

Metrical myths

METRICAL MYTHS

AN EXPERIMENTAL-PHONETIC INVESTIGATION INTO
THE PRODUCTION AND PERCEPTION OF METRICAL
SPEECH

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Introduction

This book is a report on a series of experiments carried out within the framework of experimental phonetics. Experimental phonetics aims at testing hypotheses concerning the processes of producing and perceiving human speech sounds. This particular investigation focused on the production and perception of metrical speech, a subject which is usually considered more suitable for introspection than for experimental research.

Although metre is said to consist of abstract patterns, the terms used in the description of these patterns suggest that their characteristics can be expressed in measurable parameters. The most telling example is that of calling some syllables 'long' and other syllables 'short', or even 'half as long'. Experimental data obtained as early as the beginning of this century showed that metrical patterns do not exist of simple alternations of long and short syllables. Still, the belief that the differentiation between syllables can be expressed in terms such as long-short or loud-soft persists. This may be the result of incorrectly applying the results of experiments on rhythm to speech.

In the case of recognizing or experiencing a particular type of rhythm, usually tested by means of tone sequences, it is possible to have subjects perceive one particular rhythm by varying one characteristic of the tones. In speech, however, the matter is more complicated because of factors such as grammar and meaning. Within the field of linguistics the perception of a metrical pattern is said to arise from abstract rather than concrete parameters. Because a speaker knows the stress patterns of his language, he will also recognize its metrical patterns. Thus, two extreme approaches to metrical theory can be distinguished: the one maintains that metre can be described in measurable, concrete parameters, the other suggests that metre is part of the abstract rule system of a given language.

The present investigation focused on two main issues without accepting either extreme view. The first topic concerned the

acoustic reality of foot boundaries. Although it is generally accepted that the existence of silent intervals between feet should be regarded as a fallacy, a likely alternative has not been agreed upon as yet. In a number of experiments the relevance of acoustic demarcation of feet was investigated.

The second issue concerned metrical prominence. In a comparison of prose and poetry the hypothesis was tested that in metrical poetry more syllables are given emphasis by the speaker than in prose. The report appeared as a dissertation at Utrecht University in 1979 and the project was funded by the Netherlands Organization for the Advancement of Pure Research.

TABLE OF CONTENTS

I. PHYSICS CONTRA METAPHYSICS	1
1.1. Introduction	1
1.1.1. Rhythm as opposed to metre	4
1.1.2. Rhythm in connection with metre	5
1.2. Approaches to metre	6
1.2.1. Introduction	6
1.2.2. Quantitative movement	6
1.2.3. Temporal and accentual approaches	7
1.2.4. Experimental approaches to metre	9
1.2.5. Discussion	11
1.2.6. Structuralist and generative approaches	12
1.3.1. Problem	15
1.3.2. Two issues	17
II. THE ACOUSTIC PROPERTIES OF THE METRICAL FOOT	19
2.1. Introduction	19
2.1.1. Rising and falling metre	21
2.1.2. Prosodic boundaries	23
2.1.3. On first measuring the metrical foot	24
2.2. Nonsense syllables	26
2.2.1. Dummies	26
2.2.2. Production test	27
2.2.3. Perception test	31
2.3. Meaningful lines of verse	36
2.3.1. Introduction	36
2.3.2. Aim	37
2.3.3. First experiment	37
2.3.4. Second experiment	39
2.3.5. Conclusion	42
III. PERCEPTUAL DIFFERENCE BETWEEN IAMBIC AND TROCHAIC LINES ..	44
3.1. Introduction	44
3.2. First experiment: a paired-comparison test	45
3.2.1. Introduction	45

3.2.2.	Aim	46
3.2.3.	Material	46
3.2.4.	Method	48
3.2.5.	Results	48
3.2.6.	Discussion	50
3.2.7.	Second presentation	50
3.2.8.	Discussion of the two presentations	51
3.2.9.	Acoustic correlates of the patterns	52
3.3.	Second experiment: metre in isolation	58
3.3.1.	Introduction	58
3.3.2.	Aim	59
3.3.3.	Material	59
3.3.4.	Method	61
3.3.5.	Results	61
3.3.6.	Discussion	63
3.4.	Third experiment: metre and lexis	64
3.4.1.	Introduction	64
3.4.2.	Aim	65
3.4.3.	Material	65
3.4.4.	Method	67
3.4.5.	Results	68
3.4.6.	Discussion	74
3.5.	Summary	75
IV. THE ACOUSTIC PROPERTIES OF METRICAL CONTRAST		77
4.1.	Introduction	77
4.2.	Scale test	79
4.2.1.	Introduction	79
4.2.2.	Hypothesis	82
4.2.3.	Material	82
4.2.4.	Method	84
4.2.5.	Subjects	85
4.2.6.	Results	85
4.2.7.	Discussion	89
4.3.	Metrics and phonetics	91
4.3.1.	From stress to accent	91
4.3.2.	Pitch accent and metrical theory	93

4.3.3.	Pitch accent test	94
4.3.4.	Metricality as a function of pitch accents	96
4.3.5.	Objective properties of pitch marks	97
4.3.6.	Pitch marks and the first category	97
4.3.7.	Prose versus poetry	99
4.3.8.	Discussion of the scale test	107
4.3.9.	Continuation	107
4.4.	Second experiment: a binary choice	109
4.4.1.	Aim	109
4.4.2.	Material	109
4.4.3.	Method	110
4.4.4.	Subjects	111
4.4.5.	Results	111
4.5.	Discussion of the two experiments	122
V.	CONCLUSION	124
5.1.	Introduction	124
5.2.	The metrical foot	124
5.3.	Rising and falling metre	126
5.4.	Metrical contrast	127
5.5.	The acoustic contribution	129
5.6.	Final words	131
APPENDICES		
Appendix I	.....	134
Appendix IIa	.....	136
Appendix IIb	.....	138
Appendix III	.....	139
Appendix IV: glossary	.....	141
REFERENCES	.....	144