



## UvA-DARE (Digital Academic Repository)

### Tracheoesophageal Speech. A Multidimensional Assessment of Voice Quality

van As, C.J.

**Publication date**  
2001

[Link to publication](#)

#### **Citation for published version (APA):**

van As, C. J. (2001). *Tracheoesophageal Speech. A Multidimensional Assessment of Voice Quality*. Budde-Elinkwijk Grafische Producties.

#### **General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

#### **Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

# TRACHEOESOPHAGEAL SPEECH

## A Multidimensional Assessment of Voice Quality

Corina J. van As

TRACHOEOPHAGEAL SPEECH  
A Multidimensional Assessment of Voice Quality

The studies described in this thesis were carried out at the Netherlands Cancer Institute/Antoni van Leeuwenhoek hospital, in collaboration with the Institute of Phonetic Sciences of the University of Amsterdam, and financially supported by a grant of the Amsterdam Center of Language and Communication and the Department of Speech and Language of the Catholic University of Nijmegen.

Printed in the Netherlands by Budde-Elinkwijk Grafische producties, Nieuwegein.



ISBN : 90-9015058-7

© C.J. van As, 2001. No part of this book may be reproduced in any form, by print, photoprint, microfilm or any other means without permission of the publisher.

# TRACHEOESOPHAGEAL SPEECH

## A Multidimensional Assessment of Voice Quality

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor

aan de Universiteit van Amsterdam

op gezag van de Rector Magnificus

prof. dr. J.J.M. Franse

ten overstaan van een door het college voor promoties ingestelde  
commissie, in het openbaar te verdedigen in de Aula der Universiteit

op woensdag 26 september 2001, te 10.00 uur

door

**Cornelia Jannie van As**

geboren te Noordgouwe

Promotor : prof. dr. ir. L.C.W. Pols  
Co-promotores : dr. F.J.M. Hilgers  
dr. F.J. Koopmans-van Beinum  
Faculteit : Faculteit der Geesteswetenschappen

Printing of this thesis has partly been supported by:  
Atos Medical AB, Hörby, Sweden  
Electro Medical Instruments B.V., the Netherlands  
Medin Instrumenten B.V., the Netherlands  
Mediprof Medical Products, the Netherlands  
Nestlé Belgilux S.A.-N.V., Brussel, Belgium  
Nutricia Nederland B.V., the Netherlands  
Oticon Nederland B.V., the Netherlands  
Platon Medical Ltd, Eastbourne, United Kingdom  
Veenhuis Medical Audio B.V., the Netherlands

# CONTENTS

## CHAPTER GENERAL INSTRUMENTS

CHAPTER I	1
CHAPTER II	2
CHAPTER III	3
CHAPTER IV	4
CHAPTER V	5
CHAPTER VI	6
CHAPTER VII	7
CHAPTER VIII	8
CHAPTER IX	9
CHAPTER X	10
CHAPTER XI	11
CHAPTER XII	12
CHAPTER XIII	13
CHAPTER XIV	14
CHAPTER XV	15
CHAPTER XVI	16
CHAPTER XVII	17
CHAPTER XVIII	18
CHAPTER XIX	19
CHAPTER XX	20
CHAPTER XXI	21
CHAPTER XXII	22
CHAPTER XXIII	23
CHAPTER XXIV	24
CHAPTER XXV	25
CHAPTER XXVI	26
CHAPTER XXVII	27
CHAPTER XXVIII	28
CHAPTER XXIX	29
CHAPTER XXX	30
CHAPTER XXXI	31
CHAPTER XXXII	32
CHAPTER XXXIII	33
CHAPTER XXXIV	34
CHAPTER XXXV	35
CHAPTER XXXVI	36
CHAPTER XXXVII	37
CHAPTER XXXVIII	38
CHAPTER XXXIX	39
CHAPTER XL	40
CHAPTER XLI	41
CHAPTER XLII	42
CHAPTER XLIII	43
CHAPTER XLIV	44
CHAPTER XLV	45
CHAPTER XLVI	46
CHAPTER XLVII	47
CHAPTER XLVIII	48
CHAPTER XLIX	49
CHAPTER L	50
CHAPTER LI	51
CHAPTER LII	52
CHAPTER LIII	53
CHAPTER LIV	54
CHAPTER LV	55
CHAPTER LVI	56
CHAPTER LVII	57
CHAPTER LVIII	58
CHAPTER LIX	59
CHAPTER LX	60
CHAPTER LXI	61
CHAPTER LXII	62
CHAPTER LXIII	63
CHAPTER LXIV	64
CHAPTER LXV	65
CHAPTER LXVI	66
CHAPTER LXVII	67
CHAPTER LXVIII	68
CHAPTER LXIX	69
CHAPTER LXX	70
CHAPTER LXXI	71
CHAPTER LXXII	72
CHAPTER LXXIII	73
CHAPTER LXXIV	74
CHAPTER LXXV	75
CHAPTER LXXVI	76
CHAPTER LXXVII	77
CHAPTER LXXVIII	78
CHAPTER LXXIX	79
CHAPTER LXXX	80
CHAPTER LXXXI	81
CHAPTER LXXXII	82
CHAPTER LXXXIII	83
CHAPTER LXXXIV	84
CHAPTER LXXXV	85
CHAPTER LXXXVI	86
CHAPTER LXXXVII	87
CHAPTER LXXXVIII	88
CHAPTER LXXXIX	89
CHAPTER LXXXX	90
CHAPTER LXXXXI	91
CHAPTER LXXXXII	92
CHAPTER LXXXXIII	93
CHAPTER LXXXXIV	94
CHAPTER LXXXXV	95
CHAPTER LXXXXVI	96
CHAPTER LXXXXVII	97
CHAPTER LXXXXVIII	98
CHAPTER LXXXXIX	99
CHAPTER LXXXXX	100

*Voor mijn ouders*

