

# CONTENTS

Preface	v
Acknowledgements	v
Introduction	vii
CHAPTER 1	
Information science in context	1
1.1 The emergence of information science	1
1.2 The scope of information science	11
CHAPTER 2	
The cognitive view and information	15
2.1 The cognitive viewpoint versus cognitivism	19
2.2 Understanding information in information science	26
2.3 Information science seen as a cognitive science	37
2.4 Hermeneutics in IR interaction	41
2.5 Summary statements	47
CHAPTER 3	
Information retrieval	49
3.1 Essential issues in IR	49
3.2 Major IR research approaches — an overview	57
CHAPTER 4	
The traditional IR research approach	61
4.1 Classification theories	63
4.2 Indexing theory, controlled vocabulary issues	64
4.3 Natural language representation	67
4.4 IR technique developments	72
4.5 Relevance measurement techniques	78
4.6 Summary statements	80
CHAPTER 5	
The user-oriented IR research approach	83
5.1 The role of the intermediary and the user in IR	87
5.2 Major empirical user studies	91
5.3 Empirical investigations of user-intermediary-system interaction	99
5.4 Pre-search interviewing investigations, excluding retrieval	105
5.5 User-oriented analytic studies of IR interaction	112
5.6 Summary of analytic and empirical user-oriented studies	121
CHAPTER 6	
IR interaction — the cognitive turn	123
6.1 Personal cognitive structures relevant to IR	124
6.2 Cognitive models for IR interaction	124
6.3 Design and evaluation methodologies in IR interaction	146
6.4 Summary statements	156
CHAPTER 7	
The cognitive IR research approach	157
7.1 Selected intermediary designs in IR	160
7.2 'Intelligent' user model building vs supportive mechanisms in IR	175
7.3 The supportive user model building approach	181
7.4 Knowledge-based adaptive IR interaction	186
7.5 Towards a contextual IR theory?	194
7.6 Summary	201

<b>CHAPTER 8</b>	
<b>The Mediator Model</b>	<b>203</b>
8.1 The framework of the Mediator Model	204
8.2 The use of the framework	220
<b>CHAPTER 9</b>	
<b>Conclusions</b>	<b>223</b>
<b>Definitions</b>	<b>227</b>
<b>References</b>	<b>231</b>
<b>Subject index</b>	<b>241</b>