ABSTRACT

This paper presents a pronunciation training method specifically addressed to Italian learners of German. This method is centred on prosody, treated within a contrastive German-Italian framework. Correct prosodic perception is attained by correct identification of L2-suprasegmentals, achieved by monitoring L1-suprasegmentals. This effect percolates through to other levels resulting in correct German prosody and segmentals.

Empirical data illustrate the positive effects of a prosody-centred training on L2-German pronunciation. Results obtained with a pre- and post-test-designed analysis comparing segment-centred with prosody-centred pronunciation training are investigated in view both of specific prosodic and segmental aspects and of motivational implications. Statistically significant different improvement rates in the two procedures give evidence of the priority of prosody in pronunciation training and thus in teaching practice in SLA and in L2 phonetic acquisition.

1. INTRODUCTION

Since the late 70s, characterized by the communicative approach in SLA, language courses for L2-learners aim at improving L2-communicative competence rather than formal correctness and take account of cognitive and emotional implications in SLA [3] [8] [9] [11]. Language teachers have become acquainted with the necessity of giving prosody priority in language teaching as prosody is the interface between grammar and the speaker’s emotions.

Thus prosody has gained much more weight in SLA research and practice: correct prosody is considered primary with respect to segments, as correct prosodic perception and production have proved to have positive consequences on the segmental level. Prosodic deviations are considered to have a more negative influence on the communicative effect of speech acts than segmental mistakes.

Data involving cross-sectional research on adult Italian learners of German, beginners and students with high level L2 competence, showed that L2-learners are not equipped to discriminate elements of German prosody and tend to carry incompatible Italian intonation patterns over into German contexts [5]. Experiments showed that correct pronunciation is largely dependent on the self-control of intonation – also in L1 – and on the correct position of accents in German words and sentences.

Starting from the specific knowledge of the students’ pronunciation defects, the Contrastive Prosody Method was developed [6], a teaching model which is primarily aimed at correcting prosodic errors and fossilized prosodic features in L2-German of Italian learners.

2. THE CONTRASTIVE PROSODY METHOD

The Contrastive Prosody Method (CPM) is specifically addressed to Italian learners of German, both beginners and advanced students, and it is aimed at developing prosodic competence in L2.

In the CPM prosody is treated within a contrastive framework, in which the meaning of the keyword ‘contrastive’ is far from that attributed to it since the Contrastive Analysis Hypothesis. In the CPM L1-prosody is used as a means to produce and acquire correct word and sentence stresses, and correct intonation contours in L2. The theoretical assumption is that special attention must be paid to learner-specific aspects: while treating L2-phonetics and prosody, the learners’ L1 is never excluded from the acquisition process.

The CPM is a learner-centred method: starting from the initial phases of the training, the learners are never considered ‘simply’ L2-learners, but bilingual individuals, i.e. the “locus of the [linguistic] contact” [10]. Therefore each language learner is considered the place of contact of L1 and L2, and is not simply viewed as a potential L2-speaker. The bilingual approach for teaching German phonetics is based on the assumption that starting from their first encounter with L2, learners are bilinguals to be studied within the framework of research on bilingualism [5]. Thus L1 is not seen as an obstacle for L2-acquisition, but as the threshold which connects L1 with L2.

Mistakes belong to each stage along the road which leads to bilingualism, as do other speaker-specific characteristics. Most difficulties at the segmental level are not primarily related to incorrect pronunciation of single phonemes: the phonetic and prosodic interferences of Italian learners can be attributed to a lack of competence at the suprasegmental level. Incorrect pronunciation is mainly to be attributed to the learners’ distorted perception of L2 sounds and intonation, i.e. a perception filtered by the mother tongue’s characteristics, rather than to defective speech, i.e. to a deficit in the speakers’ phonatory apparatus.

2.1. The Teaching Model

The nucleus of the CPM lies in the systematic attention towards intonation and accenting/deaccenting processes with the typical reduction phenomena of German, and also towards the communicatively adequate prosodic realization of speech acts in L1 and L2, whereas segmental aspects are largely neglected. Accenting and deaccenting processes are a constant feature of many languages [1] and in German they are extremely important. In German, traditionally a stress-timed language [4], unstressed vowels undergo strong reductions tending towards šwa, and voiced consonants in syllable coda are devoiced. For Italians vocalic reductions and centralizations in unstressed positions and the final devoicing are difficult tasks to accomplish, because in Italian, traditionally a syllable-timed language [2], there is no phonological distinction between stressed and unstressed vowels and consonants in syllable onset...
and in syllable coda.

In the initial phases of the phonetic training, which include exercises with numbers, dialogues, poetry or songs, scenes taken from films, i.e. texts which are to be read aloud, learners deal with prosody and phonetics intuitively, and they are supposed to be taught rules explicitly later on.

During the exercises the learners have to produce Italian speech acts corresponding to the German sentences of the exercise, embedding them into self-constructed virtual situations. The aim is to produce German speech acts, which are never viewed as ‘sentences’. The learners are autonomous, they never repeat model-sentences: correct pronunciation is attained without the teacher’s interventions; the learners never have models to repeat and imitate, but utterances – from their peers – to judge and improve. They act inside a group of learners, who listen to the sentences of the other learners and judge their acceptability first in L1 and then in L2. The reference point of every trial, change and self-correction are the learners’ speech acts. The method’s principle is that learning is efficient only when it is self-learning inside a group of peers. Not to be dependent on an external model (a sentence produced by the teacher) gives the learners a feeling of security and of success which leads to a positive change of the whole learning attitude: the learners quickly realize that they are able to produce German sentences on their own, i.e. without the teacher’s help.

Even if the learners are autonomous, they are never alone. Nobody is excluded from the acquisition process, as both speaker and listeners have to activate their language awareness and in syllable coda.

Prosodic competence first in L1, whereas passing to L2 becomes extremely easy, given that the ‘rules’ deduced from Italian are applied with minimal adaptations. Thus learners acquire prosodic competence first in L1, and then profit from the experience in Italian for the acquisition of prosodic competence in German. By often switching from one language to the other, the learners improve their speed in code-switching and they lower the neurological activation threshold of L2 [7].

Two simple ‘rules’ determine the exercise: (1) the learners have to insert themselves into a real communicative situation and to act accordingly, and (2) they have to produce only one strong stress in each sentence reducing all the words without sentence stress. This means for Italian learners a drastically perceived reduction of all secondary stresses towards the primary stress. Italians with little knowledge of word and sentence stress rules in German, initially do not know which element bears the primary accent. As they cannot rely on their L2-competence, they have to try by treating L1 as if it were German. Thus they produce Italian sentences with only one strong accent and deaccent all the other words. They try to exaggerate each word accent and the other learners judge whether the Italian sentence produced sounds natural and spontaneous. At this stage the learners only rely on their L1-competence. Only when they realize which accent cannot be eliminated in Italian – and this is often a surprising discovery – do they realize with their own sentences which word is endowed with the primary stress.

At this point the learner switches to German assuming that the German equivalent of the accented word in the Italian sentence dominates the German sentence too. In the initial phases of the training, the teacher has to present exercises in which the German and the Italian primary stresses coincide. When producing the German sentence the learner exaggerates only the sentence accent by deaccenting all other elements. Thus a perfect German speech act is produced effortlessly. By exaggerating the sentence stress, there is little energy for voiced consonants in syllable coda and for full vowels in an unstressed position: the reduction and centralization of unstressed vowels, the disappearance of shwa-epenthesis and the final devoicing are automatically accomplished.

Prosody as a basis for a contrastive approach in language teaching is sensible, because from the beginning learners effortlessly and unconsciously avoid mistakes which otherwise would hinder them from correctly acquiring L2. Furthermore this has positive consequences on their learning attitude because they soon realize that their sentences “sound German”.

In order to check the validity of the Contrastive Prosody Method in comparison with the traditional segment-centred pronunciation training, a systematic control of the two training methods was introduced on an experimental basis. The aim was to measure the efficiency of the Contrastive Prosody Method and to find out to what extent segmental or suprasegmental competence influence the native speakers’ judgements concerning L2-learners’ pronunciation.
3. PROSODY-CENTRED VS. SEGMENT-CENTRED PRONUNCIATION TRAINING IN SLA

3.1. Subjects
Two learner groups (n = 20 Italian students, average age 20 years) were separately and contemporarily trained during 10 weeks: the experimental group (PT) got a 20-hour prosody-centred training following the premises of the CPM, the control group (ST) got a 20-hour traditional segment-centred training.

In order to protect the experimental results from inter-group-effects unrelated to the training methods, all students were selected from the first university year: all subjects were beginners with little experience in German.

During the training the students attended German courses at university (5 hours a week), but did not attend any phonetic and/or pronunciation training outside their training programme. All learners were trained by the same person at the same time on different days in order to avoid tiredness-effects and other contingent differences. As all subjects were selected on a voluntary basis, high motivation could be expected.

3.2. Procedure
A pre- and post-test analysis method was introduced for comparing the improvement rates after the two different trainings. PT’s and ST’s performances were DAT-recorded before and after the prosodic vs. segmental training and the recordings were transcribed following IPA conventions.

The testing-material was identical for the two groups (18 sentences in highly marked everyday-situations and a modern poem) and roughly corresponded to the training materials. The ST was trained with specific segment-centred materials for the language lab, (repetition and substitution exercises in single words and sentences in isolation), the PT was trained with own materials (songs, dialogues, games, modern poetry, prayers etc.).

The recordings were randomized, tape-recorded and given to n= 5 native speakers – German university teachers – for auditive judgements; thus the recordings had neither chronological (pre- vs. post-test), nor group order (PT vs. ST).

For the auditive judgements the native speakers had to judge global pronunciation competence, segmental and suprasegmental competence, i.e. single sounds vs. word and sentence stress and intonation pattern. The judgments were expressed in Italian marks (min. 18 for sufficience, max. 30). Statistics (means, standard deviations and t-tests) were calculated with SPSS for Windows 7.5.

3.3. Results and Discussion
One aim of the experiment was to find out to what extent segmental vs. suprasegmental competence determines the intuition-based global impression of L2-learners’ comprehensibility by native speakers. The comparison of global judgements with segmental vs. suprasegmental competence shows that native speakers are more influenced by suprasegmental competence (46.6%), than by segmental competence (22.5%) (in 9.9% of cases the two marks were equal, in 20.9% the global impression was the exact mean between the marks for the two competences).

In order to have an objective experimental basis for evaluating the subjects’ improvement rates and phonetic realizations before and after the training besides the native speakers’ subjective-auditive judgements, the recordings were phonetically analysed in detail at the segmental and suprasegmental level. An individual and a group-specific statistic analysis was performed in order to measure the mean individual improvement rates and that of the experimental group (PT) in comparison with those of the control group (ST).

In the post-test both the PT and the ST obtained higher marks than in the pre-test, which confirms a positive effect of both training procedures. Individual results show a clear difference between pre- and post-test for all subjects (PT and ST), but group-specific results (PT vs. ST) show significant between-group differences. There are greater differences between pre- and post-test for the experimental group (PT) than for the control group (ST) (fig. 1).

Statistic evidence shows to what extent the two different groups’ improvement rates diverge: In the pre-test the means of the PT (21.8, s.d. 1.45) and of the ST (20.8, s.d. 2.14) did not significantly differ (p=.220), whereas a highly significant difference (p<.01) between the means of the PT (27.3, s.d. 1.69) and of the ST (22.8, s.d. 1.85) in the post-test gives evidence that after the trainings the two groups significantly differed. A t-test for paired samples between pre- and post-test performances of the two groups gives evidence of a highly significant difference (p=.000 for PT, p=.013 for ST). The improvement rates varied for the PT between 3 and 8 marks (mean 5.5, s.d. 1.56), for the ST between -2.2 and 6 marks (mean 2.0, s.d. 2.10).

As the two groups did not significantly differ in the pre-test, whereas both the between-group (PT vs. ST) and the within-group (pre- vs. post-test) differences were highly significant, it can be concluded that a training-dependent change has taken place; the different improvement rates can clearly be attributed to a training-effect. Statistical evidence shows that higher improvement rates were achieved by prosody-centred training than by segment-centred training (fig. 2a).

The group trained with the Contrastive Prosody Method (PT) significantly improved its pronunciation more than the group traditionally trained with a segment-centred pronunciation (ST). Similar improvement rates could be observed on the basis of the number of segmental mistakes (fig. 2b): both the t-test for
independent samples of the post-test’s result between PT’s and ST’s means (p = .000) and the t-test for paired samples between pre- and post-test of the PT and the ST (p = .000 for PT, p = .001 for ST) showed highly significant differences, whereas a non-significant difference between PT’s and ST’s segmental mistakes in the pre-test (p = .934) shows that at the beginning of the programmes the two groups did not significantly differ from each other.

Fig. 2a PT’s and ST’s performance in pre- and post-test – global impression by native speakers

Fig. 2b PT’s and ST’s performance in pre- and post-test – sum of segmental mistakes

The empirical data concerning the comparison between the improvement rates of the prosodically-trained experimental group (PT) with those of the segmentally-trained control-group (ST) significantly favour the PT. Both the auditive judgments of native speakers and a detailed analysis of segmental mistakes show that homogeneous learner-groups, which typologically resemble the analysed subjects, i.e. adult Italian learners of German with little L2-competence, profit more from a prosody-centred pronunciation-training than from a traditional segment-centric one. Not only is the general performance – the global impression of correctness, comprehensibility and communicative efficiency by German native speakers – affected, but also the specific segmental production. This shows that attention towards prosodic aspects in the initial phases of second language acquisition can also have positive effects on the segmental level. The mean improvement rates at the segmental level are 78.9% for the PT and 31.9% for the ST (fig. 3).

4. CONCLUSION
Experimental results show that L2-learners trained with prosody-centred and segment-centred programmes improve at different rates both according to global impression by native speakers and at the segmental level: statistical evidence favours prosody-centred pronunciation training. The positive results concerning both the trained aspects – L2 phonetics and prosody – and the emotional component involved in the acquisition process evidence the need to invert the traditional priorities in L2 pronunciation training and to give prosody a primary role in SLA.

REFERENCES