

TEACHING ENGLISH ARTICULATORY SETTINGS TO POLISH LEARNERS

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This paper presents the results of an experiment whose ultimate purpose is to demonstrate the importance of the concept of "articulatory basis" for the teaching of the foreign language pronunciation. One such experiment has already been reported in Kolosov (1971); that report as well as a number of other publications (e. g. Honikman (1964), Kelz (1971) and works quoted therein) have stressed the need for including in the pronunciation drills some pre-orientating articulatory exercises which would help the learners to acquire the general articulatory setting of the target language and consequently to achieve a more natural, "accentless" pronunciation, which the acquisition of the target articulatory basis ensures by definition (articulatory basis is "the system of characteristic articulatory movements of a given language that confer upon it its general phonetic aspect", Marouzeau (1943:38).

The languages involved in the experiment were Polish (native) and English (target). Hence, its more immediate purpose was to test the adequacy of the descriptions of the English and Polish articulatory bases as presented by this author in another paper (Ozga 1976) and underlying the training which was to give the learners the postulated phonetic accuracy and naturalness. The reasoning behind the above statement is as follows: if the descriptions in question are adequate, the drills based on them ought to give the learners in the experimental group a better mastery of English pronunciation¹ than that demonstrated by the learners in the control group, whose instruction would not include such drills. Note, however, that the reverse is not automatically true: if the achievement of the experimental group is not found to be more

¹ In terms of phonetic accuracy and naturalness, not in terms of phonetic distinctions.

pronounced than that of the control group, it may merely point to some fault in the preparation of the drills but not necessarily invalidate the descriptions underlying them. Thus, it is not only the principle that is being tested but also, and more directly, the technique.²

In Ozga (1976) the Polish and English articulatory bases were described and compared, for the most part within the framework suggested in Honikman (1964). The main points of that presentation are briefly summarized in table form below:

TABLE 1.
ARTICULATORY SETTINGS

EXTERNAL	ENGLISH	POLISH
<i>Jaws</i>	little mobility non-extensive, non-energetic movements small aperture — loosely closed	pronounced mobility extensive movements from clenching to large aperture
<i>Lips</i>	neutral, slightly and loosely apart, slightly cornered, moderate mobility	pronounced mobility, tense, pressure against the molars
<i>Cheeks</i>	neutral and relaxed	intermittently dimpled and elongated
INTERNAL		
<i>Main active articulator</i>	apex	predorsum/blade
<i>Anchorage</i>	laterally to the roof	apex against lower front teeth
<i>Body of tongue</i>	concave	convex
<i>Glottis</i> (Over-all muscular effort)	devoicing (lenis articulation)	full voicing (energetic articulation)

To effect the transition from the Polish to the English basis a set of pronunciation drills was incorporated into the programme of instruction of the experimental group. These were of two types:

1. early stage drills — pronouncing selected Polish utterances with the introduction of an increasing number of the features of the English basis. A separate class was devoted to the discussion and drilling of each new feature. The procedure was as follows:

Step 1. Teacher's description of the feature (e. g. English lip-and-cheek setting)

- Step 2. Teacher's demonstration in "silent articulation" (where possible)
- Step 3. Students' imitation in "silent articulation"
- Step 4. Teacher's demonstration of the difference between the English setting and the corresponding Polish one. In lip-and-cheek control, for instance, the difference was shown by pronouncing Polish words like *dziękuję* [dʒɛŋ'kuje] in the native way and then with "stiff and sore" lips, which reduced the lip movement [dʒɛŋ'kuje]
- Step 5. Students' imitation and teacher's correction
- Step 6. Practice in utterances of increasing complexity
- Step 7. Integrating the newly learnt feature into the system of the ones learnt previously, e. g. superimposing lip setting on glottal setting:

The features were introduced in the order given on p. 2, i.e. in what seems to be the order of difficulty (from cruder, directly observable features to finer kinesthetic distinctions), except that glottal and over-all muscular control were the subject of the very first drill. In spite of the difficulty that the glottal control exercises presented to the learners, this arrangement was found to be psychologically well-motivated; when the feature was mastered, the learners' performance improved perceptibly, their speech becoming more controlled and subdued, which was precisely the effect that the entire course was striving to achieve, since it constitutes the essential difference between the "sound" of English and Polish.

After all the features had been introduced, they were drilled in isolation and together on Polish material of increasing complexity.

An example of the early stage drills is given below:

- Step 1. Glottal and muscular control: devoiced, non-energetic, breathy articulation, similar to that of the Upper Silesia dialect of Polish
[dʒisiaj 'pada ɲeg]
- Step 2. Jaw, lip, and cheek control: flattening out the vowels
[dʒisiaj pædɔ ɲeg]
- Step 3. Tongue setting: limited motion of the vocal tract throughout the utterance
[dʒisiai pædɔ 'ɲeg]
- Step 4. Anglicizing segments where possible
[dʒiʃai p'ædɔ ɲ'neg]

2. later stage drills — pronouncing English utterances of increasing length and complexity with the organs of speech in the English gear. Unlike the drills in 1) where the transition to the final stage of "speaking Polish with an English accent" was fairly smooth, these were a problem to the learners who complained, at first, of discomfort and even pain in

² It may be sufficient to alter the technique without alternating the principle, but a failure of more than one technique based on the same principle would, to my mind, point to an inadequacy in the principle itself.

the process of speaking with the English articulatory gear, even though the utterances were graded not only in respect of complexity, but also in respect of compliance with the over-all articulatory tendency of the language, so that e. g. *The bed was empty*, with all vowels in the half-close to half-open region and predominant denti-alveolar articulation of consonants, would be introduced much earlier than *John yawned and began to laugh*, with a wider vowel and consonant range, which made it more difficult to maintain the articulatory setting described in Table 1.

Nothing has so far been said about the learners who participated in the experiment. They were first year students of English philology: 16 subjects in the experimental group and 16 in the control group. The experiment was conducted in the Institute of English, Jagellonian University of Cracow, during the English phonetics course given by the present author. The course lasted for 15 weeks (the first semester of the academic year 1974 - 75) with one 45-minute period a week (which amounts to c. 11 hours of instruction altogether). Apart from those classes both groups had a laboratory programme in phonetics (English vowels and consonants) — also one period a week with another teacher.

For both groups the phonetics courses (in class and in the lab) were of remedial nature. English vowels and consonants were described and practised; some most important suprasegmental features were introduced (e. g. proper phrasing and pausing were extensively trained). The experimental group had the additional training connected with the acquisition of the English articulatory basis, which shortened the time allotted to particular sounds. Both groups were taught in comparable, not to say identical, conditions.

To see whether there was any difference in the achievement of the control and experimental groups the following test was given to both groups before and after the course: each student was asked to read aloud a simple text from Smólska and Zawadzka's English textbook for Polish grammar schools "*We learn English*", Book I for the first form,³ p. 219. The students were allowed

³ The full text reads as follows:

"Mrs Wilson is quite alone in the house for once. Dr Wilson is out on his rounds. Susan has gone to another rehearsal. Peter is playing football and Robert has gone to see Joan.

Mrs Wilson is thinking about her family and she is a little bit worried.

All is well with Robert. He has just done well in a difficult examination and Mrs Wilson likes his girl-friend Joan very much.

But Peter... Peter is a very clever boy, but he doesn't work enough. He is interested in geography and maths, but he doesn't like French and he is not at all good at it. Susan says he reads very little. Peter spends a lot of time with Mike. They play football all the time. Peter is growing so fast... He doesn't eat enough. He must have another egg every morning. And Mrs Wilson must talk to his French teacher.

Susan is a good girl and she is pretty. She looks very nice in her new blue dress. But she doesn't want to wear her red school blazer. She says she looks awful in it.

to have a look at the text and practise for a short time before the reading. All the students were recorded on SHIRA CT cassette tape-recorder. The students' performance was judged by five competent listeners (university teachers of English — 2 Britishers, 3 Poles), who were asked to grade the over-all impression of the quality of pronunciation according to the following scale:

- 0 — poor, 1 — fair-to-middlin', 2 — fairly good,
3 — good, 4 — very good

The listeners were welcome to introduce other marks and comments if they thought the above scale insufficiently delicate. In fact, they often resorted to other means of recording their impressions (pluses, minuses, separate marks for suprasegmentals, etc.), in a sense creating their own system of evaluation. That was, however, unavoidable. The scale suggested to the listeners is highly deficient but a better one has not so far been elaborated. A standard grading scale in the case of pronunciation tests is even less discriminating: cf. Komorowska (1974:73), where the scale is 0 - 1 - 2, but it is meant primarily for the evaluation of segments in isolated sentences with the segment frequency exceeding the ordinary usage, e. g. *The cat ate the rat*, etc. Such evaluation was not the object of the experiment reported here: rather, it aimed at getting an over-all impression of "good" vs. "poor" accent — since the question of comprehensibility did not enter into it, with the students' proficiency in achieving phonemic distinctions and the simplicity of the text involved. However, a less impressionistic, more objective testing technique has yet to be devised. The only way to eliminate at least to some extent the subjectivity was to compute the judgement of several ("jury judgement") so as to base the conclusions on inter-subjective if not entirely objective criteria.

The over-all judgement computed from the judgements of particular listeners is significantly in favour of the experimental group. The absolute achievement of either group or each student disregarded, the relative mean improvement of the experimental group is 0.5 of a grade as compared to 0.15 of a grade in the control group, i.e. by nearly half a grade. It means that if the performance of a student in the experimental group was *fair*, his improvement — treated as a token of the average improvement of his group — would be to *fair+*, while in the control group it would be much less remarkable.

Without relying too much on these data, which will have to be corroborated by other — improved — tests of similar nature, it may at least be signalled that articulatory training of the type described above has a fair chance of improving considerably the Polish learners' English pronunciation. It must be remembered that no extra time was given to such training, but although it was conducted at the cost of segmental "postural" training, the over-all results were not poorer but better. This is important in view of the general insistence on cost effectiveness in teaching, where any time-saving device is

more than welcome. It is not unreasonable to expect that the refinement of both the descriptions of the bases and the phonetic training connected with them may lead to even more statistically significant results, which will give both the principle and the technique the validity which they undoubtedly deserve.

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