

## Book review

**To Honour Eli Fischer-Jørgensen: Festschrift on the Occasion of her 90th Birthday, February 11th, 2001**

**Nina Grønnum, Jørgen Rischel (editors)**

Travaux du Cercle linguistique de Copenhague, Vol. XXXI, Copenhagen: C.A. Reitzel, 2001, 297 pp.; kr 420.

The editors of this book, Nina Grønnum and Jørgen Rischel, both highly accomplished scholars and scientists in their own right, have done an excellent job of enlisting authors from five countries and editing this collection of papers in honor of Eli Fischer-Jørgensen, whose many outstanding contributions to phonetics and phonology over a long career easily merit such attention. Indeed, reading through the list of her publications from 1932 to 2000 (pp. 54–73), I was struck by how many of the earlier ones were important building blocks in my own graduate education (e.g., 1952) and by how many of the whole set have been widely cited as seminal contributions (e.g., 1963, 1989).

In their brief Preface (pp. 9–11) the editors provide a succinct outline of the career of this “Grand Old Lady of general phonetics and phonology.” Following their practice, I will refer to her as Eli. The book, by the way, is graced with a striking recent photograph of her to be treasured by those of us who have had her as a friend and colleague for decades.

Before turning to the scientific papers, I must mention two more celebratory features of the book. The first one, which is not a paper in the usual sense, is “A Bridge over the Sound: Dialogue between Eva Gårding and Gösta Bruce Dedicated to Eli Fischer-Jørgensen.” (The Sound is the Öresund, the channel between Eli’s Copenhagen and the authors’ Lund.) The whole thing is very well done. It has the air of a spontaneous informal chat between two people who know all the highlights of Eli’s career and have an intimate knowledge of her character and personality. It makes for interesting and enjoyable reading.

The second celebratory item is “Honoris Causa. Tribute to Eli” by Frans Gregersen and Una Canger (pp. 23–53). The authors provide an insightful outline of Eli’s education and career with special attention to her very active involvement with the Linguistic Circle of Copenhagen (Le Cercle Linguistique de Copenhague), that fertile ground for the promotion of research, discussion, and publication. We are told that influential figures in her studies at the University of Copenhagen were Louis L. Hammerich (1892–1975) and Victor Brøndal (1887–1942).

The rest of the book contains 12 scientific contributions: eight on topics in phonetics, two in phonology, one in syntax, and one in what might best be called pragmatics. Given the scope of this journal as well as my own predilection, I will dwell on the papers in phonetics without altogether neglecting the others.

In “F0 Analysis and Prediction in Swedish Prose Reading” (pp. 124–147), Gunnar Fant and Anita Kruckenberg begin by saying, “This is an attempt to approach

analysis and synthesis of F0 contours along somewhat unconventional lines." Their normalization of F0 contours in both frequency and time makes for ready comparisons between speakers. These representations are used together with perceptual assessments along a graded scale for the study of prominence in oral readings of set passages in Swedish.

In "The Behavior of the Larynx in Speech Production" (pp. 161–173) Hajime Hirose gives us a rather succinct but very clear discussion of the topic with illustrative examples from such languages as Japanese, Korean, Sindhi, and Danish. His focus is mostly on phonetic properties involving adduction and abduction of the vocal folds, tension of the thyrovocalis muscle, and raising and lowering of the larynx.

Klaus J. Kohler continues his fruitful studies of running speech in "Plosive-Related Glottalization Phenomena in Read and Spontaneous Speech. A Stød in German?" (pp. 174–211). Using the large databases accumulated at Kiel, he shows that in German, especially North German, stop consonants in certain contexts in citation forms are likely to be manifested phonetically in fluent running speech as one or another kind of glottalization reminiscent of the famous Danish stød. Parallel experiments in perception validate this glottalization as an acoustic cue. Kohler goes on to emphasize the importance of giving much more attention to running speech in our research than has been customary. I find it easy to agree with him.

Given its relevance to a topic that has engaged much of my own research effort, I was especially intrigued by "Linking Linguistic Contrasts to Reality: The Case of VOT" (pp. 212–225) by Peter Ladefoged and Taehong Cho. Making good use of extensive data previously published (Cho & Ladefoged, 1999), they examine the ranges of voice onset time (VOT) values in 18 languages, each of which is represented by several speakers. The study is limited to voiceless unaspirated and aspirated velar stops and ejectives in initial position in citation forms of words.<sup>1</sup> Aside from family membership, the languages differ somewhat in how many phonological contrasts they have for the foregoing phonetic categories. Six languages have just /k/; four have /k g/; two have /k k<sup>h</sup>/; one has /k k'/; one has /k k' g/; and four have /k k<sup>h</sup> k'/. Thus, altogether 11 languages have no aspirate–inaspirate contrast. For the latter, the authors' data do not support the suggestion by Docherty (1992) that a low-cost option, namely, the simplest articulatory gesture, whatever that might be, will be chosen by the language.<sup>2</sup> In fact, across these 11 languages the values for this stop are scattered along the VOT dimension. (It would help to have a scale on the vertical axis of Fig. 3.) What is regrettable here is the implication, surely unintended, that the terms "aspirated" and "unaspirated" have fixed well-defined meanings. Rather, they are relative terms. The "unaspirated" stops of one language can be slightly aspirated in comparison with both the "unaspirated" and "aspirated" stops of another language. Such scalar differences are likely to be

<sup>1</sup>They consider only voiceless categories partly because they "do not know of any claims that different degrees of negative VOT are phonologically contrastive." Such a contrast, of course, would be possible with differences in closure duration. In fact, that is the situation in Pattani Malay, a language in which all consonant categories, including voiced obstruents, can be distinctively short or long in word-initial position.

<sup>2</sup>I am unable at this time to find a copy of Docherty (1992), so I must depend solely on the comments of Ladefoged and Cho.

reflected in the VOT values, much as seems to be the case in this study. I certainly agree with the view of Ladefoged and Cho that the phonetic parameter underlying VOT is an articulatory one. Indeed, it is essentially the outlook of a paper cited by them for something else (Lisker & Abramson, 1964, pp. 414–416) and of other papers (e.g., Abramson, 1977), which claim that VOT is a handy acoustic index of what the physiological mechanism is doing.

The next paper in phonetics (pp. 226–238) is “Hearing the Polish Sibilants [s], [ś], [ʃ], Phonetic and Auditory Judgments” by Leigh Lisker. The study begins with an acoustic analysis of the turbulences and formant transitions of the post-dental, palato-alveolar, and alveolopalatal fricatives of Polish. Then, in a series of his customary meticulously designed cross-language perceptual experiments with native speakers of American English and no knowledge of Polish, Lisker tests for both auditory differentiation of phonetic categories and purely psychoacoustic discrimination. He makes brief but interesting use of the results in remarks about motor theories of speech perception.

Peter Molbæk Hansen in “Durational Phenomena in an Apocopating Dialect” (pp. 247–264) ends a 20-year delay in publishing data on Himmerlandic dialects of Danish. His acoustic measurements of F0 and duration may well be a good contribution to Danish studies; however, as one with no practical command of Danish, I found that wending my way through the author’s description of the problem tried my patience too much for me to appreciate his conclusions.

A stimulating approach to the subject of syntagmatic and paradigmatic constraints on the differentiation of speech sounds is presented in “Acoustic VC Transitions Correlate with Degree of Perceptual Confusion of Place Contrast in Hindi” (pp. 265–284) by Manjari Ohala and John J. Ohala. Taking advantage of the rich consonantal inventory of Hindi, the authors shed light on such matters through acoustic analysis and experiments in perception.

The paper by Kenneth N. Stevens, “The Properties of the Vocal-Tract Walls Help to Shape Several Phonetic Distinctions in Language,” is a brief but elegant presentation of a topic that does not loom large in the speech science literature. In our common source-filter model of the acoustics of speech we normally focus on the varying configurations of the supraglottal vocal tract and their excitation by different sound sources and combinations thereof, with little or no attention to changing states of the walls of the cavities. The matter of how yielding a relevant wall might be and its bearing on phonetic distinctiveness is discussed in connection with vowels and sonorant and obstruent consonants.

Although the foregoing eight papers are all studies in phonetics, they clearly have implications for phonology. Let us turn now to the two papers in more abstract phonology. In “What Can Be Derived from Just Three Binary Features: Occam’s Razor and Major Classes for Phonotactics” (pp. 74–99), Hans Basbøll defines, with very few initial postulates, a simple set of major classes for phonotactics. In doing so, he insists on hugging the phonetic ground, saying (p. 76), “The distinctive features used should have a solid grounding in phonetics: they should be phonetically interpretable and, more specifically, be PHONETICALLY HOMOGENEOUS.”

Osamu Fujimura, who is best known as an important speech scientist, occasionally makes a foray into phonological argumentation, as he does in “The Feature Spirantized” (pp. 148–160). His proposal here has to do with the feature

specification of the English consonant clusters /sp st sk/. These clusters in syllable-initial position are of particular interest, because there is no voicing contrast in the stops, which, denuded of their [s]-frication, are likely to be heard as /b d g/ by English speakers but as voiceless stops by speakers of languages with unaspirated voiceless stops (cf. Lotz, Abramson, Gerstmann, Ingemann & Nemser 1960).

The one paper in syntax is "Fronting in Irish English" (pp. 100–160), and the one in what I take to be pragmatics is "Accessibility and Activation" by Jacob L. Mey. All in all, this book is a worthy tribute to Eli and merits wide circulation.

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### References

- Abramson, A. S. (1977). Laryngeal timing in consonant distinctions, *Phonetica*, **34**, 295–303.
- Cho, T. & Ladefoged, P. (1999). Variations and universals in VOT: evidence from 18 languages, *Journal of Phonetics*, **27**, 207–229.
- Docherty, G. (1992). *The timing of voicing in British English obstruents*. Berlin: De Gruyter.
- Fischer-Jørgensen, E. (1952). The phonetic basis for identification of phonemic elements, *Journal of the Acoustical Society of America*, **24**, 611–617.
- Fischer-Jørgensen, E. (1963). Beobachtungen über den Zusammenhang zwischen Stimmhaftigkeit und intra-oralem Luftdruck, *Zeitschrift für Phonetik*, **16**, 19–36.
- Fischer-Jørgensen, E. (1989). Phonetic analysis of the stød in Standard Danish, *Phonetica*, **46**, 1–59.
- Lisker, L. & Abramson, A. S. (1964). A cross-language study of voicing in initial stops: acoustical measurements, *Word*, **20**, 384–422.
- Lotz, J., Abramson, A. S., Gerstman, L. J., Ingemann, F. & Nemser, W. J. (1960). The perception of English stops by speakers of English, Spanish, Hungarian and Thai: a tape-cutting experiment, *Language and Speech*, **3**, 71–77.