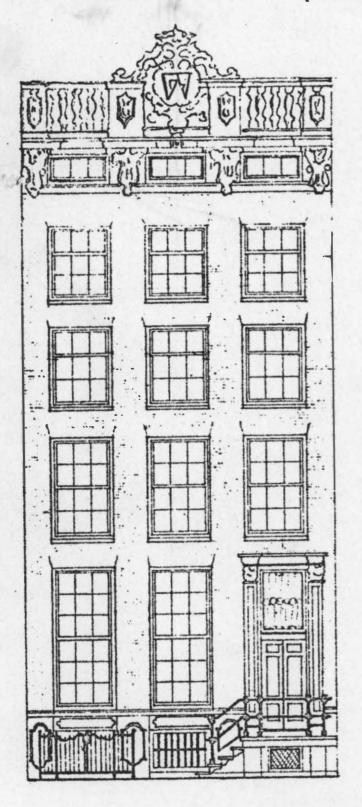
INSTITUUT VOOR FONETISCHE WETENSCHAPPEN

## PROCEEDINGS

## Institute of phonetic sciences



llerengracht 338 Amsterdam

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J.W. Meyers teaches English at the Institute for the Training of Teachers, \* ' D' Witte Leli ', Stichting Nutsseminarium, Herengracht 247, which is connected with the University of Amsterdam.

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## Foreword.

In the Institute of Phonetic Sciences of the University of Amsterdam it has become tradition to see the Phonetic Sciences as the study of the <u>mechanism</u> of speech and hearing. This definition includes the acoustic theory of speech production as one of the problems an all-round institute can no longer dodge. The relation between the shape of the vocal tract and the accompanying sound signal is one of the acoustic problems to be solved. In this issue of our Proceedings two papers have been devoted to this subject, written by mathematically trained cooperators of our institute, each of them presenting his own approach. In my personal opinion the acoustic theory of speech production is not a specialization: without it phonology is an empty shell passively resonating to the alphabet. Acoustic theory of speech production is a step on the long road of demystification of articulatory phonetics.

The impact of modern statistical methods like principal component analysis and factor analysis on modern phonetics is demonstrated by a paper on the classification of vowel systems and the influence of reduction phenomena, being the result of the combined efforts of a physicist and a linguist.

This issue of the Proceedings opens with the report of an exploratory investigation on the role of the voice feature in Dutch. We apologize for the fact that, due to a printer's error, the normalized abbreviation for millisecond (a thousandth of a second), to wit msec, has been partly carricaturized in this paper to Msec, which means a million seconds. We do hope that this 'slip of the typewriter' does not reduce the readability of this, in my opinion, interesting paper.

Hendrik Mol.