Proceedings of the Fifth International Workshop on Natural Language Generation

3-6 June 1990

Linden Hall Conference Center Dawson, Pennsylvania

Organized by:

Kathleen **R** McKeown, Columbia University Johanna D. Moore, University of Pittsburgh Sergei Nirenburg, Carnegie Mellon University

Financial Sponsors:

National Science Foundation

American Association for Artificial Intelligence

Association for Computing Machinery, Special Interest Group on Artificial Intelligence

Contents

;

Kathleen F. McCoy, K. Vijay-Shanker, Gijoo Yang, Using Tree Adjoining Grammars in the Systemic Framework	1
Stuart M. Shieber and Yves Schabes, Generation and Synchronous Tree-Adjoining Grammars	9
Nigel Ward, A Connectionist Treatment of Grammar for Generation	15
Ehud Reiter, A New Model for Lexical Choice for Open-Class Words	23
Leo Wanner and John A. Bateman, Lexical Cooccurrence Relations in Text Generation	31
Susanna Cumming, Natural Discourse Hypothesis Engine: A Tool for Generating, Testing and Refining Hypotheses Concerning the Contextual Basis for Linguistic Choice	39
Jim Barnett and Inderjeet Mani, Using Bidirectional Semantic Rules for Generation	47
John A. Bateman, Upper Modeling: A Level of Semantics for Natural Language Processing	54
Marie W. Meteer, Abstract Linguistic Resources for Text Planning	62
Mark T. Maybury, Using Discourse Focus, Temporal Focus, and Spatial Focus to Plan Narrative Text	70
T. Pattabhiraman and Nick Cercone, Selection: Salience, Relevance and the Coupling between Domain-Level Tasks and Text Planning	79
Owen Rambow, Domain Communication Knowledge	87
Ursula Wolz, An Object Oriented Approach to Content Planning for Text Generation	95
Robert A. Granville, The Role of Underlying Structure in Text Generation	105
David J. Mooney, Sandra Carberry, Kathleen F. Mccoy, The Basic Block Model of Extended Explanations	112
Penelopen Sibun, The Local Organization of Text	120
Eduard H. Hovy, Parsimonious and Profligate Approaches to the Question of Discourse Structure Relations	128

.

~

Daniel D. Suthers,	
Reassessing Rhetorical Abstractions and Planning Mechanisms	137
Peter van Beek and Robin Cohen, Resolving Plan Ambiguity for Response Generation	144
Christine Defrise and Sergei Nirenburg, Aspects of Text Meaning: Speaker Attitudes in Language Generation	150
Ingrid Zukerman, Generating Peripheral Rhetorical Devices by Consulting a User Model	156
Robin P. Fawcett, The Computer Generation of Speech with Discoursally and Semantically Motivated Intonation	164
David E. Johnson and Hideo Watanabe, Relational-Grammar-Based Generation in the JETS Japanese-English Machine Translation System	174
Terry Patten and Daniel S. Stoops, Real-Time Generation from Systemic Grammars	183
Notes: Norman Badler, Mark Steedman, Bonnie Lynn Webber,	
Narrated Animation: A Case for Generation	189

,