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From the President

ISPhS has a new President and a new Board of Directors for the 1999/2003 legislation period. I am impressed by and grateful for the confidence and encouragement which our membership have expressed by their clear vote in favor of the members of our new team who are ready to sacrifice their time and energy to the benefit of our Society during the coming four years. Let me assure you that this group is firmly committed to developing our Society on the basis of our ideals and missions through new strategies, initiatives and actions.

This year, two major events gave our phonetics community the opportunity to come together: the XIVth International Congress of the Phonetic Sciences (ICPhS in San Francisco) in August and the European Conference on Speech Communication and Technology (Eurospeech ’99 in Budapest) in September. Both conventions have been interpreted as impressive and encouraging symbols of the power and dynamics of our discipline. On the other hand, many of those who attended one or the two of these very large meetings complained about the increasingly anonymous atmosphere, the excessive amount of lectures and posters as well as about the high cost for the individual participant. With its International Phonetic Sciences Conferences (IPS), ISPhS has developed the idea of sponsoring smaller lower cost meetings on changing topics and thus facilitating a more personal interchange of ideas. This is only one example of ISPhS’ many initiatives which will be developed in the future.

The new volume of The Phonetician very well reflects ISPhS’ new strategy of attributing a more important role to the distribution of relevant news among its membership. The structure of the bulletin introduced by the new editors offers a wide range of different informations focussing on current research, new publications, announcements of and reports on recent conventions as well as on reports from our Society in general and the regional offices. The Phonetician 80 will be put on ISPhS’ new website (www.isphs.org) in order to test the attractiveness and effectiveness of this place for a general information pool serving our members and other visitors. We are, however, fully aware of the fact that many of our members do not have access to the web. The Phonetician in its printed form will, therefore, continue to be the major link between individual members and the Society.

Since I am confident that everyone will read his/her Phonetician 80 before the end of the year I would like to extend my best wishes to all of you for an agreeable passage to the year 2,000. May our hopes and dreams become reality in the new millennium!
From the Editors

You might have noticed, as from the last issue (Number 79 – 99/I), Niels Schiller and Olaf Köster are the new editors of *The Phonetician*. You can learn more about them by reading their bionotes on page 4 of *The Phonetician* 99/I. To contact the editors, please find their addresses in the back of this issue.

Call for Papers

*The Phonetician* is published twice a year as the newsletter of the International Society of Phonetic Sciences (ISPhS). Starting in 1999, some offices, such as the presidency of the ISPhS, as well as the editorship of *The Phonetician*, have changed hands. From now on, *The Phonetician* will also be dedicated to the publication of short research papers. *The Phonetician* welcomes short contributions in all areas of phonetics, including articulatory phonetics, acoustic phonetics, psycho-acoustics, cross language and L2 phonetics, speech synthesis, phonetic modeling, speech signal processing, speech perception and production, etc. Contributions should primarily emphasize experimental work, but theoretical and methodological papers will also be considered.

Manuscripts should not exceed a maximum of 1500 words (including no more than 2 tables or figures). Manuscripts will be reviewed anonymously and authors will receive the reviews within 3 months of submission.

The title page should include the authors' names and affiliations, address, e-mail, telephone, and fax numbers. The manuscripts should include an abstract of no more than 100 words and up to four keywords. The final accepted version of a manuscript should be sent both on hard copy and in electronic form.

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A Multilingual Text-to-Speech System

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Abstract

This paper gives an overview of a text-to-speech (TTS) system, DreSS (Dresden Speech Synthesizer), which was developed at Dresden University. In this article, the structure of the system and the different modules for generating prosody and its evaluation will be described. Finally, the special features of DreSS will be explained. These include multilinguality as well as hardware support for non-PC applications.

History

The speech communication chair at TU Dresden was established in 1969 with speech synthesis as one of its research focuses. With their early formant synthesizers, SYNI I (1972) and SYNI II (1975), this group contributed to the family of speech synthesizers still working without computer control. The next generation, ROSY (named to acknowledge the cooperation of computer producer Robotron Dresden), was a 4-formant synthesizer terminal which was controlled by a mainframe computer. It was produced for use in several phonetic research laboratories. With the progress in microelectronics, formant synthesizer systems became smaller in size until a synthesizer chip was developed in cooperation with the FhG Institute IMS in Dresden [1]. As a result, a series of application studies, especially in the rehabilitation area, have been performed.

The aim of these studies was to improve the quality of the synthesized speech. This requirement could be met by the availability of more computing power and storage capacity which has taken place since the beginning of the PC era. As a result, the process of speech synthesis changed from formant synthesis to the concatenation of small segments of natural speech in time domain. The system at TU Dresden works according to this concept. It is called DreSS.

Structure of DreSS

DreSS is a text-to-speech (TTS) system. This means that the synthesized speech is generated from conventional written (ASCII) text. To do this, the TTS system operates as follows:
Preprocessing: The TTS system has a component which converts the sequence of letters into a sequence of phonetic symbols to be synthesized. This so called grapheme-phoneme conversion is performed by rules and consults a dictionary in order to deal with phonologic and phonetic exceptions. The preprocessing subsystem also has to resolve special parts of the input string, like abbreviations, numbers and dates, etc. Such abilities are very important in interpreting texts from e-mails. Recently, we developed a module for DreSS which meets the special needs of e-mail reading.

- **Prosody generation**: This module utilizes the linguistic information coming from the preprocessing module as well as some rules and data bases, which give the synthesized phrase some prosody. This is important for the naturalness of the synthetic speech and for the acceptance of this system in everyday applications. Prosodic processing (duration and intonation control) is performed by several modules, which can be user-specified. The other modules, which will be discussed in more detail in the following paragraph, add segmental durations and pitch parameters to the stream of phonemic information.

- **Unit selection**: The unit selection transforms the stream of phonemes into a sequence of speech units and then adds prosodic information. For the German baseline system of DreSS, diphones had been selected as speech units. As will be shown later (Table 2), other unit systems have been used for DreSS, too. As a rule of thumb, the larger the units, the better the naturalness of the synthesized speech. If an application offers enough memory, longer units may be selected from large corpora. Unit selection for DreSS is flexible enough to support corpus-based synthesis as well.

- **Acoustic synthesis**: Finally, the acoustics module builds the synthetic speech signal from a sequence of speech units and then reproduces the prosodic contours.

Prosody modules

In the past, different modules for calculating the prosodic parameters have been developed for DreSS. The following models were used for the intonation (pitch) component:

- **Linear Approach**: The linear approach to intonation control is a very simple but robust production model. It superposes the contributions of accentuation-based and sentence/phrase-based linear components to the resulting intonation contour.

- **Data Driven (Neural) Approach**: To generate flexible speaking styles and to quickly adapt the DreSS system to the requirements of different voices or languages – a data driven approach is used. This approach includes an artificial neural network and enables the direct estimation of a pitch contour from a sequence of linguistic input vectors [2]. The feature coding here is syllable-oriented.

- **Adaptation of the Fujisaki model**: The third method utilized in DreSS for generating intonation applies the well-known Fujisaki model (e.g., [3]). This model represents the combination of a phrase control mechanism (controlled by phrase commands) and an accent control mechanism (controlled by accent commands) moderated by a mathematical algorithm. Since this algorithm considers information
from the articulatory apparatus, the model is well suited for different languages. Of course, the parameters of the model have to be determined for every language. For German, this was done in [4] and [5]. In this paper, the method is referred to as MFGI (Mixdorff/Fujisaki German Intonation).

Finally, the control of segmental durations is an essential for the quality of the synthetic speech. Again, the user of DreSS may select from different components:

- **Adaptation of Klatt’s rules**: For standard use of the TTS system, a rule-based duration control, based on Klatt [6] is utilized, because it performs well and generates a desirable voice quality. Based on the composition of the phonemic word string and the obtained accent level, the duration control module generates individual phoneme durations using a rule system while modifying inherent and minimal durations from a given phoneme database.

- **Multi-level approach**: This approach [7] supports global and local rhythm variation and follows a top-down strategy including the phrase, syllabic and phonemic level. As such, the alternative use of rule-based, statistical or data-driven methods is permissable at these levels. Generated durations do not differ significantly among the rule model and the ANN approach on the phrase and the syllabic levels, as long as the database for the training and/or the rule adjustment are identical. At the phonemic level, the statistical model utilizing Campbell’s elasticity approach (e.g. in [8]) revealed the best results.

**Evaluation of the prosodic quality**

Good prosody control is essential for the naturalness of synthesized speech. However, it is difficult to determine which prosody control is a good one. For this reason, we performed an extensive subjective comparison of our three intonation modules described above. The duration control module used Klatt's system. These results are presented in detail in [9]. Table 1 describes the results of a final summarizing test that compared different versions of DreSS with natural speech as well as some foreign systems (called aliens). Table 1 shows that the acceptance rate of a state-of-the-art TTS systems is nearly the half that of natural speech. Among our own prosody modules, MFGI performed somewhat better than the other approaches. The experiment which combined MFGI with natural durations demonstrates that improvements in duration control might contribute to much better acceptance rates.

<table>
<thead>
<tr>
<th>System</th>
<th>Mean</th>
<th>Standard dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural speech</td>
<td>10.00</td>
<td>0</td>
</tr>
<tr>
<td>DreSS with MFGI and natural durations</td>
<td>6.57</td>
<td>2.02</td>
</tr>
<tr>
<td>DreSS with MFGI</td>
<td>5.35</td>
<td>2.60</td>
</tr>
<tr>
<td>Alien C</td>
<td>4.83</td>
<td>2.55</td>
</tr>
<tr>
<td>DreSS with Neural Network</td>
<td>4.70</td>
<td>2.58</td>
</tr>
<tr>
<td>Alien B</td>
<td>4.43</td>
<td>2.69</td>
</tr>
<tr>
<td>Alien A</td>
<td>2.65</td>
<td>2.74</td>
</tr>
</tbody>
</table>

Table 1: System ranking. Measuring the acceptance of a TTS system by the listener for a connected text from three sentences (scale 0 ... 10).
Multilinguality

Finally, a TTS system should be able

- to change the voices if the task requires it (e. g., from male to female),
- to change the language in general (multilingual synthesis) [10],
- to change the language if the text in a first language contains segments from another one (polyglot synthesis).

For all of these purposes, the system must be able to switch from one database to another. To do so, there must be a strict separation of code and data in the system architecture and the required databases in different voices and/or different languages must be available. The DreSS databases are continuously growing. Those which are adequately developed have been tested and the results are shown in Table 2.

<table>
<thead>
<tr>
<th>Language</th>
<th>Units</th>
<th>Base</th>
<th>Speakers</th>
<th>Inventory size</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>1200 diphones</td>
<td>approx. 800 single words</td>
<td>1 male 2 female</td>
<td>approx. 7 Mbyte</td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>1700 diphones and triphones</td>
<td>1700 sentences</td>
<td>1 female</td>
<td>13 Mbyte</td>
<td>using the framework of Verbmobil</td>
</tr>
<tr>
<td>Russian</td>
<td>572 allophones</td>
<td>570 artificial words</td>
<td>1 male</td>
<td>0.5 Mbyte</td>
<td>cooperation with AdW Minsk [11]</td>
</tr>
<tr>
<td>Chinese</td>
<td>2910 syllables</td>
<td>2910 sentences</td>
<td>1 male</td>
<td>23 Mbyte</td>
<td>[12 - 14]</td>
</tr>
</tbody>
</table>

Table 2: Inventories for multilingual speech synthesis accomplished with DreSS.

In the above table, base refers to the corpus which was used to produce the units. For the purpose of comparison, the inventory size was normalized to a common sampling frequency of 16 kHz.

Platforms and hardware support

Since newer computers run faster and more efficiently, DreSS is now running without additional support on PCs under Windows and on workstations under different derivatives of Unix. Customer specific versions have even been produced for signal processor boards. Of course, powerful computers are required for high quality synthesis involving large corpora. For DreSS, however, we have always kept in mind that the majority of potential users will have limited resources. For such non-PC applications (e. g., in traffic information systems or in aids for the handicapped), we have developed an integrated circuit (IC), VOICE 3, in cooperation with the FhG Institute IMS in Dresden. A version of DreSS using this IC was developed in a package according to the PCM/CIA standard. This so-called Voice Card (Figure 1) was produced by FhG and was demonstrated at a number of fairs and exhibitions to show the potential of this type of non-PC synthesis. Recently, FhG and our group developed an improved version of the synthesis using this IC [15].
Final remark

Some features of the German baseline system of DreSS may be tested via our internet tutorial [16, 17] which can be accessed by the address:

http://www.ias.et-tu-dresden.de/kom/lehre

References


Presentation of Kay Elemetrics Awardees

Kay Elemetrics Award 1997:
Prof. Dr. Eric Keller, Lausanne, Switzerland

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Born in Basel, Switzerland, and educated in the U.S., the Netherlands, Canada, and Germany, Eric Keller obtained a Ph.D. in Linguistics from the University of Toronto in 1975. From 1978 to 1990, he taught psycholinguistics and computer science at the University of Quebec at Montreal. Upon his election to the Chair of the Section for Computer Science and Mathematical Methods in 1991, he founded the LAIP (Laboratoire d’analyse informatique de la parole), Faculté des Lettres, at the University of Lausanne. His main interests concern the acoustic, articulatory and neurogenic structure of speech and its computational modelling. This global view of speech and its modelling is understood within the larger framework of muscular and neural functioning, speech motor control, neurolinguistic processing, as well as human consciousness. Eric Keller is the author of some eighty publications (including four monographs) in the areas of speech, speech synthesis and computer science. The initial part of his career was marked by his co-development of an ultrasound measurement device for tongue action in speech, and by his explorations of the fine details of lingual speech motor control in normal and pathological speakers. He subsequently became known in the speech community as the author of a speech analysis program for the MacIntosh called "Signalyze". This user-friendly program permitted many to discover the details of the acoustic and articulatory structure of speech by simple, personal exploration. Over the last decade, he has directed the research and development of LAIP's French-language speech synthesis system called LAIPTTS. Currently, this system is being expanded to handle German, and probably, oral Latin. Since 1997, he has also chaired a European COST project involving 17 countries and some 30 laboratories in the area of improvements in speech synthesis (COST 258).

Prof. Keller is the recipient of the Kay Elemetrics Award 1997 for his contributions to the theoretical foundations of the phonetic sciences and his outstanding fundamental and applied research in our field.
Asher Laufer was born in Haifa, Israel. He obtained his B.A. from the Hebrew University in Jerusalem, in Hebrew Language and Talmud and his M.A. in Hebrew Language from the same University. Subsequent studies took him to London where he obtained his Ph.D. from the University of London with a dissertation on "Synthesis by Rule of a Hebrew Idiolect". Professor Laufer started his academic career as a Research Assistant in the Phonetics Laboratory and the Language Tradition Project at Hebrew University. In 1972 he took on the position of director of the Phonetics Laboratory. Along with these duties, he systematically participated in the teaching and research programs of the Hebrew Language Department at Hebrew University and the Faculty of Medicine, School for Communications Disorders, Speech and Hearing, at Tel-Aviv University. In 1975 and 1976/77 he was director of the Language Tradition Project and the Hebrew Language Department, respectively. For over 10 years he was in charge of the Unit for Teaching Hebrew to Foreign Students, Overseas School of the Hebrew University. At the end of the seventies, in the mid-eighties and again ten years later in the mid-nineties, extended visiting programs took him to visit phonetics laboratories and institutes across the world [Los Angeles (UCLA), New-Haven (Haskins Labs), Berkeley (UC), Cambridge (M.I.T.), Copenhagen, Bergen, Victoria/Canada, Edmonton/Canada, and Sydney/Australia]. Professor Laufer’s list of publications includes 9 books or chapters of books and 26 articles. These publications as well as his numerous public lectures, reflect a wide scope of academic interests ranging from phonology to speech synthesis, articulatory and acoustic phonetics, intonation, phonetic transcription, second language teaching, phonotactics and the phonetics of Hebrew and Arabic. His program for synthesizing Hebrew speech as well as his research on the function of the epiglottis in speech and the emphatic sounds in Hebrew and Arabic, were received with particular interest by the phonetics community.

Professor Laufer is the recipient of the Kay Elemetrics Award 1999 in recognition of his valuable contributions to articulatory phonetics and the phonetics of Hebrew.
Obituary on André Martinet (1908-1999)

André Martinet was born on April 12th, 1908 in St.-Albans-des-Villards (Savoy) where his parents were teachers. After his successful „agrégation“ (competitive examination for posts on the teaching staff of colleges and universities) in English philology at the Sorbonne, Paris, his academic interests turned to the Germanic languages for which he spent time in Berlin and Copenhagen. He then chose general linguistics as his special field of research. In 1937, he obtained a doctor’s degree in the humanities from the Sorbonne with his main dissertation on „La géminisation consonantique d’origine expressive dans les langues germaniques“ (Consonant gemination of expressive origin in the Germanic languages) and an additional dissertation on „La phonologie du mot en danois“ (Word phonology in Danish). One year later, he was appointed Director of Studies in Phonology at the Ecole pratique des Hautes Etudes, which is associated with the Sorbonne.

During World War II, André Martinet was interned in an officer’s prisoner camp, where he collected data on the pronunciation of French officers. He published his findings in 1945 in his book „La prononciation du français contemporain“ (Pronunciation of contemporary French). In 1946, he became a member of the International Council of IPA and devoted much of his time to the development of this
association. Three lectures at the University of London resulted in his book, „Phonology as Functional Phonetics,“ which appeared in 1949. From 1947 until 1955, he was a professor of General and Indogermanic Linguistics and Head of the Department of Linguistics at Columbia University, New York. During this period, he developed his theory on the economy of language and linguistic dynamics which resulted in his book on „Économie des changements phonétiques: Traité de phonologie diachronique“ (Economy of phonetic change: A treatise on diachronic phonology). This book was honored in 50 reviews and translated into five languages.

After his return to France in 1955, André Martinet was given the chair in General Linguistics at the Sorbonne along with the position of Director of Studies in Structural Linguistics at the École pratique des Hautes Études. In 1956, he published „La description phonologique, avec application au parler francoprovençal d’Hauteville (Savoie)“ (Phonological description applied to the Francoprovençal of Hauteville [Savoy]) which served as a model for the dissertations which his students wrote on different languages. His lectures in Paris served as the foundation of his „Eléments de linguistique générale“ (Elements of General Linguistics), published in 1960. Many of the subsequent editions of this book were translated into 17 languages. The complete work of André Martinet includes a dozen additional books, most of them translated into different languages, the „Dictionnaire de la prononciation française dans son usage réel“ (Dictionary of the pronunciation of French in its real usage) which he published together with Henriette Walter in 1973, as well as more than 400 papers. In these publications, he extended his linguistic theory, for example the principle of pertinence, to the fields of morphology and syntax. André Martinet’s work clearly demonstrates that general linguistics covers all domains which refer to language in general (langage) and to the different languages (langues).

André Martinet died on July 16th, 1999, in Paris. He devoted his life to linguistics to the very end. His last papers will appear posthumously. As one of the pioneers of modern linguistics, he has left deep theoretical and practical influences on the field. His publications and the many lectures he gave have been appreciated throughout the world. He must be regarded one of the most important linguists of the 20th century.

Fernande Krier, Rennes

**ISPhS' New Website**

ISPhS' new website can be accessed through its new address:

www.isphs.org

Many new features have been added, e.g. a forum, an on-line membership application form, new links of interest etc.
Phonetic Institutes Present Themselves

A new section of *The Phonetician* will be devoted to the presentation of phonetics institutes from all over the world. The purpose of this new section is to give our readers an idea about what other phonetics institutes look like, what sort of equipment they have, what their main research areas are, and last, but not least, who their staff are. Ideally, this will help to increase the scientific exchange between phoneticians and their institutes.

If you would like to present your phonetics institute in *The Phonetician*, send a short description of it to the editors. This time, we shall publish a description of the Department of Phonetics at Nijmegen, The Netherlands.

Phonetics at the University of Nijmegen

The Institute of Phonetics at the University of Nijmegen was founded in 1972 by the establishment of a chair of phonetics in the faculty of arts. In 1973, 1974, and 1976 three research associates were appointed. This kernel group formed the basis for the development of activities in research and education. In 1988 the faculty of arts decided to bring together the former Institute of Phonetics and the Sections of Computational Linguistics and Corpus Linguistics into one department: the Department of Language and Speech. Until the beginning of 1990, the main research topics focused on experimental phonetics: correlates of voice quality, automatic transcription of Dutch intonation, form and function of pitch accents in Dutch, inverse filtering of glottal waveshapes, transcription of normal and deviant speech, speaker recognition.

Since 1988, research in many of these areas has continued and others have been developed in three main areas. Current research activities include:

*Phonetics Section*: automatic text-to-speech synthesis, speech generation, automatic speech and speaker recognition, segmental variation in running speech, durational modelling, form and function of intonation, agreement and validity of transcription of normal and pathological speech.

*Computational Linguistics Section*: automatic syntactic and semantic analysis of Dutch sentences. Based on principles from general linguistic theory, sentences are parsed in two stages: first the Amazon parser assigns a constituent structure based on structuralist grammar, and second, the Casus transformational grammar enriches the Amazon analysis with deep syntax information.

*Corpus Linguistics Section*: research is aimed towards the development and implementation of tools for corpus-based and experimental research. Special emphasis is placed upon the development of corpus-based methods for syntactic, semantic and discourse research.
All research activities of the Department of Language and Speech are housed in two research programs:

1. Speech and Language Technology
2. Experimental Linguistics.

These programs are parts of the Centre for Language Studies (CLS), an inter-university research institute in which participate the Faculties of Arts of Nijmegen University, the University of Brabant and the Max Planck Institute for Psycholinguistics in Nijmegen.

The Proceedings of the Institute of Phonetics (known as the Proceedings of the Department of Language and Speech) were published until 1996.

The Department of Language and Speech offers two full-time MA programs:

1. **Language, Speech and Informatics** is a four year undergraduate and graduate program. Students are trained in computer science for use in the field of language and speech technology, which includes academic and civil applications. In general the program aims at training highly-skilled professionals who are qualified for employment in the office automation and information industry, by providing a useful combination of courses in the field of computer science, linguistics and phonetics.

2. **Speech and Language Pathology** is a three-year graduate program (in 2000 it will be a four year program) and is organizationally situated in the department of Language and Speech. A number of faculties participate in this interdisciplinary program: arts, social sciences and medicine. The curriculum focuses on skills necessary to carry out both fundamental and applied research in the field of pathological and normal language and speech behaviour.

**Staff:**
Prof. Dr. W. H. Vieregge, Head of the Department
Prof. Dr. L. Boves
Dr. P.-A. Coppen
Dr. Ir. B. Cranen
Dr. J. van Halteren
Drs. V. Kamphuis
Drs. J. Kerkhoff
Drs. N. Oostdijk
Dr. A. Rietveld
N. van Rossum

Research staff on temporary basis: 20

**Equipment:**

**Research:** Three Unix-servers (8 cpu/640 MB RAM, 2 cpu/512 MB RAM, 1 cpu/128 MB RAM, 13 Unix workstations and about 20 PC’s)

**Teaching:** One Unix-server (1 cpu/256 MB RAM) and 15 Unix workstations. EGG-measuring equipment, Kay nasometer.

Studio facilities.

**Address:** Department of Language and Speech, Erasmusplein 1, 6525 HT Nijmegen. Telephone: ++31.24.36.12.900; Telefax: ++31.24.36.12.907

W.H. Vieregge
Meet Your Regional Secretaries

In this section we will present our ISPhS regional secretaries who are the backbone of our organization. Regional Secretaries are the link between ISPhS members and the Board of Directors. In particular, they are responsible for the organization of local events of ISPhS, the organization of various additional activities in the field of phonetics and the distribution of *The Phonetician*. The Regional Secretaries give annual reports about their section to the Board of Directors.

**Today:**

Professor Dr. **Marie Dohalská-Zichová**, Regional Secretary of the Czech Section

Marie Dohalská was appointed as Regional Secretary of the Czech Section in 1995. She is in charge for approx. 35 members who have their academic home in the Czech and Slovak Republics. Marie Dohalská was born in 1937; she studied French and Czech at Charles University in Prague, where she received her PhD in 1967. After her post doctorate (habilitation) in 1982, she became a professor at the Institute of Phonetics at her home university (1995). In 1998, Marie Dohalská was appointed Chevalier des Palmes Académiques by the French Government. In 1999, she was elected Vice President of ISPhS for the 1999-2003 term.

Marie Dohalská has specialized in the phonetics of Czech and French, verbal communication, speech analysis, sociophonetics, speech perception and the TTS synthesis of Czech.

She is currently involved in research activities at her Institute of Phonetics on the naturalness of synthetic speech (European COST 258 project) and several other projects on the analysis of spontaneous Czech (grant projects). A large database of read and spontaneous Czech is currently being created at her institute. Her institute also deals with forensic phonetics and comparative phonetics (esp. on the suprasegmental level).

Marie Dohalská's teaching activities cover specialized seminars on French and Czech phonetics as well as lectures and seminars in speech communication, speaker’s education/speech techniques, and verbal communication or sociophonetics.
You can contact the Regional Secretary of the Czech section via **Tomáš Duběda, M.A.**, who assists Prof. Dohalská in her work and who is in charge of ISPhS matters at the Institute of Phonetics, Charles University, Prague.

**Selected Bibliography:**


**Addresses:**

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CZECH REPUBLIC  
e-mail: dohalska@ff.cuni.cz

Tomáš Duběda, M.A.  
Institute of Phonetics  
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Charles University Prague  
Nám. J. Palacha 2  
111638 Prague/Praha 1  
CZECH REPUBLIC  
e-mail: dubeda@ff.cuni.cz

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**XIVth ICPhS in San Francisco**

The XIVth International Congress of the Phonetic Sciences was held on August 1-7, 1999 in San Francisco. Three years of planning by the local committee at the University of California at Berkeley resulted in a conference attended by over 800 persons from countries throughout the world. In all, people from 47 different countries from six continents were present!

642 papers (including 312 poster papers) were presented at scheduled sessions, including two plenary sessions that opened and closed the Congress. The plenary
speakers were: Francis Nolan, Louis Pols, Hideki Kasuya (with co-authors Kikuo Maekawa and Shigeru Kiritani), Winifred Strange, and Ian Maddieson. Session papers covered numerous phonetic areas, including sociophonetics, speech technology, clinical phonetics, forensic phonetics, language acquisition, language teaching, sound change, prosody, intonation, speech production research and much more!

Members attending ICPhS 1999 received a copy of "A Guide to the History of the Phonetic Sciences in the United States", published at UC-Berkeley. That volume, edited by John Ohala, Arthur Bronstein, Grazia Busa, Julie Lewis, and William Weigel, is a 134 page volume of essays covering the following areas:

(a) - 10 thematic historical essays on: acoustic phonetics (by I. Mattingly); American dialects (by L. Pederson and W. Kretzschmar, Jr.); American dictionaries and on spelling reform (by Arthur Bronstein), clinical phonetics (by R. Daniloff); field phonetics (by L. Hinton); speech perception research (by M. Studdert-Kennedy and D. Whalen); physiological phonetics (by F. Minifie); speech technology (by B. Gold); and the AAPS (by H. Hollien).

(b) - The history of phonetic research at eleven laboratories: Bell Telephone Labs (by C. Shih and J. Olive); University of California at Berkeley (by M. Plauche and J. Ohala); Univ. of Florida (by H. Hollien); Gallaudet University (by J. M. Pickett); Haskins Labs (by C. Fowler and K.S. Harris); Univ. of Iowa (by K. Moll); Univ. of Michigan (by P. Beddor and J. Catford); MIT (by K. Stevens); Ohio State Univ. (by I.Lehiste, M. Beckman, R. Fox, and K. Johnson); the Speech Communication Research Laboratory at Santa Barbara (by D. Broad); and UCLA (by P. Ladefoged and others). A special essay on "Preliminaries to Speech Analaysis" (1952) by R. Jakobson, G. Fant, and M. Halle was authored by John Ohala.

(c) - The 3rd section of this volume contains 91 biographical essays on major contributors to the history of the phonetic sciences from Thomas Jefferson and Benjamin Franklin to the present.

Nine technical and book exhibitions were available throughout the Congress. They were presented by the Academic Press of Harcourt, Brace and Co., Blackwell Publishers, Cambridge Univ. Press, Carstens Medizinelektronik of Germany, Kay Elemetrics Corp., Kingston Press Services of the U.K., S. Karger AG of Switzerland, Scicon of Los Angeles, and Singular Publishing.

By action of the Congress, the IPA will be the principal sponsor of future meetings of the ICPhS. The next meeting of the ICPhS will be held in Barcelona, August 2003.

The planning committee of the XIVth ICPhS Congress expresses its appreciation to all who conducted demonstrations, read papers, presented essays to the Handbook, attended, listened, and learned.

Proceedings are available on CD-ROM or as hardcopy.

John Ohala and Arthur Bronstein,
Dept. of Linguistics, Dwinelle Hall, University of California, Berkeley
The International Workshop for Speech and Computer (SPECOM'99) was held in Moscow (Russia) on 4-7 October, 1999. Moscow State Linguistic University (MSLU) in cooperation with the St. Peters burg Institute for Informatics and Automation of the Russian Academy of Sciences (SPIIRAS) organized it. The general Sponsor of SPECOM'99 was INTAS and the Co-Sponsor was AUDITECH-RD (Russia).

SPECOM'99 focused on several important topics in human-computer interaction by voice, as well as other applied areas of speech dialogue systems. Specific topics included:

- Speech dialogue models
- Integration of diverse knowledge in the speech comprehension process
- Multi-lingual and multi-modal systems
- Speech recognition for dialogue systems
- Conceptual approaches to dialogue educational systems and speech units
- Applied systems and new technologies involving transmission methods
- Text-to-speech synthesis
- Speech signal databases
- Phonetic aspects of dialogues with computers
- Systems of speaker identification and verification

SPECOM'99 focused on issues of basic research. This year, 82 people from many countries, including Germany, France, UK, Greece, The Netherlands, Japan, Korea, Slovakia, Romania, Ukraine, Mexico and Russia participated in the workshop. Keynote lectures included (the authors are in parentheses):

- Speech technologies and speech science (V. Galunov, V. Taubkin)
- Spoken dialogue systems for call centre automation (G. Kokkinakis)
- Statistical pattern recognition techniques for multimodal human computer interaction and multimedia information processing (G. Rigoll, S. Müller)
- The beginning of machine translation in the USSR (retrospective review) (Yu. N. Marchuk)
- The knowledge based speech–input expert system for Russian (R. K. Potapova)
- Reservations of using language and extralinguistic knowledge for speech dialogue systems improvement (Y. Kosarev, J. Savage).

The International Workshop SPECOM’99 in Moscow was a very useful scientific event with informative talks and discussions based on the theoretical research and practical experience of the participants. A lot of interesting problems were presented and discussed concerning the interactions between speech and computer. SPECOM will continue as a mechanism of support for new ideas, conceptions and technologies in the area of speech and computers.

Rodmonga K. Potapova, Moscow State Linguistics University
The European Conference on Speech Communication and Technology - Eurospeech'99, was held in Budapest, Hungary, on September 5-9, 1999. This conference was the sixth in a biennial series launched in 1989 and sponsored by ESCA, the European Speech Communication Association. After Paris, Genoa, Berlin, Madrid, and Rhodes, the conference was hosted by the Technical University of Budapest. A total of 1020 participants registered; 280 of them were students. Participants came from 52 countries. The largest delegation came from the USA with 203 participants, followed by Japan (114), Germany (108), France and the UK (71 each). This made Eurospeech'99 the second biggest Eurospeech conference ever held (only Eurospeech'97 in Rhodes had a slightly larger number of participants). Nearly 1100 abstracts were submitted; 723 papers were finally presented. Three oral sessions and three poster sessions were run in parallel. Five plenary sessions including the opening and closing sessions completed the program. The printed proceedings comprise six volumes with almost 3000 pages. The conference proceedings are also available on CD-ROM (see http://www.isca-speech.org for further information).

The first plenary paper in the opening session is always given by the recipient of the ESCA Medal for Scientific Achievement. The 1999 medalist, Fred Jelinek (Baltimore, USA), presented a paper entitled "Putting language into language modeling" which dealt with the structured language model (SLM), a new approach of language modeling in large-vocabulary speech recognition systems.

Although the majority of the papers were presented in the classical domains of speech recognition and speech synthesis, there were sessions about topics such as articulatory measurements and modelling, first and second language learning, speech disorders and speech for the disabled, audio-visual speech, speech corpora, speech and noise, speech and the internet, topic detection and tracking, and education in speech communication. Five sessions dealt with various aspects of prosody in speech synthesis, dialogue, and speech recognition. A special session on education, the "Education Arena", was organized like an exhibition with presentations of educational speech processing software covering all aspects of speech communication, such as basic speech signal analysis, simulation of articulatory movements, or developing small applications in speech recognition.

The scope of the conference was not at all limited to speech technology or applied research. A large number of papers dealt with basic research in speech communication and phonetics. Two of the five plenary papers were presented by phoneticians. Mária Gósy (Budapest, Hungary) gave a lecture about "The controversial connection between speech production and perception: Theories versus facts". Björn Lindblom (Stockholm, Sweden) presented "How speech works: Questions and preliminary answers". The main topic of this talk was how to cope with the massive variability in the speech signal, and Lindblom pleaded for measures that would try to make sense of this variability instead of trying to make it disappear.
Speech recognition however was the primary topic, with the largest number of presented papers at the conference. And so it was quite natural that the last plenary paper, "Perspectives of speech technologies research highlighted at Eurospeech'99" by Hermann Ney (Aachen, Germany) dealt with this topic. Many improvements have been reported in acoustic modelling, language modelling, and search. These findings may be small but they add up. The probabilistic framework has been successful and is being used in other fields. Acoustic modelling is still a bottleneck and better features are needed. At the first Eurospeech 10 years ago, a speech recognition system could deal with a 1000-word vocabulary and read speech; today's systems approach 64000 words or more with a natural-language grammar and spontaneous speech.

Being held in a university building was an advantage for the conference. The lecture halls were modern and well equipped. Acoustic signals controlled from a central place enforced a synchronized timing between the oral sessions so that changing sessions between paper presentations was easy. The poster areas were easily accessible and had sufficient space so that each poster could be displayed for at least half a day.

Eurospeech'99 was also a landmark for ESCA. The General Assembly held during the conference followed a proposal by the ESCA Board by deciding that the Association should transform itself into an international organization with its board open to members from all countries, not only from Europe. As the most visible sign for this new era to come, ESCA changed its name into ISCA (the International Speech Communication Association).

In summary, Eurospeech'99 was a well-organized event, which provided a lot of new information and inspiration. It was an excellent opportunity to see old friends and make new ones. It also reinforced the significant progress in all fields of speech communication that has been made during the past two years. I enjoyed it very much and am already looking forward to the next Eurospeech to be held in Aalborg (Denmark) in 2001.

Wolfgang Hess
Institute of Communication Research and Phonetics
University of Bonn, Germany

Annual Meeting of the IAFP in York

IAFP 1999: Conference Report

The International Association for Forensic Phonetics (IAFP) this year helds its annual conference at the University College of Ripon and York St John in York, UK. The first conference on Forensic Applications of Phonetics was held at this same venue in 1989 and IAFP was officially founded some two years later after the third annual conference in 1991. Since then the conferences have toured the globe, but it was felt particularly fitting that the event should return to York for this anniversary.
IAFP now has around sixty members representing a wide range of countries. Twelve countries - Australia, Austria, Finland, France, Germany, Italy, Japan, Netherlands, Poland, Russia, Sweden and UK were represented at this year's event.

After opening addresses from the Chairman (Peter French) and the President (Hermann Künzel), in which outlines of IAFP's history and development were given, Malcolm Coulthard, Founding Chairman of IAFP's sister organisation, the International Association of Forensic Linguistics, delivered a paper presenting the latest advances in computer programmes for the detection of plagiarism and disputed authorship. This focused upon an approach developed at the University of Birmingham involving automated comparative analysis of lexico-syntax across documents. The programme was seen to have applications in both the academic context (identification of plagiarised essays by university students) and the forensic field (e.g., determination of common authorship of threatening letters).

Subsequent contributions were organised around three main themes: (i) The Evaluation of Evidence by Lay-Witnesses (non-phoneticians); (ii) Methodological Issues in Forensic Speaker Identification; (iii) Technological Aids for Speech Processing and Interpretation.

**Evaluation of Lay-Witness Evidence**

Angelika Braun, Jens-Peter Köster and Hermann Künzel (Bundeskriminalamamt, Speaker Identification Department, Wiesbaden and University of Trier) reported on research they had conducted on the comparative accuracy of lay-listeners and automated expert systems to determine whether tape recorded samples of speech emanated from a common source.

Gea de Jong (City University, London) presented the results of experiments in which she had attempted to establish whether there were any correlations between the accuracy of earwitness identifications of speakers and various aspects of the witness's musical abilities.

Peter French (J. P. French Associates, UK) gave a report on a recent case which had given rise to a change in UK law. This concerned a Court of Criminal Appeal ruling which was being generally taken to indicate that phoneticians as experts had only a very limited role to play in giving evidence to the courts on whether voice line-ups, the auditory equivalent of visual identification parades, were fairly constituted.

Allen Hirson (City University), David Howard (University of York) and Peter French described experiments which attempted to assess the degree to which priming could assist in improving subjects' abilities to interpret what was said in recordings masked by noise.

**Methodological Issues in Forensic Speaker Identification**

The papers organised around this theme provided the bulk of contributions to IAFP 1999. The papers spanned a wide range of matters.

Elizabeth McClelland (Edinburgh) spoke on the nature of the forensic speaker identification task and the ways in which the strategies and questioning techniques adopted by cross-examining barristers could pose difficulties for experts in giving a full and proper representation of their findings and conclusions.
The paper by A. Federico and Andrea Paoloni (Fondazione Ugo Bordoni, Rome) raised both epistemological and methodological issues in the use of Decision Theory in moving from findings in the form of acoustic correlations to conclusions about common - or different - speaker identity.

The contribution of Andrew Butcher and Miles Moody (University of Adelaide) centred around a case where they had been required to determine which from a closed set of speakers (only two) had been recorded in the perpetration of a crime. A range of auditory phonetic and acoustic methods (f0 estimation; formant averaging; LTAS) had been deployed in giving rise to their eventual conclusion.

Franck Marescal (French Gendarmerie Laboratory) provided delegates with an overview of the phonetic and acoustic parameters used by his laboratory in conducting forensic speaker identification cases. The outcomes of the overall method were, after careful evaluation, presented within the framework of Bayesian probabilities. It was noted by the presenters of the Braun, Köster and Künzel paper (see above) that this laboratory had taken part in their experiment and provided accurate results.

Voice disguise is a persistent and difficult problem for forensic speaker identification experts. The patterns of disguise have to date been only poorly documented. The paper by Herbert Masthoff and Nicole Trouet (University of Trier) provided a significant beginning at outlining the trends in voice disguise found in criminal recordings and in addressing the problems they pose.

Different channel characteristics also present difficulties in the forensic comparison task. The presentation of Andrea Paoloni and Susanna Ragazzini (Fondazione Ugo Bordoni, Rome) addressed the problems encountered here particularly if one adopts an approach to identification based upon automatic formant estimation of vowels. The effects of three transmission media (orthophonic, telephonic and GSM - the euro-standard grande system mobile) were addressed in relation to this approach.

The paper by Sylvia Moosmüller (Academy of Sciences, Austria) arose from the Austrian context where expert evidence of speaker identification had often to be given on samples in Albanian (Macedonia). A good understanding of the processes of simplification in fluent colloquial speech of the variety in question is a pre-requisite to interpreting these recordings. Her contribution focused upon the phonological processes of reduction and assimilation.

In carrying out comparisons of recordings on acoustic-phonetic dimensions, it is now routine to undertake fundamental frequency estimations across the recordings of the questioned and the suspect voices. Fundamental frequency has been shown to vary in response to a range of factors (background noise, alcohol consumption, transmission channel, and so on). Jens-Peter Köster (University of Trier) introduced a new factor into the equation by presenting experimental data on the effects of physical exertion (and its simulation) on fundamental frequency.

A paper was given by Czesław Basztura, Tomasz Rutkowski and Andrzej Drygajlo (Wroclaw University of Technology, Poland) concerning the effects of compression and signal coding of speech. The ways in which these processes may affect individual voice features were described.
Finally, in this theme John Baldwin (University College London) described the application of an auditory-phonetic approach to a case where two speakers - closely aligned in voice and speech patterns - were suspects in an criminal offence. Fine-grained and systematic auditory analysis of consonant and vowel pronunciations enabled him to eliminate one suspect and identify the other.

**Technological Aids: Speech Processing and Interpretation**

Rodmonga K. Potapova (Linguistic University, Moscow) and Vsevolod V. Potapov (Technical University, Moscow) have developed a database of information relevant to forensic phonetics and this has been incorporated into an electronic (computer-based) encyclopaedia for use by Russian experts in the field. The theoretical background to this work and a practical demonstration were given.

Greg Griffiths (Griffiths Communications, UK) gave an introduction on the basic principles and procedures of enhancing the intelligibility of noisy and difficult forensic recordings via the sound filtering technology produced by the Digital Audio Corporation.

Throughout the conference and, more intensively, following the presentation by Greg Griffiths, delegates spent time in gaining 'hands on' experience of sound processing equipment. Systems for demonstration were provided by David Betts of Cedar (Cambridge, UK), as well as by Greg Griffiths.

The conference concluded with a paper of very obvious forensic relevance, but which provided a poor fit with any of the three theme headings. This was Jos Bouten's account of experiments involving comparative acoustic testing of the report signals of handguns. Cross-correlations of the signals were investigated as a basis for the identification of source weapons. The paper was enshrined within a theme heading of its own: The Parting Shot.

In addition to the scientific contributions, members of the various IAFP committees met to assess and progress developments within the area. Perhaps the most significant advances took place within the Professional Conduct Committee and the Accreditation Committee.

In line with other organisations which oversee forensic disciplines, the IAFP Professional Conduct Committee introduced a clause into its Code of Practice preventing members from undertaking cases on a contingency fees basis ('no win, no fee'). It was agreed unanimously that, if an expert entered into such an arrangement with an instructing party, it could be construed as acting against the measure of objectivity and detachment the courts expect of him/her.

The Accreditation Committee finalised its procedures for the accreditation of forensic phoneticians. These were given support by the membership and are now in place. The first candidates for accreditation will present themselves to the Committee at the next Annual Conference in Rome in July 2000.

Peter French
Minutes of the 1999 General Meeting

The Society’s General Meeting was held in San Francisco, August 5, 1999, 12:30-13:45h.

The Date of this GM was chosen in accordance with the Bylaws, and appropriate invitations to the officers and members had been sent out. It was preceded by a joint meeting of the Board of Directors and the Council of Representatives. Routine business and the agenda for the GM were dealt with at the preassembly meeting.

Agenda

1. Opening Remarks by the President

The interim President of ISPhS, Prof. Jens-Peter Köster, welcomed those present. He reminded the Membership that ISPhS’ main concern was to foster and assist research efforts by phoneticians, particularly in Third World countries. He acknowledged the reports of a possible closer cooperation between the ICPhS Permanent Council and IPA. Up until now, both IPA and ISPhS had cooperated with the Permanent Council in mediating business affecting the Phonetic Sciences. Prof. Köster has, therefore, personally delivered a letter to the President of the Permanent Council, Prof. Björn Lindblom, that ISPhS would like to be included in future discussions of this issue.

2. Secretary General's Report: Old Business

a. The Phonetician

Advance copies of the three current issues of *The Phonetician* (CL-77, CL-78, No. 79 – 1999/I) were distributed. Copies for the rest of the Membership will be mailed out upon return from the Conference (August 1999). This development means that *The Phonetician* is now up to date. As of 1999, two instead of three issues per year will be published. There have been a number of changes with regard to the journal. Two young scientists have taken over the editorship from Dr. Patricia Hollien. Prof. Bahr went on to express her gratitude to Dr. Hollien for the many years of hard work. The new editors, Dr. Olaf Köster and Dr. Niels Schiller, who have already produced the past three issues, briefly introduced their new concept for the journal. It is to be more scientific, i.e. more like a Bulletin than like the Newsletter which it used to be. In addition, there will be a number of new sections, including peer-reviewed scientific papers, conference reports, introductions of Regional Secretaries, and a section describing different Phonetics Institutes around the world. The new editors urged the Membership to submit papers for publication (max. 1500 words). In addition, the book reviews editor, Prof. Judith Rosenhouse from Israel, was introduced. Finally, all future issues of *The Phonetician* will be produced at Trier University because this will reduce the printing costs by approximately two thirds.
b. Membership List

The Membership List has been extensively overhauled. These changes are reflected in the Spring 1998 issue of *The Phonetician* (CL-77). Nonetheless, correction sheets will be mailed out with the latest issues of the journal so that all members can check their listing for accuracy. Any changes may be sent to the President’s office. At the present time, there are about 550 Members in good standing plus the 13 Corporate Members.

c. Web Site

An ISPhS web site has been created and will be maintained at Trier University. It contains the Bylaws as well as information on activities of the Society. A Bulletin Board will be added shortly to the Web page to assist in communication between members. Any information to go onto it should be submitted to the President’s office for approval.

d. Awards

The Secretary General solicited nominations for the Kay Elemetrics Award for 1999, as well as the Svend Smith Award for the year 2000. In addition, she informed the membership that 1-2 Fellows should be elected each year. Nomination forms will be sent out along with *The Phonetician* in order for the Membership to provide input to the Nominating Committee for these honors.

Prof. Bahr informed those present that the Honorary President of ISPhS, Prof. Sakow, had passed away. She indicated that ISPhS was represented at the funeral by Prof. Kohno. She expressed her appreciation for Prof. Sarkow's devotion to the Society. The passing of Prof. Sakow leaves an opening in the office of Honorary President. Prof. Köster proposed that Prof. Hollien be nominated as the new Honorary President. This motion was seconded by Prof. Weiss. The motion then passed unanimously. Prof. Weiss also moved that, after having served two terms, the following Vice Presidents be promoted to Honorary Vice Presidents: Eva-Maria Krech, Alain Marchal, Heinz Morioka, Rodmonga K. Potapova, Marion Shirt, and Frederik Weingartner. This motion was seconded by Prof. Bakalla and passed unanimously.

e. News from the Regions

Communication with the Regional Secretaries has greatly improved. Among the most active regions in the recent past were South America, Croatia, and the Czech Republic. Most importantly, Phonetics workshops have been organized in different regions. It was also announced that the Phonetic Society of Japan became a Corporate Member of ISPhS.

f. Elections

Since the resignation of Prof. Hollien from the office of President in 1998, Prof. Köster has served as interim President until this year. Thus, he, as well as several other officers, are due for (re)election. The following proposals were put forth by the Nominating Committee:
President: Jens-Peter Köster
Vice Presidents: Bahr, Braun, Colton, Dohalska, Horga, Kelz, Künzel, Lambacher, Laufer.
Auditor: Braun
Treasurer: Bahr. (Since Prof. Bahr has held this office for many years, this is to be regarded as an interim solution. It is desirable to keep the present bank account with the opportunity for credit card payment instead of transferring the money to another bank and possibly lose the credit card option. However, other US-based Members of ISPhS are encouraged to take on the office of Treasurer in the future.)

These nominations were approved unanimously. The Membership will vote on them by postal ballot this fall.

g. UNESCO

ISPhS has been informed by UNESCO that it will no longer be supported as an NGO. Informal contacts with UNESCO will be maintained nonetheless.

3. Treasurer’s Report

The 1998 report can be found on page 29 of the most recent issue of The Phonetician (No. 79 – 1999/I). The finances are healthy: ISPhS has about $7,000 in the Society account, plus the money for the Awards. In the past, the biggest expenditure has been the printing and mailing of The Phonetician. These costs will be considerably reduced in the future due to a change in printers. On a final note, the Treasurer announced that ISPhS initially sponsored the 1998 Conference in Bellingham with the sum of $500. This sum was repaid as the conference became self-supporting.

4. New Business

a. Web Page

Parts of The Phonetician have been put on the Web along with the Bylaws and other documents of interest. Prof. Bakalla proposed that the Membership Directory be put on the web page. This idea will be looked into.

b. IPS 98

IPS 98 was organized by Prof. Weiss at Western Washington University in Bellingham, Washington, USA as a satellite event of the ASA meeting. This conference was a big success with many contributions of high quality. The abstracts of this meeting have been published in The Phonetician (CL-78, Fall 1998). The conference proceedings will be edited by A. Braun. They will appear under the title of Advances in Phonetics as Beihft no.106 in the renowned series Zeitschrift für Dialektologie und Linguistik published by Steiner Verlag in Stuttgart.
c. Conferences

Regional Secretaries were encouraged to mount meetings and workshops on a regional level. Under certain conditions, small grants, sponsored by ISPhS, could be made available as start-up funds. No special format is required. Should the number of applications exceed the amount of money which is available for this purpose, a Conference Planning Committee will be set up to determine funding decisions.

d. Recruitment

Recruiting activities will be intensified in the near future. One way of doing this would be to send out a year's worth of *The Phonetician* to a number of phoneticians free of charge. This would create an incentive to join ISPhS. Finally, new Membership Application Forms will be mailed out together with *The Phonetician*.

e. IPA

Contacts with IPA have unfortunately come to a standstill. This might be due to the fact that IPA actually prefers intensifying its connection with the Permanent Council. ISPhS has laid down a strategy for unity in the field of phonetics in *The Phonetician* (CL-55) and considers that these proposals still are a solid basis for future discussions with IPA.

5. Closing Remarks

The President thanked those present for their co-operation and extended a special word of thanks to the General Secretary, Prof. Huntley Bahr, for her continued support throughout the past year.


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**From our Members**

In this section, any comments, questions, and announcements from our members are welcome.

Pwe Linn Lihg and his co-workers have developed new approaches to an English spelling reform based on their research in articulatory phonetics. Anyone interested in cooperating with this team is invited to contact

Pwe Linn Lihg  
c/o Li Fan  
56 Xin Gennan Road  
Ganzhou  
PR of China 341000
From the Review Editor

More Information about Reviewing Books

Reviews in *The Phonetician* are mainly dedicated to books related to phonetics and phonology in any way.

Book reviews for *The Phonetician* are usually written on the basis of books that arrive at our office from publishers. Prospective reviewers should address us if they want to review a specific book from the list of "Publications Received".

If you have a new book that is not on the list of "Publications Received" but you would like to review it, please get in touch with me before sending your review.

The title of the book should be exactly as given on the book cover. The length of the review can vary between 300 and 800 words, i.e., between half a page and one and a half pages.

The review should be factual and descriptive rather than interpretive, unless reviewers can relate to the book a theory or other information, which could be of benefit to our readers.

The text should provide as many names quoted or referred to as possible, to give the qualified reader a better idea of the orientation of the contents.

In case the reviewer is not a native speaker of English, I would appreciate it if s/he had the review edited by a native speaker of English before sending it to me. Otherwise I have to do this, which lengthens the editing process.

Book reviews are accepted for publication on the basis of both book contents and review adequacy. They are screened not only by the Review Editor, but also by the General Editors of *The Phonetician*.

Reviews should be sent to the Review Editor as soon as possible after receiving a book for reviewing. E-mail is the preferred mode of transmission, followed by fax and regular mail, in this order. The respective addresses are as follow:

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Please do not hesitate to contact me if you have any other related questions.
Thank you for your cooperation.

Judith Rosenhouse
Cummings, Anne C. & Evelyne Charvier-Berman (1997)  
* A l'aventure: An Introduction to French Language and Francophone Cultures,  
also audio tape or CD, $ 61.95.  

Reviewed by: **Henri Niedzielski**,  
University of Hawaii

The joint work of two French-American authors with over 35 years combined experience in the classroom, this book aims to prepare American students for the linguistic and cultural challenges they will face traveling around the French-speaking world. (p. vii) It uses an "innovative visual approach, presented in the form of a French 'bande dessinee' created specially for the book by a native French cartoonist." (vii) Innumerable copyright or original photographs illustrate the texts. Multi-media audiovisual aids (audio tapes, transparencies, video cassettes, PC and Mac reading shells, a testing program) are available.

Sixty lively stories are distributed over 15 chapters with four episodes each. Each episode is presented in four steps: "pour communiquer" (*communicative goals*), "pour y arriver" (*grammatical structures*), "pour s'adapter a la culture" (*cultural information*), and "pour aller plus loin" (*developing four skills*). This fourth step contains all the phonetic explanations and exercises provided in the book.

The sounds, rhythms, and other distinctive features of French pronunciation are presented in non-technical explanations in each chapter. They are followed by brief activities for learners to practice and check mastery of the points presented. (ix)

The following example will show how French pronunciation is taught in the book.

"One of the things that makes French so pleasant to listen to is the linking together of certain sounds. This is called liaison. As you hear more and more French, you will learn exactly where to make (or avoid) liaison. Liaison occurs only when a word ending in a consonant (usually s, x, or t) precedes a word beginning with a vowel or a mute h, as in the word heure (*hour*). The final s or x sounds like [z] in liaison. The phrases below illustrate liaison." (p. 42)

This explanation is followed by two exercises (repetition and production) containing a total of 13 phrases.

It is clear that emphasis is placed on communication rather than mastery. In fact, there is not much material here for phoneticians but the course is probably more motivating for contemporary youth than the rigorously scientific textbooks of past generations as it is physically attractive (I only noticed one typo: *language* on page vii), culturally informative, and overall easy enough not to discourage anyone.
The subtitle of this dictionary is "The Complete Guide to Written and Spoken English". It is quite a promise and, yet, it seems to have been kept. Developed from computerized corpora and printed in England, it covers lexical units in usage in the United States and other English speaking countries, including the British experience. In fact, it seems to be the first dictionary to put to prominent use the extensive oral recordings constituting the Spoken English Corpus.

As stated in the preface, the excellence of a dictionary is measured not only by its coverage but also by the definitions it offers. In this respect, this new LDOCE is truly remarkable. It integrates many features found mostly in isolation in other dictionaries (such as drawings identifying parts of complicated objects, tools or animals characteristic of the Duden dictionaries; syntagmatic valences described in combinatory dictionaries, sociolinguistic information, and phonetic notations with geographical variants). All this information is provided to enable the reader not only to understand a word in its context but also to be able to write phrases based on this word with the proper collocation for a specific situation.

I will provide here an example of each of these very desirable features. Colors are presented on pages 235 and 236. The first page portrays a painter with a palette of paints of different colours/colors and in front of her is a landscape. Every color is named in context. On the second page colors are presented as used in describing heads of people, also in context. In fact, 24 pages are in full color.

Polysemous verbs are particularly difficult to use or even to understand because most dictionaries give lengthy lists with examples of their many meanings. I devised years ago, a general classification for all verb bases on nine semantic categories (I discovered later that Aristoteles had started such a classification). This dictionary does not use either of these classifications but it does provide its own taxonomy which is very helpful because it subcategorizes polysemous verbs into general groups (for instance, three and a half pages of listings for 'get' are organized under six areas of meaning: 1. receive/obtain, 2. move/go/travel, 3. have/own, 4. become/make somebody become, 5. understand, 6. other meanings (p. 591-594). Likewise the meanings of 'put' are arranged into 11 fields (p. 1151-1154); those of 'set' into eight (p. 1298-1300), etc. Thus, the reader is guided straight to the desired meaning, saving much precious time.

Examples of sociolinguistic information abound. Thus, spoken and written frequencies of common words are provided (e.g., 'let' p. 814); usage notes are supplied (e.g., 'invent' vs. 'discover' p. 751); graphs illustrate relative frequencies of words used in combination with other words (e.g., the words most commonly used with 'money' (spend, make, earn, raise, borrow, good, p. 916). Many other helpful visual aids depict sociolinguistic characteristics of the English language. In fact, over 2300 words are illustrated.
Even the readers of The Phonetician will enjoy this dictionary as phonetic notations are given for every word, including many dialectal variants. Nothing would prevent me from believing the claim that this is the "only [general] dictionary to recognize the importance of spoken English [...] as it is based on an analysis of over 135 million words of spoken and written English, including natural conversations recorded across the U.S." (back cover page). In short, a great dictionary.

Pronouncing Dictionary of Proper Names,
ISBN 0-7808-0098-2. $88.00

Reviewed by: Henri Niedzielski,
University of Hawaii

Five years after the first edition (vide my review in The Phonetician, CL-67, p. 3), Omnigraphics offers a second edition of this excellent dictionary compiled "with the aid of the latest speech synthesis technology". It is 200 pages longer and addresses 5,000 more entries (i.e., it covers over 20% more names) than the first edition.

The preface to the second edition will guide me in this review. It states: "Many words were included that have come into prominence in recent years through current events, popular culture, and sports. [...] In addition to adding many place names around the world, a particular effort has been made to extend our coverage of US place names with difficult or unpredictable pronunciations. [...] The editors have also added all names from the Old and New Testaments not found in the first edition. [...] As a minor departure in style for these scriptural names, an approximation of the Hebrew pronunciation is given after the Anglicized pronunciation". (viii)

If no mention is made of any correction, it is because none was made but for the layout of the Introduction in some pages (i, ii, viii, xx, xxi, xxx-xxxii). Instead of repeating suggestions from my previous review (none of which were implemented), I'll ask some questions which I did not present then for the sake of brevity. Why stress the difference in French between /o/ and /æ/ but not between /e/ and /e/ or /æ/ and /a/? The pronunciation of 'patte' as /pat/ (p. 25) is not accepted in standard French. It is /pat/. On page 227, several French names containing the letter u are listed. Only one (Dubœuf, Georges) gives the proper pronunciation for that letter. Contrary to what the editor seems to believe (p. xxv and passim), /y:/ exists only in the final position in a French phonetic word.

As for additions, a quick perusal of the volume points to the absence of such names as 'Chechenya' (yet, between 1993 and 1998 this country was in the news very frequently), Jospin, Nathanyahu. Of course, a selection has to be made among the millions of names in the world but we must remember that "for many of the entries in PDPN, inclusion was on the grounds of difficulty" (ix) and "prominence" (viii).

As for PDPN1, PDPN2 seems to have been very carefully assembled and is very user friendly. I have noticed only one misspelling: 'varients' (p. viii) for 'variants'.
All in all, this dictionary is a very useful reference tool. I recommend it to librarians, journalists and broadcasters, humanists, political and social scientists, as well as to anyone interested in international communication and also to learners of English. More information on ordering the book or other materials is obtainable by faxing (800) 875-1340, calling (800) 234-1340 or writing to Omingraphics, Inc. Penobscot Building, Detroit, MI 48226.

**Perry R. Cook (ed.), (1999)**

*Music, Cognition and Computerized Sound: An Introduction to Psychoacoustics*


xi + 372 pp.+CD, 60 $, hardback.

Reviewed by: **Judith Rosenhouse,**

Department of Humanities and Arts, Technion - I.I.T., Haifa, Israel

"This book is an introduction to psychoacoustics, specifically geared towards those interested in music." It is based on many years of instruction of the topic at Stanford University (Stanford Center for Computer Research in Music and Acoustics) by the editor and his colleagues (J. Chowning, B. Gillespie, D. J. Levitin, M. Mathews, J. Pierce and R. Shepard) who between them wrote the 23 chapters of the volume. The book is intended as a textbook for college students, as well as for independent study by people interested in psychology and music. It is therefore written in an easy-to-read style, which would be attractive for readers.

The chapters include information about the amazing human hearing system, and human voice features, about human brain functioning and cognition (perception), about acoustics (physical notions, measurement and analysis methods), but mostly about the perception of musical sound. Since music uses similar, if not the same, production and perception means as speech, it seems to us that it would be interesting also for speech phoneticians to read this book. If anything, music is acoustically richer than speech and therefore yields more complex phenomena than speech in certain respects.

Chapter 1, "The ear and how it works" and Chapter 2 about "The auditory brain" (both by M Mathews) provide some physiological information. Chapter 3, "Cognitive psychology and music" (by R. Shepard) presents basic notions in music-related psychology. Chapter 4, "Sound waves and sine waves" which gives some theoretical physical background to the subject and Chapter 5 "Introduction to pitch perception" (both by J. Pierce) introduce also some psychoacoustic notions. Various psychoacoustic perceptual features, of a less and more complex nature, as well as their physical (acoustic) correlates are discussed in the following chapters. Chapter 6 "What is loudness" and chapter 7 "Introduction to timbre" (by M. Mathews). These chapters deal with the basic notions of frequency, intensity and spectrum and their psychoacoustic parallels (pitch, loudness, and timbre). Chapter 8 "Hearing in time and space" (J. Pierce), Chapter 9 "Voice physics and neurology" (by P.R. Cook), Chapter 10 "Stream segregation and ambiguity in audition" (by R. Shepard), Chapter 11 "Formant peaks and spectral valleys" and Chapter 12 "Articulation in speech and
sound" (both by P.R. Cook) explain the phonetic-physical phenomena marked in these titles. Chapter 13 deals with "Pitch perception and measurement" (by R. Shepard), Chapter 14 "Consonance and scales" (J. Pierce) takes us to the musical field, as does chapter 15 "Tonal structure and scales" (R. Shepard). Chapter 16 "Pitch, periodicity and noise in the voice (P.R.Cook) deals with acoustic features of the (singing) voice, including its noise elements. Chapter 17, "Memory for musical attributes" (D.J. Levitin) is more psychologically directed in the sense that it examines human memory capabilities concerned with music. Chapter 18 "Haptics" and Chapter 19 "Haptics in manipulation" (both by B. Gillespie), deal with taction and kinesthesia, i.e. haptics, which is relevant to sensing the mechanical aspect of musical playing and the motor control of muscles and body position during one’s playing a musical instrument. This is a relatively young area of research in the context of music acoustics but not unknown to performing students of music. Chapter 20, "Perceptual fusion and auditory perspective" (by J. Chowning) deals with the rather complex psychoacoustic features experienced and experimented by the study of computerized music, such as the solo and chorus effects, closeness and distance perspective. Chapter 21, "Passive nonlinearities in acoustics" (by J. Pierce) describes nonlinear features of the decay of a sound (e.g., produced by a string or a gong) which form part of its characteristic sound. Chapter 22 (by J. Pierce) "Storage and reproduction of music" deals with computerized music, its writing (notes) storing (in files) and reproduction. Chapter 23 "Experimental Design in psychoacoustic research" (by D.J. Levitin) is a methodological treatise of the topic, with numerous examples (pp. 299-328). It is therefore also the longest chapter in the book.

Three appendices accompany the text - "suggested lab exercises,"(pp. 329-343) "Questions and thought problems"(pp. 343-350) and "Sound examples on CD" (pp. 351-360) explaining the contents of the CD (with 80 examples) that accompanies the book. An index (for both subjects and authors) is the last section in this volume (pp. 361-372). References are given at the end of each chapter.

Altogether, the book is well designed and updated in the description of the psychoacoustic phenomena. Its style is flowing and easy to read, as intended. The reader can sense the writer’s expertise in the contents of each chapter. It has numerous illustrative figures, hand-drawn (by computer) as well as tables and figures from the professional literature. As a textbook it is indeed great for teaching, as promised in the Introduction. The chapters present the various topics in a logical order, so that when computerized music is discussed toward the end of the book the reader is ready for the new phenomena. Since the book treats a number of scientific fields (e.g., acoustics, psychoacoustics, music and speech acoustics, computerized music), it can serve as part of the reading required in a number of courses, according to their specific aims, and not only for the single course on which the book is based. As one course the contents of the book seem to require a relatively large number of weekly hours of teaching, it would seem, not to mention lab exercises and listening to the CD examples (but the number of hours per course in the original framework is not mentioned in the book). To sum up, the book fulfills its stated goals and seems very useful for anyone who would like to get a good updated notion of the various questions currently dealt with in these fields.
Pruszewicz, Antoni ed.
Outline of Clinical Audiology (in Polish: Zarys Audiologii Klinicznej),
Publications of the K. Marcinkowski Academy of Medicine in Poznań,

Reviewed by: Donald S. Cooper,
University of South Carolina

In much of Europe, medical treatment of disorders of speech, voice and hearing is in the hands of otolaryngological specialists known as phoniatrists. Antoni Pruszewicz, the phoniatrist editor of the work under review, is a prominent Polish academic physician who has served as dean of his medical school, and is first author of thirty-one items in the bibliography of the present work, which includes over a thousand citations. Pruszewicz also edited and wrote much of a valuable earlier treatise on speech and voice disorders (Foniatria kliniczna Poznań 1992) reviewed in CL-70, and has contributed extensively to the study of the history of his field. Thus the depth and breadth of his contributions to medical aspects of speech and hearing speak for themselves. In the work reviewed here, he is joined by twenty-two collaborators, including many distinguished specialists from phoniatry and related specialties.

After a brief (4 pp.) introduction, the second section of the book (121 pp.) concerns the physical and physiological bases of audiology; further material treats acoustic phonetics, imaging of the auditory system, and studies of the labyrinth and related neurological topics. The third section (110 pp.) treats subjective (psychophysical) methods of the study of hearing and audiometry, including speech audiometry and the examination of central auditory processing. The fourth chapter (54 pp.) treats objective methods, i.e., reflex methods, electric response audiometry, and otoacoustic emissions.

The fifth section (132 pp.) concerns the diagnosis of hearing disorders, a section which emphasizes the medical context of European audiology. The sixth section (75 pp.) is very broadly conceived to cover procedures for treatment of hearing disorders, including hearing aids, cochlear implants, otological surgery, and auditory (re)habilitation. The last (seventh) chapter (12 pp.) concerns medicolegal issues connected with hearing loss. The forty-one page bibliography shows broad acquaintance with both Western and East European publications. Each section of the text refers to publications by number in the bibliography, so that publications relevant to a given topic can usually be identified even by those unable to use the Polish text. Detailed subject and author indices facilitate use of the book.

Pruszewicz's treatise on audiology will not be accessible to many Western readers. Consequently it may usefully be compared to Jack Katz's Handbook of Clinical Audiology, the fourth edition of which was published in the same year by Williams and Wilkins in Philadelphia. The results of this comparison will by readily understandable in terms of the realities of the education of medical residents, in contrast to specialized Ph.D. level training in audiology, which at its best equips its graduates well to maintain a strong technical role in otolaryngological and independent practice. In general, Katz's edited book covers a broader and deeper technical range of
audiological practice, but gives less detailed treatment of the biological and medical context of audiological practice than does Pruszewicz's book. This biomedical point of view is complementary to the more technical approach of American audiology. Furthermore, acquaintance with the present work, even for those unable to use the Polish text, will bring them the opportunity to use its rich bibliography of European publications to become aware of relevant literature which is often slighted in American reviews. Thus Pruszewicz's work can be a useful resource even in those medical and university libraries where knowledge of Polish cannot be expected.

Pruszewicz's publication of this treatise on audiology, which complements his earlier treatise on speech and voice disorders, bears witness to the special contribution of the profession of European phoniatry in its ability to bring a biomedical point of view to disorders of speech and hearing. The publication also demonstrates the vitality of the Polish phoniatric school of which Antoni Pruszewicz is a distinguished representative.

Cummings, Anne C. & Evelyne Charvier-Berman (1997)
_A l'aventure: an Introduction to French Language and Francophone Cultures_,
also audio tape or CD, $ 61.95.

_Deutsch - Immer Besser: A four Skills Approach for Intermediate German_,

Dawson, Laila & Albert C. Dawson (1996)
_Dicho y Hecho: Beginning Spanish_

Dominicis, Maria C. & John J. Reynolds (1998)
_Repase y esciba: Curso avanzado de gramatica y composicion_,

Reviewed by: Henri Niedzielski,
University of Hawaii

I have recently received several unsolicited foreign language textbooks. This short note is intended for those readers of _The Phonetician_ who might be interested in beginning or continuing to learn French, German or Spanish.

For at least a couple of decades (since 'cognitive' approaches more or less replaced 'audio-lingual' orientation), a trend in foreign language learning has not been to emphasize correct pronunciation. Either the sounds, rhythms, and other distinctive phonetic features are presented in non-technical explain-actions (cf., _A l'aventure_ or _Dicho y Hecho_) or they are completely ignored (cf., _Deutsch - Immer Besser_ or _Repase_...
y escriba). In *A l'aventure*, pronunciation is briefly drilled after each explanation; in *Dicho y Hecho*, some rules are given mostly for orthoepic exceptions in chapters 1-5.

The procedure generally adopted in these books is 'situational'. The course usually starts with "visual components that use a cast of identifiable characters to allow the student to relate and react to situations that reflect the theme, vocabulary, functions, and structures of each chapter." (*Dicho y Hecho*, p.iii)

Lively stories are distributed over 14 or 15 chapters and presented in 4 steps: 1. a text to be read (or cartoons in the case of *A l'aventure*) for communicative goals, 2. structural diagrams and/or rules for grammatical competence, 3. more readings for vocabulary buildup and cultural information, and 4. a synthesis reviewing the chapter for writing competence (stressing process writing rather than product writing). In *Deutsch - Immer Besser* steps 3 and 4 are reversed.

It is clear that emphasis is placed on communication rather than mastery. In fact, there is not much material here for phoneticians but the courses are probably more motivating for contemporary youth demanding instantaneous gratification than the rigorously scientific textbook of past generations. The volumes are physically attractive and culturally informative or even entertaining (probably to appeal to the visual sense developed by television). In short, these materials should not discourage anyone, and that is a great advantage.

To motivated students and international communicators, I would suggest to follow up on some other courses in order to improve their pronunciation. I recently reviewed one in *The Phonetician* (vide *Deutsche Aussprache* by Heinrich Relz). An even more extensive and detailed course which I would highly recommend for this purpose is Italian Phonology. Both courses follow a frame by frame programmed method developed when it was fashionable to speak a language with a standard pronunciation (cf., Mueller & Niedzielski 1964).

**Muma, John R. (1998)**

Reviewed by Betholyn Gentry (ch. 1-5) and Priscilla Davis (ch. 6-9), University of Arkansas at Little Rock, Little Rock, Arkansas.

The preface introduces the reader to the field of cognitive socialization and to cognition, codification and language, communication and expression and affect (CCCE). It contains a tribute to Carol Prutting and other notable scholars who have advanced our thinking relative to philosophical and theoretical views regarding provision of clinical services. A continuing theme throughout this book is the need for language specialists to get back to a more theoretical base for intervention with children with language impairments. The rest of the book is divided into nine chapters and four appendices that espouse cognitive socialization and provide a clinical model for assessment and intervention.
In chapter 1 "Setting the Stage," Muma's devotion to cognitive socialization is stated and he emphasizes the need for adequate theories for predicting, explaining and understanding clinical impairments. Muma argues for a stronger theoretical base in our clinical services. He is concerned by many prominent researchers in our field who do not see a need for a theoretical base for our clinical services. This chapter is used to lay the foundations for the remainder of the book which is based on current cognitive socialization literature and to introduce a clinical model based on these theories.

In chapter 2 "Philosophical Views and Theoretical Perspectives," an overview of relevant philosophies, theoretical perspectives and clinical implications are presented. These are excellent summaries providing clinical implications for the reader. This chapter also introduces Muma's updated model for the cognitive-social bases for language. Seventeen clinical implications of this model are discussed in detail. Basically the model stresses a broader view of language in general and intervention in particular.

Chapter 3 "A Clinical Model: Cognitive Socialization," is devoted to familiarizing the reader with core issues of language. The speech act theory is used as a framework for discussing a clinical model, defining specific language impairments and deriving a clinical rationale. Two Clinical models developed from the principles of cognitive socialization literature are discussed, one addressing assessment and the other - intervention. This chapter ends with a suggestion for a code of conduct for clinicians to abide by in addition to the ASHA code of ethics.

Chapter 4 "Cognition," discusses in detail the views of Freud, Piaget, and Vygotsky and other major contributors to the field of cognition, cognitive psychology and language of the past several decades. Next the topics of memory, discrepancy learning, and brute and institutional facts are discussed. These topics are followed by discussions of: representation; cognitive modularity; representational redescription; process, level, stage, and strategy; top-down and bottom-up processing; left-right processing or two modes of thought; modality processing; experiential cognition; and science and human affairs. In chapter 4 Muma returns to a cognitive social bases model of language and stresses the fact that the domains of CCCE are preferable to the notions of modality difference which are held in clinical fields today.

Chapter 5 "Codification: Message of Best Fit," discusses how children learn language codification. Muma raises eight issues relative to using MLU to index language acquisition. He also discusses some of the apparent flaws of using raw frequencies and percentages to document language acquisition in children. Several pages are devoted to discussing grammar, MLU and acquisition sequence. As in previous chapters Muma stresses the application of a cognitive social bases model in language intervention.

Chapter 6, "Communication and Expression," provides a historical perspective of pragmatic beginning with Frege (1892/1952) and Wittgenstein (1953) who has often been credited as a father of pragmatics. Muma provides a thorough and detailed review of the field of pragmatics including a various pragmatic activities, which is the strength of this chapter. Continuous themes that Muma emphasizes as goals for language intervention are "communicative payoffs, communicative contexts and playing the communication games." He points out that language impaired children are often
lacking in communicative skills that relate to peer acceptance. He emphasizes the value of scripts and narratives in the clinical field and declares that the study of pragmatics has elevated the importance of the social aspects of language.

Chapter 7, "Clinical Assessment: Description," presents assessment issues that Muma has previously published and which provide the bases for a strong argument to develop assessment procedures that contain construct validity. He contends that most popular assessment tools used in our field lack construct validity. A discussion regarding different kinds of assessment procedures and their inadequacies is provided. According to Muma, the clinical field is using data that "are incompatible with the available substantive literature." Support for the use of the Muma Assessment Program (MAP; Muma and Muma, 1979) as an example of an assessment procedure that provides construct validity is presented. Support is provided for descriptive assessment and language sampling. These assessment issues refer to pregrammatical and grammatical children.

Chapter 8 "Language Intervention: Facilitation," describes an intervention model. Philosophical views and their respective clinical implications are listed and discussed. Distinctions are made between instructions and facilitation approaches. Muma reviews and provides strategies for his "three P's" of language intervention: parallel talk, peer modeling and parent participation. Ten techniques for language intervention are revisited. Intervention procedures for pregrammatical and grammatical children are differentiated. Services delivery issues are also discussed. Chapter 9, "Epilogue," provides a summary from the cognitive socialization literature. Muma urges the clinical field to consider a list of issues that may help a clinician provide a rationale for achieving a coherent understanding of what goals need to be developed.

In conclusion we would like to say that this text is very comprehensive in scope. Most of Muma's views are updated with current cognitive socialization literature. The reading level is more for the intermediate to advanced scholar. However the text is clearly written and well organized. We can recommend this text to anyone interested in cognitive socialization and how to apply these concepts to clinical setting. We applaud Muma's assertion that we question the direction of our profession and constantly strive for the best theoretical and philosophical views to ensure improved client progress.

Blum-Kulka, Shoshana (1997)

Dinner Talk,

Reviewed by: Jonathan Berman,
The University of Aizu, Japan.

This is a book about cultural patterns of communication within family discourse. It is a cross-cultural project, which compares the interactive styles of family discourse of Jewish Americans (JA), Israeli Americans and Israelis, within the natural setting of the family dinner meal. All subjects of the study are tied by a common Jewish heritage,
a common history and a sense of shared ‘peoplehood’. There were thirty-four families which took part in this study, twelve middle class JA; eleven native born Israelis and eleven American born (Jewish) Israelis, immigrants to Israel. The study was completed between 1985 and 1992. After it was completed, the author went back to interview the families, to get the participants’ view on what went on with regard to language socialization. Furthermore, it took a few years of analyzing all the data for the author to reach a coherent understanding of exactly what took place.

Why the family meal? According to the author, dinner talk is a prime site for pragmatic socialization. This development was the focal point of the analysis. The study was motivated by three analytical concerns: (1) the cultural variation in the way of speaking; (2) the concern of enculturation; and (3) the role of dinner talk with the pragmatic socialization. This book’s focal point is centered around two themes, the cultural styles of sociability and the matter of pragmatic socialization. Different items discussed in Dinner Talk include issues of politeness and power, as well as the fluctuation between different speech modes, speech genres, sociable talk and socializing talk. The findings of the book demonstrate a rich sense of intercultural style and cultural diversity among all different groups.


Reviewed by: Stephen Lambacher, The University of Aizu, Japan

Processing Interclausal Relationships has brought together examples of some of the major observations and main theoretical views of leading scholars from the US and Europe on the topic of discourse and written texts. Contributions are mainly from researchers involved in adult language, but some of the papers deal with developmental aspects of language. Also, some of the papers focus on production, while others focus on comprehension; some papers focus on oral discourse and others on written texts. The thirteen chapters in the book are subdivided into four major sections.

Section I contains two papers that provide a general overview of the use of linguistic markers for maintaining discourse and text cohesion in adult and child language. They are "coherence cues mapping during comprehension" by M. Gernsbacher, and "Coherence and cohesion in children’s stories" by L. Shapiro and J. Hudson.

Section II contains five papers that focus on the integrative function of connectives. The first three papers concern the evaluation of the functioning of connectives in comprehension (Chapter three, "Toward a procedural approach of the meaning of connectives" by J. Caron, Chapter four "The different functions of a

Reviewed by: Stephen Lambacher,
The University of Aizu, Japan

The Crosslinguistic Study of Language Acquisition is a series which has brought together 38 authors and examined the acquisition of 28 languages representing 18 major language families. Volume four and five have been published simultaneously. The chapters are basically selective critical views as opposed to extensive summaries of each language structure. Each language in question is examined "as a case study in a
potential crosslinguistic typology of acquisitional problems, considering the data that contribute to issues of general theoretical concern in developmental psycholinguistics and linguistic theory." In the volumes, the code has been looked at more as a system of morphology and syntax and less attention has thus been given to phonology and prosody - although some of the chapters do deal with phonological features of the particular language in question.

The fourth volume surveys the acquisition of three languages from three different language groups: Finnish, Greek and Korean. Chapter one, "Estonian, Finnish and Hungarian acquisition" by L. Dasinger includes a section on the phonology of these three languages that should be of special interest to phonologists. Two phonological features are discussed, duration and vowel harmony; the former being characteristic of all three languages, and the latter being restricted to Finnish and Hungarian. All three languages have long and short phoneme values in both their vowels and consonant systems, forming minimal pairs which serve to distinguish different words.

Chapter two, "Acquisition of Finnish" by J. Toivainen includes a section on "vowel harmony" where we learn the interesting fact that the dental plosive /t/ and the velar /k/ are both acquired by children before bilabial /p/ which is acquired about six months later for children learning Finnish. The supportive evidence provided for this claim is that the Finnish word /aiti/ (mother) is typically the first word learned by most finish children, which according to the author contradict Jakobson’s (1941) universal order of acquisition.

In Chapter three "Acquisition of Greek" by U. Stephany, we learn that changes between ancient and modern Greek (MG) in pronunciation, morphology, syntax and vocabulary took place during the founding of Constantinople in AD. 324. In a section on "phonology, and orthography" the author points out that consonantal letters and sounds in MG are straightforward, but this does not hold for vowels. For example, the high front vowel /i/ is commonly spelled by eta /η/, iota /ι/, upsilon /υ/, or the digraphs epsilon and iota /ει/ and the omicron iota /οι/; the mid vowels /e/ and /o/ are written as epsilon /ε/ or alpha iota /αι/ and omicron /ο/ or omega /ω/ respectively. MG has a five vowel system, /i,u,e,o,a/ which is fairly common among the world’s languages.

Chapter four, "The acquisition of Korean" by J.Y. Kim, presents a selected review of specific areas of grammar. An interesting discovery is that Korean children’s speech at an early age most resembles that of Korean adults, compared with children learning other languages such as English. Kim therefore questions the belief that all children are born with a universal grammar.

The fifth volume - "Expanding the Contexts" - contains chapters that provide a balance between theory and methods, along with typological comparisons (Dan Slobin), cognitive prerequisites (Soonja Choi), problems and a reanalysis of the origins of grammaticizable notions (Dan Slobin). Choi also presents some more data on Korean acquisition within the framework of language and cognition in development.

Chapter one, "The universal, the typological and the particular" (by D. Slobin), focuses on the ideas that languages fall into typological patterns and do not completely differ from each other. Chapter two, "Language specific input and early semantic development: Evidence from children learning Korean" (by S.J. Choi) examines the
relationship between languages and cognition. Choi comes to new conclusions about the early influence of "specific linguistic forms on the development of the child’s semantic systems." Chapter three, "Language topology, prosody and the acquisition of grammatical morphemes" (by A. Peters) examines the acoustic properties of language and the infant’s perception of them. Peters proposes that the process of acquiring grammatical morphemes differ and is influenced by phonetic and prosodic factors, although the individual differences of learners must also be considered. Chapter four, "Variation in a cross-linguistic context (by E. Lieven) examines data presented in the preceding chapters of the series to show how differences in the language acquisition of the children learning the same language can help us to better understand the process of language acquisition. In chapter five, "The origin of grammaticizable notions" Dan Slobin, the author and editor of the series, argues that we are blocked in our efforts to explain the innate component of language because we have not considered that language is mostly molded over time in the process of communication between individuals, Slobin feels "some of the structure that has been attributed to the individual mind/brain of the child can be accounted for as the result of diachronic linguistic processes.

The series should attract professionals and students of psycholinguistics or adult and child language acquisition, as well as linguists interested interested in the acquisition of morphology, syntax and phonology in general. A detailed table of contents is included at the beginning of each chapter for handy reference. The extensive references included at the end of each chapter could be used by graduate students if the book were used in a course.

Peltzer-Karpf, Annemarie et al.* (1994)
Spracherwerb bei hörenden, sehenden, hörgeschädigten, gehörlosen und blinden Kindern,
(Tübinger Beiträge zur Linguistik), Tübingen: Gunter Narr Verlag.
xi + 372 pp., ISBN 3-8233-5068-4, DM 96,

Reviewed by: Wiktor Jassem,
Poznań, Poland

This book reports on the acquisition of speech in specific conditions involving a perceptual handicap, as compared with normal conditions. The general research object is the adaptation of the central nervous system to an imperfect start as observed in the development of speech ability of blind children and those with impairments and total loss of hearing. The research is based on the author's biological model of mental self-organizations which regards cognitive development as an interaction between innate capabilities and environmental effects.

The neurological aspects of self-organization involving pattern recognition and segmentation are discussed in Chapter 1.

Chapter 2 explains the application of the self-organization model in conditions of reduced information input.
Chapter 3 describes the particular conditions of the research, which was conducted exclusively on German linguistics material.

Chapter 4 discusses some general problems of communication including feedback and non-verbal behavior. Most of the research was carried out with German and Australian children between the ages of 5 to 11. Throughout the research three groups of subjects are distinguished: (a) with normal sight and hearing, (b) blind and (c) those with impaired hearing or total deafness. Very little justification is given for grouping the two, rather different etiologies, under (c), which may be perplexing especially when only results of speech games and speech imitations are presented. The information on p. 34 saying that deaf children were provided with binaural hearing- aids is too general.

Chapter 5 reports on comparative longitudinal studies of specific word categories, such as substantives, verbs, adverbs, etc. in spontaneous speech. The role of linguistics patterns is explained in Chapter 6, and these patterns are extensively described in the following areas: morphology (Ch. 7), syntax (Ch. 8) and semantics (Ch. 9).

Interestingly, the difference between the children in the group can be observed not only in the rather obvious area of semantics, but also in grammar, especially word formation. All such differences, sometimes quite complex, are presented throughout the book in abundant, clear graphs. These show that there are areas in which the development is similar in all three groups. Where it is not, the difference may be specific to the impairments, though beyond lexicon and semantics, these differences are not always easy to explain. No statistical testing of the differences in the quantitative results is presented, so that in many cases it is impossible to judge how significant the results are.

Metalinguistic competence is studied in Ch. 10. Chapter 11 concentrates on phenomena observable in continuous text and dialogue, such as elision, paraphrase and recurrence. A general discussion is included in Ch. 12, while Ch. 13 contains additional, detailed results not reported in the bulk of the book, including some case studies.

Chapter 14 is devoted to the specific, widely interesting problem of visual compensation in hearing-impairment.

Chapter 15 discusses the rather rare, but therefore fascinating case of bilingual congenitally deaf children. The term is stretched here so as to include what are actually two separate forms of one language, viz. spoken and signed. Development of such pseudo-bilingual competence is shown to be dependent on immersion, i.e., it requires the use of both modalities in the family. One would perhaps wish to see rather more emphasis on the distinction between perception and production. A little more information about results obtained in other research centers than those represented by the authors would also be welcome.

The new computer programs devised for aiding speech in children with sight and, especially, hearing impairment are only mentioned in passing (p. 285). No phonetic or phonological problems are dealt with. The volume is unique as a complete monograph which studies data on speech (and language) acquisition in sighted and hearing
children along the same parameters as those that are either blind or deaf. This is the book's chief merit.

*An addendum says "..unter Mitarbeit von.." (= assisted by...) with a list of five names plus three more, the authors of one chapter. The five are: Hermine Posch, Eva Dringel-Techt, Elisabeth Jantscher, Astrid Neuman and Renate Zangl. The other three (only shown on the inner title page) are Ruxandra Sireteanu, Barbara Groten and Regina Rettenbach.

Brisk, Maria Estela (1998)
Bilingual Education: Compensatory to Quality Schooling,

Reviewed by: Luther Killebrew,
The University of Aizu, Japan.

This book can be viewed as a general guide to bilingual education in American classrooms. The overall purpose is to promote true bilingual education as desirable and even necessary. The author presents reasonable arguments for including the home language as part of the child’s education. It is thoroughly researched and well cited, lending much credibility to the study. While focusing only on US bilingual education, the lessons are universal.

The book is divided into five main parts. The first chapter gives a detailed description of the debate surrounding bilingual education (opponents and proponents) and the history of bilingual education in the US, including the legal battles and federal decisions relating to the subject. This is followed by the description of various types of bilingual programs in the United State, from two-way bilingual programs to where the lone goal is English development so the student can be mainstreamed as quickly as possible.

The second part of the book is a description of internal and external influences on a student’s bilingual development. These include personal characteristics, the role of the family and situational factors. This chapter is vital to the information of empathy towards students, especially for teachers who have never experienced this process themselves.

The remainder of the book is a beginning manual for those contemplating the creation of a bilingual, program or those trying to improve existing programs. It begins with detailing an effective school, from teachers to principals to district administrators and how each member of the system, not just the teachers, are instrumental in devising effective programs. This is followed by a chapter on bilingual curriculum development and finally an overview (mostly anecdotal) of effective bilingual strategies. This "manual" was developed by figuring out what makes effective programs click rather than personal opinion, thus strengthening the argument.
Overall, the book is very well thought out, very well organized and easy to read. The author has avoided the trap of academic writing and used language suitable for the uninitiated (like myself). As a teacher, I found the book motivating and hope-inspiring. As a parent trying to raise a bilingual child, this book revived my hope that my son might be able to maintain his bilingual abilities should we ever return to the US. My only question is, why isn’t the bilingual development of majority language children argued as necessary?


Reviewed by: Doug Sawyer, The University of Aizu, Japan

As the title indicates, this collection of studies and articles attempts to develop bridges between Second Language Acquisition (SLA) theory and Second Language (S2) pedagogy. It is to be expected that acquisition theory cannot always be neatly and directly applied to pedagogical practice, and such difficulties are clearly present in some of the offerings here. Nevertheless, this book is certainly a valuable resource and tool for second language teachers who desire to apply second language acquisition research and theory to their teaching. The lead-off chapters alone (of each of the five divisions) offer valuable connections and recommendations for applying SLA theory to L2 teaching.

The volume consists of 19 articles, divided into the five following divisions:
[General] Factors Affecting the L2 Setting (Chapters 1-4);
Internal Factors [Affecting Reception and Processing of] Input (Chapters 5-8);
External [Pedagogical] Factors [in Reception/Processing of ] Inputs (Chapters 9-13);
Factors Affecting [General] Production (Chapters 14-16);
Factors affecting Pronunciation (Chapters 17-19).

Most of the chapters are either research articles or reviews of previous SLA research studies with a view toward pedagogical application, and each of the five sections is introduced by a well-written and thought-provoking article relating theory to practice with regards to the area it represents. The lead-off articles to the five sections, as well as several other articles that do an excellent job of bridging the gap between SLA research and L2 testing, makes this a valuable addition to any L2 teacher’s library and indicate good potential for collaboration between SLA theorists and L2 pedagogues. A number of the other articles are weak in terms of pedagogical applicability, make overtly strong suggestions for pedagogical applications despite minimal demonstration of validity, leave out any reference to obvious limitations, or have apparent gaps in reporting of data for some reason. Nevertheless, in this
reviewer’s opinion, the quality and applicability of the articles mentioned below greatly outweighs the limitations of some of the other offerings and guarantees a worthwhile initial reading and ongoing reference volume.

Susan Gass introduces the first section and the book by arguing convincingly for the need to appropriately assess which areas of SLA relate to pedagogical issues and which do not. She suggests that teachers need SLA training or background in order to measure classroom practice against research findings, as well as to evaluate research to see whether it is applicable and to avoid being misled by popular SLA theories that are too often pressed into service with minimal (or no) reapplication or challenge. She also stresses the need for teachers to be able to apply the test research in such a way as to better understand how to capitalize on learners’ natural capabilities in the classroom in ways that may not be possible apart from a classroom environment. This provides a good motivational base for the reader and provides the momentum to make it through to the lead-off article of the second section.

Lydia White begins the second section with a presentation of research that qualifies the input hypothesis (and its descendants. She offers indication that simple exposure to correct forms is not sufficient to remove the L1 interface and result in correct grammar, at least for some of the more resistant grammatical norms; (pedagogical) identification of incorrectness of erroneous forms was found to be necessary, as well.

The third section includes two articles worthy of special note. It begins with an overview article by Diane Larsen-Freeman, in which she debunks myths about grammar teaching and language acquisition - some of which have been proven false by SLA researchers, while others have been introduced by SLA theorists; Larsen-Freeman goes on to suggest several worthwhile areas for collaboration between SLA researchers and L2 teachers. The section also includes a worthwhile review by Stephen Krashen in support of his "reading hypothesis" (akin to his earlier "input hypothesis"); Krashen’s arguments are engaging and challenging, as usual, and he provides a good overview and ample references for those interested for deeper investigation, although no studies are thoroughly presented in the article itself to provide immediate evidence to his strong assertions for the primary importance of free voluntary reading.

Section four, on factors affecting L2 production, begins with a presentation by Andrew Cohen of several areas of potential collaborative SLA and classroom L2 research that have been uncovered by SLA theory and research. In addition, the remaining two article in this section are also insightful and informative: a study by J.E. Parker et al. (exploring L1 and L2 use in language immersion programs) and a persuasive review of studies by Elaine Tarone (indicating the importance of using various approaches in SLA research depending on the environment and purpose of the research, rather than gravitating toward some kind of SLA research norm).

The final section, also begins and ends with articles that clearly present SLA research in ways that offer insights that can be further investigated and applied to L2 pedagogy. John Paolillo offers a fine article reporting his studies exploring /r/ and /l/ acquisition patterns and sequences in L2 English learners from various Asian L1 groups, giving evidence for consistent patterns of /r/ and /l/ acquisition based on phoneme location within lexical units (like words) within a given L1 group; one of the
pedagogical suggestions was to make use of such considerations in the development of pronunciation texts. Doris Hansen finishes off the volume with a balanced challenge to extreme L2 applications of Lenneberg’s critical period hypothesis (that age limits the ability to overcome pronunciation errors, among other things) in determining a student’s ability (or inability) to overcome accent limitations. She adds the variable of acculturation, and reexamines the model with the two factors being considered both separately and together.

This volume is well organized, with strong articles at the beginning of each section; I heartily recommend it, particularly the lead-off article of each of the five sections and the other articles mentioned above, to L2 teachers who are considering (or convinced of) the relevancy of SLA research to their L2 pedagogy, and also to SLA researchers who are concerned with teacher collaboration and pedagogical applicability of their research. There are a number of excellent and applicable articles within that offer material and incentive for the building of a navigable bridge between L2 theory and practice.

Rossi, Mario and Evelyne Peter-Defare

Les Lapsus ou Comment Notre Fourche a Langué (1998),
Paris: Presses Universitaires de France,
 xii + 163 pp., ISBN 2-13-048920-6, 118 FF ($ 21.00).

Reviewed by: Chantal Paboudjian,
Institut de Phonétique, Université de Provence, Aix-en-Provence, France

Earlier works on slips of the tongue have focused mainly on English, German, and Italian; this book is the first one dedicated to French on this topic. It was only preceded by five student research works conducted at the Institute of Phonetics in Aix-en-Provence France and by a compilation of 2400 slips of the tongue by P. J. L. Arnaud from the University Lumière in Lyon, France (see Appendix).

This book provides an analysis of the nature, causes and mechanisms of the phenomenon and is based on a corpus of 2808 errors (1000 are presented in an appendix and a total of 3770 can be found on http:/www.lpl.univ-aix.fr/staff/rossi). The data have been collected between 1992 and 1996 from spontaneous conversations, and from television and radio dialogues and interviews.

The classification has been completed using several criteria:
(1) the nature of the linguistic units containing errors (i.e. words, syllables, vowels, consonants, vowels-consonants, features)
(2) the types of errors (blends, haploglosses, omissions, additions, shifts, paradigmatic and syntagmatic substitutions).
(3) the sources of errors: context and position (anticipations or perseverations).

In the same way, four criteria have been used in the analysis of errors.
(1) The span ("empan"), i.e. the number of syllables between targets and the sources of errors. Example: C'est de la (boire), de la *bière qu'ils <boivent> (4 syllables between (boire) and the source of error <boivent>)
(2) The "Lexis" coded from 1 to 4 indicating whether the error is semantically or contextually related either to (1) the target, (2) to a word, (3) a non-word, or (4) a grammatically incorrect construct of the language.

These criteria used by various authors have been applied to French. Rossi and Peter-Defare provide a precise redefinition of each criteria and propose new ones. Their conclusion (in keeping with Crompton's position) is that the syllable constitutes the basic unit of articulatory programming. A new classification of errors is thus proposed.

In conformity with the idea that slips of the tongue may serve as cues in the determination of language production processes, the most captivating section of the book (in my opinion) discusses the implications of observations within two production models: Levelt's Serial Theory and Dell and Stemberger's Interactive Theory. Rossi and Peter-Defare try to show which type of interactivity, within a concept of modularity, may best account for the cognitive mechanisms behind errors.

Their observations support Levelt's theory and reveal that the criteria they propose, especially the lexical effect advocated by Dell and Stemberger (i.e., a phonological error implies the use of a word in the lexis), are not significant in the case of French. The probability of coming across a word of the lexis in the case of substitutions depends on the number of syllables. Monosyllabic words offer the widest range of options since there are many minimal pairs in such cases.

The sources of errors are numerous: among them we have the psychological state of the speaker, selective attention, the content of the message, the semantic links of the message with the environment, discourse constraints, language structure, and the frequency of linguistic units. The types of errors and their mechanisms can be accounted for by the organization and the constraints of the production system.

This book will not only be appreciated by those who work in cognitive sciences and by grammarians, but also by all teachers and lovers of French. They will no doubt find a source of jokes in it and most assuredly of illustrations to give to students.

Waals, Juliette (1999)
*An Experimental View of the Dutch Syllable*,
ISBN 90-5569-063-5, paperback. xii+158 pp,
NLG 48.00 (excl. P&P, VAT).

Reviewed by: Niels Schiller,
Cognitive Neuropsychology Laboratory, Department of Psychology,
Harvard University, Cambridge MA, USA.

This published dissertation presents a phonetic investigation of syllable structure in Dutch. It provides empirical data about the durational characteristics of single consonants as well as consonant clusters and vowels. The book is divided into three empirical parts, dedicated to the word onset (Chapter 2), the word coda (Chapter 3),
and the intervocalic position (Chapter 4). Chapter 5 provides additional data about the role of lexical stress in syllabification. The results are summarized in Chapter 6. The book comprises a list of references, an index, and a Dutch summary.

The aim of this book is the empirical investigation of the relation between segment duration and syllable structure in Dutch. It is generally well written, although the largely descriptive form of the dissertation -- including a lot of data -- makes it sometimes a bit hard to read. The general method used by the author to obtain empirical data was to ask native speakers of Dutch to produce specific words and pseudo-words involving the target segments. The production of these materials was recorded under laboratory conditions and the acoustic duration of the consonants and consonant clusters was then measured. The motivation of this investigation resides in the question whether it is necessary to refer to syllabic structure when interpreting durational data. The central hypothesis put forward in this thesis is the Metrical Segment Duration Hypothesis (MSDH) which states that "the relative duration of segments is a reflection of [phonological] syllable constituency".

Chapter 1 is an introduction including a brief description of the theoretical background and a short review of the literature about the relation between segment length and syllable structure. Also, the central hypothesis of the thesis is introduced and discussed before the background of the relevant findings reported so far in the literature.

Chapters 2, 3, and 4 report empirical data of segmental duration in word-onset, word-coda, and intervocalic positions, respectively. A brief description of Dutch phonology is provided including principles of phonotactics and syllabification. Both singleton consonants and consonant clusters were investigated. Generally speaking, the duration of clusters was shorter than the sum of the duration of the individual consonants. However, the shortening did not occur arbitrarily. The general cluster shortening effect was only applicable to immediately neighboring consonants, i.e., the shortening effect was local. Locality ensures that a consonant is shortened only by its direct neighbor. Taken together, analyses of the data showed that syllables and syllable structure have to be taken into account to be able to make sense of segment duration in the different syllabic positions in Dutch. This outcome supports the MSDH, i.e., "Group consonants observing sonority properties, elsewhere follow metrical structure". By metrical structure, Waals means syllable structure is based on phonological considerations. The MSDH was also reflected in the syllabification of intervocalic consonant clusters which follows two principles: (a) language-specific requirements and (b) the universal Maximal Onset Principle (MOP). However, in Dutch the language-specific principles seem to be overruled by the universal principles. Overall, this thesis constitutes a careful investigation of the phonetics and phonology of the syllable in Dutch. It provides a lot of empirical data. The data are accounted for in terms of the Metrical Segment Duration Hypothesis (MSDH), which seems to capture most of the data. However, the statistical analyses could be improved (by reporting interactions of the main effects and by conducting item-analyses). Except for some minor details that were not completely clear, the thesis is well written and the experimental work was carefully conducted. Therefore, this thesis will be of use for everybody interested in the phonetics and phonology of the Dutch syllable.


Meetings, Conferences, and Workshops

10 - 12 November 1999
Fourth European Workshop on Speaker Recognition in Telephony
Fondazione Ugo Bordoni, Rome, Italy
(http://www.fub.it/cost250/documents/rome-workshop.html)

18 November 1999
USC Speech Production Conference
University of Southern California, USA
(http://siva.usc.edu/prodconf/)

22 - 26 November 1999
Le CORUM, Montpellier, France
(http://www-ihm.lri.fr/ihm99)

9 - 11 December 1999
2nd COST-G6 Workshop on Digital Audio Effects (DAFx99): Modeling, Music Processing and Audio Effects
Norwegian University of Science and Technology, Trondheim, Norway
(http://www.notam.uio.no/dafx99/)

12 - 15 December 1999
1999 IEEE Automatic Speech Recognition and Understanding Workshop (ASRU'99)
Keystone, Colorado, USA
(http://asru99.research.att.com)

1 - 3 March 2000
22nd Annual Conference of the German Society for Linguistics (DGfS)
University of Marburg, Marburg, Germany
(e-mail: DGfS2000@mailer.uni-marburg.de;
http://www.uni-marburg.de/linguistik/dgfs2000/)

2 - 24 March 2000
Workshop on the "Declarative Analysis of the Syllable"
University of Nantes, Nantes, France
(e-mail: jean-pierre.angoujard@humana.univ-nantes.fr)

22 - 24 March 2000
Workshop "Corpora and NLP" (ACIDCA'2000 session)
Monastir, Tunesia
(http://www.chez.com/acidca2000)
3 - 6 April 2000
Conference on "The Evolution of Language"
École Nationale Supérieure des Télécommunications, Paris, France
(http://www.infres.enst.fr/conf/evolang/)

12 - 14 April 2000
6th conference on "Content-Based Multimedia Information Access" (RIAO 2000)
Collège de France, Paris, France
(http://host.limsi.fr/RIAO)

1 - 4 May 2000
5th Speech Production Seminar: Models and Data
Kloster Seeon, Bavaria, Germany
(e-mail: sps5@phonetik.uni-muenchen.de; http://www.phonetik.uni-muenchen.de/~sps5)

27 - 31 May 2000
30th Annual Clinical Aphasiology Conference (CAC)
Royal Waikoloa, Kona Coast, Hawaii
(email: marilyn@coe.uga.edu)

29 - 31 May 2000
ESCA tutorial and research workshop (ETRW): Spoken Word Access Processes (SWAP)
Nijmegen, The Netherlands (Jonkerbosch Conference Centre)
(http://www.mpi.nl/world/swap)

31 May - 2 June 2000
The 2nd International Conference on Language Resources and Evaluation (LREC 2000)
Athens, Greece

5 - 9 June 2000
Istanbul, Turkey
(http://icassp2000.sdsu.edu)

15 - 17 June 2000
11th Annual Conference on Theoretical and Experimental Neuropsychology (TENNET XI)
Université du Québec, Montréal, Québec, Canada
(e-mail: tennet@uqam.cs; http://www.er.uqam.ca/nobel/tennet)
19 - 23 June 2000  
23rd Journées d'Étude de la Parole (JEP 2000) [Speech Communication Meeting]  
Paul Langevin conference center, Aussois, Savoy, France  
(e-mail: jep2000@icp.inpg.fr; http://www.icp.inpg.fr/jep2000)

29 June - 1 July 2000  
Seventh Conference in Laboratory Phonology (LabPhon7)  
Max Planck Institute for Psycholinguistics/University of Nijmegen, Netherlands  
(labphon7@let.kun.nl; http://www.let.kun.nl/labphon7/)

5th - 8th July 2000  
Annual Meeting of the International Association for Forensic Phonetics  
Rome, Italy  
(e-mail: pao@fu.it)

16 - 19 August 2000  
VIIIth meeting of the International Clinical Phonetics and Linguistics Association (ICPLA 2000)  
John MacIntyre Centre, Edinburgh, Scotland  
(e-mail: icpla@sls.qmced.ac.uk; http://sls.qmced.ac.uk/ICPLA2000/index.htm)

5 - 7 September 2000  
ISCA workshop on Speech and Emotion: A Conceptual Framework for Research  
Northern Ireland, Great Britain  
(http://www.qub.ac.uk/en/isca/index.htm)

5 - 8 September 2000  
Xth European Signal Processing Conference (EUSIPCO-2000)  
Tampere, Finland  

13-16 September 2000  
The Third International Workshop on TEXT, SPEECH and DIALOGUE (TSD 2000)  
Brno, Czech Republic  
(http://www.fi.muni.cz/tsd2000/)

2-5 October, 2000  
Workshop: Prosody 2000: speech recognition and synthesis  
Kraków, Poland  
(e-mail: lin@amu.edu.pl; http://ptfon.wmid.amu.edu.pl)

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Interesting web sites

ISPhS: http://www.isphs.org
IAFP: http://www.iafp.net
ISCA: http://www.esca-speech.org
IPA: http://www.arts.gla.ac.uk/IPA/ipa.html
The Voice Center at Eastern Virginia Medical School: http://www.voice-center.com/index.html
Center for Voice Disorders: http://www.bgsu.edu/voice/
Links to Linguistics and Phonetics worldwide: http://www.ims.uni-stuttgart.de/phonetik/joerg/worldwide/lingphon.html
SALTMIL: "Speech And Language Technology for MInority Languages"
   http://www.onelist.com/community/saltmil
   http://www.cstr.ed.ac.uk/SALTMIL

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