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| Nota di contenuto | DEVELOPMENTS IN SPEECH SYNTHESIS; Contents; Acknowledgements; Introduction; How Good is Synthetic Speech?; Improvements Beyond Intelligibility; Continuous Adaptation; Data Structure Characterisation; Shared Input Properties; Intelligibility: Some Beliefs and Some Myths; Naturalness; Variability; The Introduction of Style; Expressive Content; Final Introductory Remarks; Part I Current Work; 1 High-Level and Low-Level Synthesis; 1.1 Differentiating Between Low-Level and High-Level Synthesis; 1.2 Two Types of Text; 1.3 The Context of High-Level Synthesis; 1.4 Textual Rendering; 2 Low-Level Synthesisers: Current Status2.1 The Range of Low-Level Synthesisers Available; 2.1.1 Articulatory Synthesis; 2.1.2 Formant Synthesis; 2.1.3 Concatenative Synthesis; Units for Concatenative Synthesis; Representation of Speech in the Database; Unit Selection Systems: the Data-Driven Approach; Unit Joining; Cost Evaluation in Unit Selection Systems; Prosody and Concatenative Systems; Prosody Implementation in Unit Concatenation Systems; 2.1.4 Hybrid System Approaches to Speech Synthesis; 3 Text-To-Speech; 3.1 Methods; 3.2 The Syntactic Parse; 4 Different Low-Level Synthesisers: What Can Be Expected?4.1 The Competing Types; 4.2 The Theoretical Limits; 4.3 Upcoming Approaches; 5 Low-Level Synthesis Potential; 5.1 The Input to Low-Level Synthesis; 5.2 Text Marking; 5.2.1 Unmarked Text; 5.2.2 Marked Text: the Basics; 5.2.3 Waveforms and |

Segment Boundaries; 5.2.4 Marking Boundaries on Waveforms: the Alignment Problem; 5.2.5 Labelling the Database: Segments; 5.2.6 Labelling the Database: Endpointing and Alignment; Part II A New Direction for Speech Synthesis; 6 A View of Naturalness; 6.1 The Naturalness Concept; 6.2 Switchable Databases for Concatenative Synthesis6.3 Prosodic Modifications; 7 Physical Parameters and Abstract Information Channels; 7.1 Limitations in the Theory and Scope of Speech Synthesis; 7.1.1 Distinguishing Between Physical and Cognitive Processes; 7.1.2 Relationship Between Physical and Cognitive Objects; 7.1.3 Implications; 7.2 Intonation Contours from the Original Database; 7.3 Boundaries in Intonation; 8 Variability and System Integrity; 8.1 Accent Variation; 8.2 Voicing; 8.3 The Festival System; 8.4 Syllable Duration; 8.5 Changes of Approach in Speech Synthesis; 9 Automatic Speech Recognition9.1 Advantages of the Statistical Approach; 9.2 Disadvantages of the Statistical Approach; 9.3 Unit Selection Synthesis Compared with Automatic Speech Recognition; Part III High-Level Control; 10 The Need for High-Level Control; 10.1 What is High-Level Control?; 10.2 Generalisation in Linguistics; 10.3 Units in the Signal; 10.4 Achievements of a Separate High-Level Control; 10.5 Advantages of Identifying High-Level Control; 11 The Input to High-Level Control; 11.1 Segmental Linguistic Input; 11.2 The Underlying Linguistics Model; 11.3 Prosody; 11.4 Expression; 12 Problems for Automatic Text Markup

| Sommario/riassunto | With a growing need for understanding the process involved in producing and perceiving spoken language, this timely publication answers these questions in an accessible reference.  Containing material resulting from many years' teaching and research, Speech Synthesis provides a complete account of the theory of speech.  By bringing together the common goals and methods of speech synthesis into a single resource, the book will lead the way towards a comprehensive view of the process involved in human speech. The book includes applications in speech technology and speech synthesis. |