

TR-H-266

**Perceptual Characteristics of Temporal
Structures in Speech: Towards Objective
Assessment of Synthesis Rules.**

Hiroaki KATO

1999.2.26

ATR人間情報通信研究所

〒619-0288 京都府相楽郡精華町光台2-2 TEL: 0774-95-1011

ATR Human Information Processing Research Laboratories

2-2, Hikaridai, Seika-cho, Soraku-gun, Kyoto 619-0288, Japan

Telephone: +81-774-95-1011

Fax : +81-774-95-1008

PERCEPTUAL CHARACTERISTICS OF
TEMPORAL STRUCTURES IN SPEECH:
TOWARDS OBJECTIVE ASSESSMENT OF SYNTHESIS RULES

By
Hiroaki Kato

Chapter 1

Introduction

Abstract

Aiming to contribute to the assessment of rules for assigning segmental durations for speech synthesis, the present study examines the cues underlying the perception of temporal structures of speech, both from a speech perceptual and from a psychoacoustical point of view. In speech perception experiments, auditory sensitivity to different kinds of distortions in temporal structures of real speech is determined. In psychoacoustical experiments, the internal mechanism mediating perceptual effects on the speech stimuli is estimated.

In this chapter, we briefly describe the problems motivating this study and the approach taken in our experiments along with an outline of this dissertation.