

## CONTENTS

List of Figures and Tables .....	13
List of Abbreviations .....	14
Acknowledgements .....	15
INTRODUCTION .....	17
PART I – MEDIA, SCIENCE AND TRANSLATION .....	23
1. Print Media and Magazine Journalism .....	23
1.0. Introduction .....	24
1.1. Print Media: A Historical Overview .....	26
1.1.1. Early Periodical Publications .....	26
1.1.2. The Periodical Press .....	29
1.1.3. Magazine: Which Was the First? .....	33
1.1.4. Magazines in the Victorian Period .....	34
1.1.5. The Magazine Century .....	35
1.2. The Press: Conceptual Foundations .....	37
1.2.1. Newspapers <i>vs</i> Magazines .....	37
1.2.2. Defining ‘Magazine’ .....	38
1.3. Magazine Journalism .....	43
1.3.1. From Consumer to Specialized Magazines .....	44
1.3.2. Online Journalism: From Digital Magazines to Blogs .....	44
1.3.3. Roles in the Magazine Industry .....	47
1.4. The Feature Article .....	50
1.4.1. News <i>vs</i> Features .....	51
1.4.2. Headlines and Other Peritextual Elements .....	53
1.4.3. A Less Predictable Text-Type .....	56
2. Popular Science in the Media .....	58
2.0. Introduction .....	59
2.1. Science <i>vs</i> Non-Science: A Historical Overview .....	60
2.1.1. Early Science .....	60
2.1.2. Professionalizing Science .....	62

2.2. Popular Science: Conceptual Foundations .....	64
2.2.1. Defining ‘Popular Science’ .....	64
2.2.2. Science or Journalism? .....	65
2.2.3. Popularization as ‘Translation’ .....	67
2.2.4. From PAST to CUSP Models .....	69
2.3. The Agents and The Audiences of Popularization .....	70
2.3.1. Scientists and Science Writers .....	70
2.3.2. The Role of Science Editors .....	73
2.3.3. The Audiences .....	75
2.4. The Language of Popular Science Writing .....	76
2.4.1. Insights from Linguistics .....	77
2.4.2. The Professionals’ View .....	79
3. Translating Popular Science .....	81
3.0. Introduction .....	81
3.1. Journalism and Translation .....	82
3.2. Science and Translation .....	84
3.3. Popular Science and Translation .....	85
3.3.1 An Under-Researched Area .....	85
3.3.2. Translating Popular Science, or Science Journalism .....	87
<b>PART II – THEORETICAL AND ANALYTICAL FRAMEWORK .....</b>	<b>91</b>
4. Theoretical Framework .....	91
4.0. Introduction .....	92
4.1. Halliday’s Register Analysis .....	93
4.1.1. Ideational Meanings and Grammatical Metaphor .....	94
4.1.2. Interpersonal Meanings .....	96
4.1.3. Textual Meanings .....	97
4.2. A Model for Evaluation: Appraisal Theory .....	98
4.2.1. Attitude .....	98
4.2.2. Graduation and Engagement .....	100
5. Materials and Methods .....	101
5.0. Introduction .....	101
5.1. Description and Classification .....	102
5.2. Testing the Method of Analysis .....	105
5.3. Specialized and Consumer Magazines: United Kingdom, United States and Italy .....	107

PART III – APPLICATIONS .....	113
6. Popularization of ‘Hard’ Sciences .....	113
6.0. Introduction .....	113
6.1. Translating Physics .....	114
6.1.1. Register Analysis .....	116
6.1.1.1. Peritext .....	116
6.1.1.2. Lead and Pay-Off .....	118
6.1.1.3. Body .....	120
6.1.1.3.1. Ideational Meanings .....	120
6.1.1.3.2. Textual Meanings .....	124
6.1.2. The Language of Evaluation .....	128
6.1.3. The Context of Culture .....	131
6.1.4. Summary of Findings .....	132
6.2. Translating Astronomy .....	135
6.2.1. Register Analysis .....	137
6.2.1.1. Peritext .....	137
6.2.1.2. Lead and Pay-Off .....	140
6.2.1.3. Body .....	141
6.2.1.3.1. Ideational Meanings .....	141
6.2.1.3.2. Interpersonal Meanings .....	149
6.2.1.3.3. Textual Meanings .....	150
6.2.2. The Language of Evaluation .....	155
6.2.3. Summary of Findings .....	158
7. Popularization of ‘Soft’ Sciences .....	161
7.0. Introduction .....	161
7.1. Translating Zoology .....	162
7.1.1. Register Analysis .....	164
7.1.1.1 Peritext .....	164
7.1.1.2. Lead and Pay-Off .....	166
7.1.1.3. Body .....	169
7.1.1.3.1. Ideational Meanings .....	169
7.1.1.3.2. Interpersonal Meanings .....	179
7.1.1.3.3. Textual Meanings .....	180
7.1.2. The Language of Evaluation .....	184
7.1.3. Summary of Findings .....	185
7.2. Translating Evolutionary Biology .....	188
7.2.1. Register Analysis .....	190

7.2.1.1 Body .....	190
7.2.1.1.1. Ideational Meanings .....	190
7.2.1.1.2. Interpersonal Meanings .....	194
7.2.1.1.3. Textual Meanings .....	194
7.2.2. The Language of Evaluation .....	195
7.2.3. The Context of Culture .....	197
7.2.4. Summary of Findings .....	197
8. Popularization of Medical and Health Sciences .....	199
8.0. Introduction .....	199
8.1. Translating Neurosciences .....	200
8.1.1. Register Analysis .....	201
8.1.1.1 Peritext .....	201
8.1.1.2. Lead and Pay-Off .....	202
8.1.1.3. Body .....	204
8.1.1.3.1. Ideational Meanings .....	204
8.1.1.3.2. Interpersonal Meanings .....	206
8.1.1.3.3. Textual Meanings .....	207
8.1.2. The Language of Evaluation .....	210
8.1.3. Summary of Findings .....	210
8.2. Translating Infectious Diseases .....	212
8.2.1. Register Analysis .....	213
8.2.1.1 Peritext .....	213
8.2.1.2. Lead and Pay-Off .....	213
8.2.1.3. Body .....	215
8.2.1.3.1. Ideational Meanings .....	215
8.2.1.3.2. Interpersonal Meanings .....	220
8.2.1.3.3. Textual Meanings .....	222
8.2.2. The Language of Evaluation .....	224
8.2.3. The Context of Culture .....	229
8.2.4. Summary of Findings .....	230
9. Popularization of Technology .....	233
9.0. Introduction .....	233
9.1. Translating Electronic Engineering .....	233
9.1.1. Register Analysis .....	234
9.1.1.1 Peritext .....	234
9.1.1.2. Lead and Pay-Off .....	236
9.1.1.3. Body .....	237

9.1.1.3.1. Ideational Meanings .....	237
9.1.1.3.2. Interpersonal Meanings .....	242
9.1.1.3.3. Textual Meanings .....	243
9.1.2. The Language of Evaluation .....	244
9.1.3. Summary of Findings .....	245
9.2. Translating Information Engineering .....	248
9.2.1. Register Analysis .....	249
9.2.1.1. Lead and Pay-Off .....	249
9.2.1.2. Body .....	252
9.2.1.2.1. Ideational Meanings .....	252
9.2.1.2.2. Textual Meanings .....	262
9.2.1.2.3. The Language of Evaluation .....	263
9.2.1.2.4. The Context of Culture .....	265
9.2.1.2.5. Summary of Findings .....	266
<b>PART IV - CONCLUSIONS AND FUTURE PERSPECTIVES .....</b>	<b>271</b>
10. Translating ‘Hard’, ‘Soft’, Medical Sciences and Technology from an SFL Perspective .....	271
10.1. A Synthesis of Findings and Observations .....	271
10.2. Assessing a Register Analysis Approach .....	274
11. Concluding Remarks .....	275
<b>References .....</b>	<b>279</b>