

**Workshop on**

**Non-native prosody: phonetic description and teaching practice**

**Nicht-muttersprachliche Prosodie:  
Phonetische Beschreibungen und didaktische Praxis**

4.– 5. März 2005

Universität des Saarlandes, Saarbrücken

organised by/organisiert von:

Jürgen Trouvain, Saarbrücken

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## Programme

### Friday, 4th of March 2005

- 9.00 – 9.15 *Opening* (Jürgen Trouvain, Saarbrücken & Ulrike Gut, Freiburg)
- 9.15 – 10.00 Martine Grice, Cologne  
Models of intonation
- 10.00 – 10.30 Ineke Mennen, Edinburgh  
Phonological influences in non-native intonation
- 10.30 – 11.00 Matthias Jilka, Stuttgart  
Different manifestations and perceptions of foreign accent in intonation
- 11.00 – 11.30 *Coffee break*
- 11.30 – 12.15 Ulrike Gut, Freiburg  
Non-native prosody: findings from the LeaP corpus
- 12.15 – 12.45 Nadine Herry & Daniel Hirst, Aix-en-Provence  
Subjective and objective evaluation of French speakers of English
- 12.45 – 14.15 *Lunch*
- 14.15 – 15.00 Ulla Hirschfeld, Halle & Jürgen Trouvain, Saarbrücken  
Teaching prosody in German as a foreign language
- 15.00 – 15.30 Grit Mehlhorn, Stuttgart  
Individual pronunciation coaching and prosody
- 15.30 – 16.00 Federica Missaglia, Mailand  
Prosodisches Training bei der Ausspracheschulung italienischer Deutschlerner:  
Die Kontrastive Prosodie-Methode
- 16.00 – 16.30 *Coffee break*
- 16.30 – 17.00 William Barry, Saarbrücken  
Rhythm as an L2 problem. How prosodic is it?
- 17.00 – 17.30 Volker Dellwo, London & Petra Wagner, Bonn  
Influences of L1 Rhythm on L2-Speech
- 19.00 *Dinner*

**Saturday, 5th of March 2005**

- 9.00 – 10.00 *Poster presentations with coffee*  
Julia Richter, Bielefeld  
Phonetic Reduction in the German language as L2  
Cordula Hunold, Leipzig  
„Hitting the right/wrong tone“ – Chinese learners of German and their prosodic deviations from target language patterns
- 10.00 – 10.30 Kerstin Uetz, Zürich  
Making teachers aware of prosody
- 10.30 – 11.00 Klaus Vorderwülbecke, Mannheim  
Finding the parts and putting them together again
- 11.00 – 11.30 Andreas Fischer, Freiburg  
Integrierte Phonetik auf der Basis des immanenten Sprechrhythmus – von Anfang an
- 11.30 – 12.15 General Discussion
- 12.15 – 12.30 *Closing* (Trouvain/Gut)

## RHYTHM AS AN L2 PROBLEM: HOW PROSODIC IS IT?

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Prosodic problems in learning and speaking a foreign language are often referred to globally as problems of rhythm and intonation. As broad cover terms they are fairly unproblematical. Appearing together as they mostly do, they don't have to justify themselves as individuals. Like an established married couple, they are not expected to differentiate between "mine and thine". However, if we are concerned with analytic, selective teaching, testing and perhaps diagnostic error analysis, we should be concerned to say which elements of speech behaviour (and which exponents of the linguistic structure) belong to intonation and which belong to rhythm. Clearly we would not wish to see them divorced, since – in a semi-justifiable jump from matrimony to music – the melodic pattern depends on the frequency change over time, and the temporal pattern of prominences contributes to a considerable extent to what naively might be called rhythm. Thus in terms of phonetic exponency the two converge at least in the temporal domain.

But the term prominence immediately evokes problem areas in L2 teaching such as "word stress" and "sentence stress". Here, the concept of rhythm as a separably definable entity to teach and test becomes even less easy to fathom, though language teaching specialists still seem to consider it important. In her description of her book *Targeting Pronunciation: The Intonation, Sounds, and Rhythm of American English*. Boston, MA: Houghton Mifflin Company, 2000, which is especially orientated towards the suprasegmentals of English, S. F. Miller writes: "The ... textbook is divided into 12 sections which deal primarily with *suprasegmentals, such as word and sentence stress, speech rhythm, intonation, linking, and thought groups*" (my italics). Explaining what sort of material and exercises are offered and how they are used, she goes on to say, "This approach leads students to trace stress and rhythm patterns, tap their hands and feet, and use rhythmic gestures and speech *to get a real feel for the melody of the English language*" (my italics). This would imply a status for melody – which I dared, above, to see as the aspect of intonation that is clearly separable from rhythm – that places it at the all-embracing top of the prosodic hierarchy.

This is meant as an illustration of the conceptual problems associated with the term rhythm, not as a criticism of Ms. Miller. When linguistic approaches to rhythm are applied to the language-learning problem, things become worse rather than better.

The aim of this paper is to scrutinize the parameters which contribute to perceived prominence of spoken syllables on the working assumption that it is the temporal pattern and relative weighting of prominences that constitute speech rhythm. After allocating the phenomena to the segmental or the suprasegmental domain, we ask whether rhythm can and should be taught as a definable prosodic entity or whether it emerges as the sum of the separately taught components.

# **INTEGRIERTE PHONETIK AUF DER BASIS DES IMMANENTEN SPRECHRHYTHMUS – VON ANFANG AN**

Andreas Fischer

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Der deutsche Sprechrhythmus wird als Ausgangspunkt für einen Unterricht genommen, der die Fremdsprache Deutsch zum körperlichen Erlebnis werden lässt - „mit Hand und Fuß“.

Ausgehend von der These „Die Phonetik ist das Tor zum Reich der Fremdsprache“ wird ein methodischer Ansatz gezeigt, der - mit der Phonetik als integralem Bestandteil jedes Sprechaktes - in der Form von Sprechstücken bzw. Rap-Texten deutsche Alltagssprache rhythmisch-dynamisch vermittelt. Mit Echo-Sprechen, Solo/Tutti-Techniken, Gruppendialogen und Begleitung auf Rhythmusinstrumenten werden Texte in rhythmischer Prosa inszeniert. Sie werden dem Lehrbuch oder einer literarischen Vorlage entnommen, nach Bedarf kreativ abgewandelt oder frei erfunden. Lexikalische und grammatikalische Aufgaben lassen sich spielerisch unterbringen.

Bewusstes Einbeziehen von Körpersprache und gruppendynamischen Prozessen verhindert, dass Langeweile aufkommt. Derartig gelernte Texte bleiben nachhaltig haften und werden mit der authentischen Phonetik verinnerlicht.



## **MODELS OF INTONATION**

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In this talk I shall review a number of different methods of transcribing intonation. In particular I shall compare systems based on auditory analysis alone with those using a combination of listening and inspection of fundamental frequency contours, discussing the problems which arise when attempting to map one system onto the other. I shall use a number of recordings to exemplify the types of mismatch which are found. I shall also show that there is a need to investigate the intonation of both carefully controlled read speech and more or less spontaneous dialogue, but that, contrary to current practice in language teaching, one cannot be treated as a substitute for the other.





## **LeaP – A LEARNER CORPUS OF L2 PROSODY**

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Corpora are increasingly used in the classroom and the recognition of their pedagogical value is growing. Especially learner corpora as opposed to native corpora give students the opportunity to discover typical learner difficulties (e.g. Bernardini 2004, Nesselhauf 2004). The purpose of this paper is to introduce the recently completed LeaP corpus, a phonetically annotated learner corpus of English and German.

The LeaP corpus <<http://www.phonetik.uni-freiburg.de/leap/>> was collected in the LeaP (Learning Prosody in a Foreign Language) project at the University of Bielefeld, Germany, which was concerned with the acquisition of prosody by non-native speakers of German and English. In this talk, the design, structure, annotation and format of the LeaP corpus will be described. The fully text-to-tone aligned corpus with extensive phonetic annotations has a size of more than 12 hours. It consists of 359 annotated and fully text-tone aligned files and includes a total of 131 different speakers with 32 different native languages as well as 18 recordings with native speakers will be described. A wide range of speakers in terms of age, sex, native languages, level of competence, length of exposure to the target language, age at first exposure to the target language and non-linguistic factors such as motivation to learn the language, musicality and so forth was covered. Data was collected from different groups of speakers: learners before and after a period abroad, before and after a four-month prosody training course, especially advanced learners who are hardly distinguishable from native speakers, and learners with different levels of competence. Four types of speech styles were recorded (word list, reading passage, re-telling and free conversation) and the recordings were annotated manually and automatically on 8 different tiers including pitch, tones, segments, syllables, words, phrasing, parts-of-speech and lemmata.

Possibilities of the application of the LeaP corpus in language teaching will be reported: it has been used both in a university class in linguistics with the corpus-based methodology of “data-driven learning” (e.g. Johns, 1991, Leech, 1997) and in pronunciation teaching by learners of German.

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# **SUBJECTIVE AND OBJECTIVE EVALUATION OF FRENCH SPEAKERS OF ENGLISH**

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Our study aims at evaluating subjectively and objectively the prosody of English spoken by French speakers and to consider the contribution of computer-assisted learning. Experiments have been done in this field. In 1965 Lane and Buiten (Michigan) studied the acquisition of prosody and imagined an automatic system to evaluate the prosody. In fact it was not efficient since student did not improve their oral capacity. Vardanian (1964) tried something similar but with a better visualiser. He wanted to make Brazilians learn English intonation. The students could compare the model with their own production. During three weeks, a test group tried to learn 6 patterns of intonation only by imitation, and the experimental group learnt by imitation and visualisation. Despite his material to visualise prosody, he found no real difference between the two groups. Later James (1977) used the melody visualiser of Martin (1973). He wanted to test the effect of the visual feedback in the acquisition of prosodic patterns for English students learning french, and he concluded that “one fact that did merge clearly was the efficacy of visualisation patterns in the field of applied phonetics and the teaching of intonation (James, 1977:242). As the acquisition of a second language prosody seems to be difficult and needs to be solved, we propose a computer-assisted english prosody learning method. It has been tested for 6 months and gives way to two lines of research: on the one hand, a subjective evaluation of the prosody of English spoken speakers in order to determine its efficiency; on the other hand, an objective evaluation which enables a correlation between the level of a French speaker and the relevant prosodic parameters. Our results on the two evaluations validate our hypothesis: the efficiency of a computer-assisted English prosody learning based on visualisation and audition simultaneously, as well as the possibility to quantify prosodic parameters. Our results also confirm the necessity to teach prosody and to deepen the research to find more quantifiable prosodic parameters. All this would increase the relevance of English prosody learning.



## **TEACHING PROSODY IN GERMAN AS A FOREIGN LANGUAGE**

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Pronunciation and phonetics in German language teaching have been ignored for a long time (and some popular text books including practical material still do) but a change can be observed in the last 10 or 15 years. If pronunciation is part of a language teaching book then often the topic is reduced to segmental phenomena such as the "ich-Laut" [ç] and the glottal fricative [h]. However, many phenomena responsible for the foreign accent which can lead to a complete incomprehensibility are of a suprasegmental or prosodic nature such as vowel length and rhythm (Hirschfeld, 1994).

Depending on their first language or previously acquired foreign languages, speakers show different problems with German L2 prosody. Some peculiarities of German prosody nearly always lead to difficulties: typical melodic contours (e.g. the accomplishing of the final low at the end of utterances), assigning and producing lexical stress, structuring and realisation of rhythm.

Moreover, we can observe numerous phenomena which are caused by the first language of the learner:

- Native speakers of French show not just difficulties with lexical stress but also with the reduction of unstressed syllables.
- Russian speaking learners often exhibit a far too extreme pitch movement to mark the sentence accent.
- Speakers with Finnish as L1 are not able to produce an adequate rising intonation contour to mark certain question types.
- Chinese speakers produce tonal movements foremost on the syllable level.

Both groups, learners and teachers, must be acquainted with the most important features of prosody in an adequate way. Teachers must be willing and capable to recognise, to explain, and to correct the most serious problems and also to give feedback. In the talk which will be given in two languages, English and German, various examples of different methods, types of exercises and learning aids for German L2 prosody will be presented.

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# **"HITTING THE RIGHT/WRONG TONE" – CHINESE LEARNERS OF GERMAN AND THEIR PROSODIC DEVIATIONS FROM TARGET LANGUAGE PATTERNS**

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Due to the increasing number and different traditions of education and learning, Asian (particularly Chinese) learners of German comprise a group of learners which is increasingly coming to the attention of researchers for language and language learning. In the context of my dissertation, I concern myself with articulation and prosodic problems of Chinese learners of German, but this poster presentation will concentrate on the prosodic deviations.

Adequate using of the target language in communication should transcend making oneself understood, so in fact the question of analysis the speech of German speaking Chinese should be of two kinds:

1. Is the second language articulation/prosody such that the foreign language learner can make himself understood? / Are there misunderstandings at times that are caused by insufficient articulation and/or prosody?
2. Is the language (i. e. „the sound“ of language) perceived as comfortable/ acceptable or not?

On the basis of these two questions I try to generate a list of significant pronunciation deviations, which listeners find to be distracting for communication. In the search for causes, I will show some of the peculiarities of the Chinese language that are for instance connected with the fact that Chinese is a tonal language, because facts about the system of the native language of Chinese learners may help to analyse articulatory and prosodic deviations. On the other hand, I will show some other possible causes for problems with second language patterns, that may be found for instance in the analysis of cultural and learning background of the Chinese learner as such.

The presentation will give insights into the work-in-progress, that includes discernment and acceptance studies as well as detailed analysis of individual cases.



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## **DIFFERENT MANIFESTATIONS AND PERCEPTIONS OF FOREIGN ACCENT IN INTONATION**

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Many studies combining the fields of second language acquisition and prosody have been able to show that L2 intonation can exhibit foreign accent and that vice versa intonational characteristics contribute to the overall impression of foreign accent.

It is, however, much more difficult to determine exactly which intonational deviations are relevant manifestations of foreign accent, i.e. which of an L2 speaker's concepts of intonational organization are actually responsible for the foreign-accented intonation.

This study will discuss the difficulties specific to the identification of intonational foreign accent (IFA) by examining both German speakers' productions of American English and American speakers' German utterances in order to determine which "tonal entities" are represented internally and therefore involved in the eventual manifestation of foreign accent.

The paper argues that there are various intonation-specific parameters that complicate this endeavor. The problems identifying relevant aspects of IFA are summarized in four points: 1. point of view (i.e., influence of the used intonation model), 2. different sources of intonation errors (transfer from L1 vs. apparently unmotivated deviations), 3. great variability of intonation, and 4. distinction between individual and cumulative effects of IFA.

Example analyses for each of the above factors constitute the main part of the study.

The influence of the used intonation model in the perception of the relevant tonal phenomena is examined by comparing the effects of three models, including a view of the intonation contour as a sequence of discrete tonal categories based on the Tone Sequence Model approach (Pierrehumbert, 1980), a parametric approach (Möhler & Conkie, 1998) and a superpositional approach (Fujisaki, 1983).

Fundamentally different types of intonation errors are demonstrated in cases of straightforward transfer of an L1 intonation category to the L2 (e.g. in American speakers' realization of continuation rises in German), and on the other hand intonation errors that have no obvious source in the L1, but may be due to a general

phenomenon of simplification similar to the concept of a “Basic Variety” (Klein & Perdue, 1997).

The great variability of intonation can be shown by means of numerous phonetic deviations within a tonal category or the deviating use of whole categories not perceived as foreign, but only resulting in different interpretations.

Finally, it can be shown that the accumulation of such deviations eventually leads to an impression of foreignness. In fact, experiments using low-pass filtered speech demonstrate that there are global effects of foreign accent in prosody and especially intonation that are independent of the word-related interpretation of an utterance.

As a result of the above analyses it is attempted to draw conclusions as to generally practicable approaches to improving the teaching of intonation in L2 pronunciation. These conclusions are to a certain degree specific to the source and target languages involved and concentrate on the conscious control of global intonation features (e.g. pitch excursion, frequency of pitch accents) and the use of intonation resynthesis to demonstrate both the correct use of tonal categories in certain discourse situations and more appropriate phonetic realizations of the categories themselves.

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# INDIVIDUAL PRONUNCIATION COACHING AND PROSODY

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Adult pronunciation of foreign languages shows fossilizations (frozen patterns) which is due to phonological interferences with the native language (cf. Grotjahn, 1998; Kaltenbacher, 1998; Jilka, 2000). Since the prosody of the L2 is perceived through the “filter” of the mother tongue, deviations in the prosody of the target language can be predicted (based on the knowledge of the prosodic properties of the learner’s L1). For example, a syllable-timed rhythm of L1 is transferred to a (stress-timed) target language (cf. Gut, 2003).

On the other hand, learners with identical L1 background differ with respect to the following features: the amount and grade of particular deviations (cf. Baran, 2002), the perception of prosodic differences in the target language, the ability of imitating the prosody of the foreign language, their cognitive learning styles as well as their learning strategies and their grade of language awareness.

Individual learner coaching that focuses on pronunciation is an effective method to handle these individual difficulties. In this individual coaching, informal perception and production tests serve as a diagnostics. The coach can illustrate certain learning strategies and offer particular exercises and learning material. Moreover, she contributes her expert knowledge on the prosodic system of the L1 and the target language of the learner. The learner is seen as an autonomous person who takes the responsibility for her own learning. The coach can support this learning process by giving the learner individual feedback on the progress of her pronunciation. Since an active way of learning is thus required of the learners with respect to addressing their own pronunciation difficulties, the training and the permanent feedback, language awareness of the pronunciation and prosody of the target language is raised. This is a first and necessary step to improve adult learners’ pronunciation performance in the foreign language.

In this talk, I will propose a method for individual pronunciation coaching. The focus will be on successful examples where language awareness of individual learners was sharpened, which led to an improvement in their active knowledge of German prosody.

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# PHONOLOGICAL INFLUENCES IN NON-NATIVE INTONATION

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Languages can differ intonationally at the phonological as well as the phonetic level. As a result, mutual influences of the L1 and L2 intonation systems may occur at both these levels. A phonological influence would result from intonational differences in the inventory of phonological tunes, their form, and in the meanings assigned to the tunes. A phonetic influence would result from a difference in the phonetic realization of an identical phonological tune. For example, Mennen's (2004) finding of differences in the timing of a phonologically identical rise in the intonation of Dutch near-native speakers of (Modern) Greek is an example of a phonetic influence, whereas Willems' (1980) finding of a different direction of pitch movements (rises rather than falls) in the intonation of Dutch learners of English, is an example of a phonological influence (resulting from a difference in the form or distribution of phonological tunes).

This talk will present a case of phonological influence in non-native intonation. Specifically, it will report on an instrumental study of Greek yes-no questions (YNQs) and emphatic statements (ES) produced by a group of native and non-native (Dutch) speakers of Greek. Greek YNQs with focus on a non-final word and Greek ES are interesting, since they show almost identical rising-falling contours. However, according to Arvaniti, Ladd & Mennen (forthcoming) the phonological elements of these similar tunes are phonologically different in that the peak in ES is a reflex of a pitch accent ( $H^*$ ) whereas the peak in YNQs with focus on a non-final word is the reflex of a phrasal tone ( $H^-$ ). Dutch doesn't have a similar intonational distinction between YNQs and ES. It is therefore interesting to see whether (and if so, how) Dutch near-native speakers of Greek realise such a phonological distinction in their L2.

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# **PROSODISCHES TRAINING BEI DER AUSSPRACHE- SCHULUNG ITALIENISCHER DEUTSCHLERNER: DIE KONTRASTIVE PROSODIE-METHODE**

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Die empirische Betrachtung des Sprechverhaltens erwachsener Deutschlerner italienischer Muttersprache (Missaglia, 1997) zeigt, dass viele Defizite im Bereich der mündlichen Kommunikation nicht primär auf mangelhafte Realisierung einzelner Phoneme zurückzuführen sind, sondern vielmehr auf unsichere Kompetenz im suprasegmentalen Bereich hinweisen. Dabei schlägt sich die mangelnde prosodische Kompetenz nicht nur auf die suprasegmentale Ebene in Form normabweichender Intonationskonturen und rhythmischer Einheiten sowie falscher Wort- und Satzakkente nieder, sondern sie führt auch zu gravierenden – und oft stark kommunikationsstörenden – Fehlern auf der segmentalen Ebene (etwa Schwa-Epenthese, fehlende Auslautverhärtung, unkorrekte Vokalrealisierung). Darüber hinaus lassen sich muttersprachbedingte Interferenzerscheinungen in Verbindung mit satzphonetischen Phänomenen feststellen, die als unmittelbare Folge des Kontaktes zwischen einer silben- und einer akzentzählenden Sprache zu betrachten sind. Falsche Wort- und Satzakkente, viele Pausen und elaborierte Sprechweise führen gleichsam zu verlangsamtem (und stark silbenzählendem) Rhythmus, der sich wesentlich vom akzentzählenden Rhythmus deutscher Sprecher unterscheidet (Missaglia, 1999a).

Die festgestellten Schwierigkeiten lassen sich kaum auf ein artikulatorisches, d.h. motorisch-produktives Defizit zurückzuführen, sondern weisen vielmehr auf den Einfluss muttersprachspezifischer Hörgewohnheiten hin. Die Lerner neigen dazu, muttersprachliche Perzeptionsklassen und Distributionsregeln unbewusst auf die Zielsprache zu übertragen, wobei sie auf präzise Artikulation und elaborierte Aussprache der Einzellaute mehr Wert legen, als auf korrekte prosodische Realisierung.

Dieser Sachverhalt lässt sich auf der Grundlage der von Kuhl et al. (1995) auf die mentale Repräsentation phonetischer Einheiten übertragene Prototypentheorie dahingehend deuten, dass die Schwierigkeiten bei der Verarbeitung fremdsprachlicher Laute, Lautverbindungen und intonatorischer Muster auf die Existenz – und den Magneteffekt – muttersprachspezifischer phonetischer Prototypen schließen lassen.



Vor dem Hintergrund der theoretisch gestützten und experimentell abgesicherten Auseinandersetzung mit den Ausspracheschwierigkeiten italienischer Deutschlerner soll im Beitrag auf der Grundlage rhythmischer Kriterien zunächst ein kontrastiver Vergleich der phonetischen Prototypen der Erst- und der Zweitsprache der untersuchten Lernergruppe vorgestellt werden. Anschließend sollen die Implikationen des Prototypenkonzepts für die L2-Ausspracheschulung diskutiert werden.

Auf die Frage, wie sich das Prototypenkonzept auf die Sprachdidaktik übertragen lässt, etwa in Form konkreter didaktischer Anleitungen, gibt es keine eindeutige und allgemeingültige Antwort, zumal beim L2-Phonetikunterricht individuelle Lernstile und Sprachlernerfahrungen berücksichtigt werden müssen. Daher lassen sich bei der Ausspracheschulung erwachsener italienischer Deutschlerner alternative und z.T. recht divergierende Wege einschlagen und unterschiedliche Methoden erfolgreich einsetzen, die einen einsprachigen oder kontrastiven Ansatz vertreten, wahrnehmungs- oder produktionsfokussiert sind. Darüber hinaus lassen sich herkömmliche kognitive von neueren kognitiv *und* emotional ausgerichteten Methoden unterscheiden.

Erfolgreiche Ausspracheübungen, die zur raschen Verbesserung alteingefahrener Gewohnheiten führen, stellen dabei Momente der Erkenntnis dar, die nicht nur im Hinblick auf die Praxis, sondern auch im Hinblick auf die zugrunde liegenden theoretischen Annahmen relevant sind.

Ausgehend von der empirischen Grundlage der durchgeführten Untersuchungen wird ein Prosodie zentriertes Trainingsprogramm vorgestellt, das den phonetischen und phonologischen Eigenheiten der Erst- und Zweitsprache wie auch der *Interlanguage* der untersuchten Versuchspersonen Rechnung trägt und das anhand einer systematischen Erfolgskontrolle bereits auf seine Brauchbarkeit hin überprüft wurde.

Die Ausgangshypothese des Trainingsprogramms ist, dass Korrektur im prosodischen Bereich zur Korrektur segmentaler Defizite führt. Wird eine rudimentäre prosodische Kompetenz erlangt, so verschwinden viele phonologische Interferenzen automatisch und spurlos. Es lässt sich somit nachweisen, dass Akzentuierung und Intonation eine Steuerungsfunktion über Silben und Einzellaute ausüben. Unterschiedliche, statistisch signifikante Verbesserungsraten auf segmentaler und suprasegmentaler Ebene im Rahmen einer vergleichenden Untersuchung von Prosodie zentriertem und traditionellem Segment zentriertem Aussprachetraining favorisieren eindeutig das Prosodie zentrierte Training (Missaglia, 1999b).

Die ermittelten positiven Ergebnisse im Hinblick auf den Erwerb der prosodischen und segmentalen Kompetenz sprechen entschieden für eine Umkehrung der Prioritäten im Rahmen der Ausspracheschulung für Fremdsprachenlerner, wobei der Prosodie eine primäre Rolle zukommt.

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# **PROBLEME EINER INTEGRIERTEN AUSSPRACHE- UND PROSODIESCHULUNG IM DAF-UNTERRICHT – ERFAHRUNGEN AUS DER LEHRERFORTBILDUNG AN VOLKSHOCHSCHULEN**

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Die Kurse für Deutsch als Fremdsprache in Deutschland sind im Allgemeinen sehr heterogen. Die Teilnehmer kommen nicht nur aus vielen Nationen, sondern bringen auch höchst divergente Lern- und Lebenserfahrungen mit in den Sprachkurs.

Diese Vielfalt bietet viele Möglichkeiten für soziales, interkulturelles Lernen. Sie ermöglicht einen intensiven Austausch und große Lebendigkeit im Unterricht. Gleichzeitig stellt sie jedoch für die Lehrperson eine besondere und sehr komplexe Herausforderung dar. Die gilt insbesondere bei der Ausspracheschulung.

Die Ausspracheschulung muss in den Ablauf des Sprachunterrichts integriert werden. Wie die Grammatik dient sie der Pragmatik und wie diese hat sie die Funktion, dem Lernenden sprachliches Handeln in konkreten Lebenssituationen zu erleichtern.

Auf Grund der Spezifik des Aussprachelernens und der individuellen Ausspracheprobleme stellt dieser Anspruch jedoch besondere Anforderungen an die Lehrperson. Zwei Aspekte spielen dabei eine herausragende Rolle:

1. Es ist kaum möglich eine „Progression“ des Aussprachetrainings zu entwickeln, wie wir das bei der Grammatik kennen, da sich die gravierendsten Probleme von der ersten Unterrichtsstunde an gleichzeitig stellen.
2. Die methodische Sequenz „Wahrnehmen – Üben – Anwenden“ gilt auch im Bereich des Aussprachetrainings. Hier fällt es aber oft besonders schwer, das Training bestimmter Phänomene mit dem Anspruch des „meaningful input“ zu versöhnen.



# PHONETIC REDUCTION IN THE GERMAN LANGUAGE AS L2

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Due to the increasing number and different traditions of education and Many students of the German language as L2 seem to articulate the foreign language in an overly exaggerated way. This is striking, because in current German the tendency is more to the opposite. The control of usage and conditions for the appearance of the reduction is important however, with respect to two phonetic constructs: rhythm and phonostyle. If a learner diverges in rhythm too much from the pattern of the language he is trying to speak, he endangers the phonetic understandability of his utterances. If a student chooses a phonostylistic variant inadequate for the situation, it can happen that his utterance will not be socially accepted.

It is now questionable, if the lack of reduction can be empirically confirmed; if so, the question is can it be traced back to L1-interference? Or do other factors, such as L1 of the conversation partner, fluency, age of German language acquisition, instructed or non-instructed acquisition, length of residence in Germany, quantity and quality of contacts with native German speakers, gender, age or socio-affective factors, play a role?

In order to clarify these questions, I will triangulate three quantitative sets of data. The first part of the survey consists of an experimental cross-sectional study (data set 1). In dyadic conversations with sixty test persons of whom thirty are non-native speakers (NNS) (ten each with L1 English, Russian and French) and thirty are native speakers (NS) spontaneous speech will be elicited.

In the second part of the experiment, the NNS test persons will be given a questionnaire (data set 2) which will identify the independent variable L1 and the potential moderator variables. These include the biography of German language acquisition, knowledge of other languages, fields of studies, and socio-affective factors. NS will fill out a questionnaire identifying gender and age. The variables age, topic of conversation, and socio-economical status will be controlled.

Finally, the third part of the investigation, an experiment including listening and imitation tasks (data set 3), will focus on the question whether possible deviations

from the norm adequate for the situation may be the result of listening or speaking problems.

In data set 1 and 3 the following will be measured: a) length of the accent syllable in two-syllable words, b) length of the reduction syllable in two-syllable words, c) the length of the functional word, d) segmental parts of the reduction syllable which contains *-e*, *-en*, *-em*, *-t* and of e) the functional word, f) the speech rate in syllables per minute (without pausing).

The data will be evaluated using variance analyses.

## MAKING TEACHERS AWARE OF PROSODY

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I will talk to you about my practical experience. Teaching *phonetics* on one hand and *German For Adult Foreigners* on the other, I also offer two-day seminars in *Teaching German Pronunciation* to language teachers.

Compared to many English teachers, my key audience have no defined level of phonetic knowledge, which means that it can vary between almost no notion and a vague memory of their university days.

Thus, and even though correct German pronunciation practically depends on the length of accentuated vowels, prosodic patterns may not (yet) be on their priority list, nor will they have specific ideas about how to meet their students pronunciation interferences.

We can find sort of a staircase-structure in what I am doing. On the first step, there is the language student. He/she has to be met wherever his/her phonetic awareness may be. Then, on the next step, we have the language teacher. He/she can only be able to fulfil the task just mentioned, if he/she has an accurate active fund of linguistic know-how which enables him/her to create language awareness in the classroom. So, temporally we need a third step, where continuing education such as I, and a few others, offer. Here on this step, teachers can reactivate or complete their practical knowledge of pronunciation rules, basic phonetics, comparative phonetics a.s.o., and here on this step they also learn how to apply their theory into their teaching, where they meet learners pronunciation problems more actively.

My task here is to direct their focus on 1) language awareness, 2) comparative phonetics and 3) a simple methodology I created as a didactical tool in pron. training. The method consists of five progressive steps I will demonstrate to you using one of the most critical subjects, the use of long or short vowels.

Focus questions are: How can L2-learners master such a complicated pattern (as German long/short vowels), unknown to many of them so far, without being aware that it even exists? And how can they be asked to produce different length of vowels (t.eg.), if they are not yet able to hear/distinguish a difference? At what level should they be trained or should training start? How do we train them?





## FINDING THE PARTS AND PUTTING THEM TOGETHER

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I would like to deal with the problem of the segmentation of (longer) sound strings combined with the ability to understand coarticulatory features in casual speech. To me, both seem to be basic abilities in understanding and producing an adequate prosody of German. In a second section, I will show how segmenting can be incorporated in complex prosodic training on the basis of a dialogue in a video language course.

Fortunately, over the last decade, phonetic training has become an almost standard feature in textbooks for German as a foreign language. There is, however, in my view a deficiency in the field of prosody, namely, rhythmic features and pauses.

In the actual language learning process, many students have great problems segmenting a (longer) string of sounds into meaningful constituents. The main deficit seems to be that the concept of rhythmic groups as a basic articulatory and acoustic unit is not sufficiently taught. It is within this unit that assimilations, elisions, and reductions “make sense” to the native speaker and also to the initiated learner. The learner faces the difficult task of understanding something that he has not heard and also of learning segmenting an acoustically unsegmented string of sounds into meaningful parts (i.e., syllables, words).

In this context, language instruction has to concentrate on the nature of rhythmic groups with the accented syllable and the accompanying unaccented ones as well as their identification. And in speaking, the focus has to be on the virtual equidistance between the accented syllables of several rhythmic groups in a sentence.

I will try to give evidence of the trainability of the above mentioned features in certain results of brain research followed by examples of relevant types of exercises.

Video language courses have occasionally tried to use the visual channel for explicit prosodic training, for example, sentence prosody. I would like to show a way of exploiting video sequences that have not been conceived for the teaching of phonetics or prosody. This training based on semi-authentic dialogue scenes asks for a combination of graded exercises including and going beyond segmentation. Through increasingly complex graphic marking of different prosodic features, the students are

led to a nearly unguided rendering of that particular scene including gestures and mimics.

## INFLUENCES OF L1 RHYTHM ON L2 SPEECH

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The question of whether languages are classifiable into different rhythm classes (e.g. stress-time or syllable-timed rhythm) has for several decades been of major interest in phonetic research. Numerous attempts have been performed in order to prove the existence of rhythm classes by finding acoustic correlates in the speech signal with more or less success. So far, there has been little research on the acoustic correlates of rhythm in L2 speech. Nevertheless L2 speech may reveal important evidence about the existence and relevance of rhythm classes: If rhythm classes exist we may assume that learners of an L2 that is in the same rhythm class as their L1 should have an advantage in acquiring the L2 rhythm over learners of the same L2 who's L1 is of a different rhythm class.

In the present research we will therefore address questions of the following types: In what way is L2 rhythm influenced by the rhythm of L1? E.g.: Do L1 speakers of a syllable-timed language produce a syllable-timed-like rhythm in a stress-timed L2? Or: If the L2 of a speaker is in the same rhythm class as his/her L1, then is this speaker better at performing the rhythm of this L2 than a speaker who's L1 is in a different rhythm class?

In order to address these questions we will use recently proposed acoustic correlates of speech rhythm which are based on the durations of consonantal and vocalic intervals (e.g. %V and  $\Delta C$  by Ramus et al., 1999, and the PVI by Grabe & Low, 2001) in connection with the BonnTempo-Corpus (Dellwo et al., 2004), a database for the cross language study of rhythm measures of the type described before.

Concerning the acoustic correlates %V/ $\Delta C$  and PVI and our hypothesis from above we should expect that rather similar measurements should be obtainable for L2 speech by speakers who's L1 is from the same rhythm class and less similar measurements for L2 speech by speakers with an L1 from a different rhythm class. First results though indicate that speakers of a stress-timed language (German) seem to change their

rhythm in the same fashion when speaking in another stress-timed language (English) as speakers of a syllable-timed language (French).

The results indicate that speakers of languages belonging to the same rhythm class do not necessarily have an advantage acquiring the rhythm of an L2 of the same rhythm class and that speakers acquiring a new language may produce the same rhythmic output for this language, independently of their L1 rhythm. Considering this and other evidence about L2 rhythm we will discuss the relevance of rhythm classes for L2 speech, the existence of rhythm classes in general and the rhythm measures used in this study.

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