for Norwegian and partly

for Icelandic, while a language such as Chinese is substantially more dependent on correct tones. In contrast, American English is more dependent on vowel quality.

### Conclusions and applications – back to the classroom

The discoveries, experiences and ideas I have presented above do not prove that the priority of stress and quantity – and the signalling of these contrasts mainly with duration – is superior to other choices of priority. However, we know they have made many teachers and learners more satisfied and – to my knowledge – there is no other coherent and consistent package of pronunciation rules and principles available. The principles presented here are in harmony with the state of the art in Swedish prosody and they have been an ‘ear-opener’ for many students and teachers. As long as we do not have clear evidence for other didactic positions, I conclude that the suggested teaching strategy is helpful to teachers and learners of Swedish as a second language. It may also provide a dialect independent base for all Swedish speaking regions in Sweden and in Finland and wherever Swedish is taught as a foreign language. Even though the strategies do not prescribe a ‘native-like pronunciation’, they provide a solid ground for further development.

The adult L2 students mentioned in the beginning of the chapter were given exaggerated versions of the sentences they practised, with durations ten times normal durations or more. The exaggerations seemed to be needed in order for the learners to lengthen vowels or consonants at all, and as students repeated the exaggerated utterances they often came out just right. My interpretation of this is that the exaggeration was needed in order to be noticeable for the learners at that particular moment. It is assumed that this will be gradually reduced as the students’ perceptions developed. Certainly it can be said that a lengthening of the teacher’s model utterance by five to ten times and then reduced to double length, rendered the learner’s utterances a perfect timing. Exaggerated durations to teach new phonological contrasts have also been tested successfully by Jamieson and Morosan (1986). As pointed out before, some features are regional and some are stable over the entire Swedish speaking community. I think it is hardly a coincidence that a number of prosodic features shared by the vast majority of Swedish regional accents have appealed to both teachers and students. Teachers, myself and others can exclaim: “Wow, they’re speaking Swedish!” I have also heard (directly from students and reported from colleagues) that many students ask: “Why didn’t anybody teach me this before?”

Another lesson I learned during this journey is that theoretical-phonological and phonetic acoustic levels are at risk of being confused when they meet in the classroom. At the theoretical level, the Swedish quantity contrast is most often viewed as being primarily associated with the quantity of the vowel and less with the quantity of the complementary consonant, since its length is predictable from the preceding vowel length and thereby seen as redundant. Elert (1970) presents various views on the Swedish quantity contrast where either gemination (doubling) of vowel or consonant, vowel length, consonant length, quality or diphthongization in the vowel, or equal complementary vowel-consonant length is seen as distinctive. Sometimes teachers read or hear about vowel-oriented views and interpret redundant consonant length as less important or even non-existent. This is a confusion of phonological theories

trying to mirror the linguistic intuition of native speakers with the needs of non-native learners of Swedish as a second language. The latter need more knowledge and practice with regard to how the target language actually sounds, irrespective of what features are regarded as primary, secondary or redundant. A proper Swedish speech rhythm requires that all stressed syllables are long and this in turn requires a complementary vowel-consonant length in actual speech.

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