

TABLE OF CONTENTS

PART I INTRODUCTION

CHAPTER 1 PROLUSION

1.0 Introduction	1
1.1 Systemic Functional Linguistics	1
1.1.1 Systemic Theory	1
1.1.2 Systemic Phonology	7
1.1.3 Uncertainties.....	15
1.2 Proposals.....	16
1.2.1 Epistemological Complexion.....	16
1.2.2 Minor Theoretical Proposals	20
1.2.3 Major Theoretical Proposals	21
1.2.3.1 Phonological Function	22
1.2.3.1.1 Stratal Relations	22
1.2.3.1.2 Content-Expression Correlations	24
1.2.3.1.2.1 Demarcation.....	25
1.2.3.1.2.2 Extension	28
1.2.3.1.2.2.1 Integration	28
1.2.3.1.2.2.2 Concatenation	29
1.2.3.1.2.2.3 Vowel Harmony	30
1.2.3.1.2.3 Other Phonological Ranks	31
1.2.3.1.2.3.1 Rhythm: Demarcation	31
1.2.3.1.2.3.2 Intonation: Integration.....	33
1.2.3.1.3 Theoretical Interpretation.....	34
1.2.3.2 A Quantum Field Model of Syntagm.....	36
1.2.3.2.1 Syntagm As Waves Of Periodic Behaviour	37
1.2.3.2.2 Quanta: Waves As Measures Of Particle Probability.....	40
1.2.3.2.3 Phonological Fields Of Charged States	45
1.2.3.2.4 Phonological Quantum Fields	47
1.2.3.2.5 Phonogenetic Fields	48
1.2.3.2.6 Phonogenetic Fields As Vectorfields	52
1.2.3.2.7 Theoretical Interpretation.....	55
1.3 Summary	56

PART II LOGOGENESIS

CHAPTER 2 PHONOLOGICAL TEXTURE

2.0 Introduction	58
2.1 Weaving The Texture Of Articulatory Fields	58
2.1.1 Structure In The Syllable Core	58
2.1.1.1 Periodicity: Textual Metafunction.....	58

2.1.1.2	Modification: Logical Metafunction.....	61
2.1.2	Cohesion Around The Syllable Periphery	63
2.1.2.1	Demarcation	64
2.1.2.1.1	Syntagmatic Variation: Phases	64
2.1.2.1.2	Paradigmatic Variation: States	66
2.1.2.2	Extension: Fields.....	69
2.1.2.2.1	Integration.....	69
2.1.2.2.2	Concatenation	71
2.1.2.2.3	Integrative Vowel Harmony.....	72
2.1.2.2.4	Concatenative Vowel Harmony	74
2.2	Weaving The Texture Of Rhythmic Fields.....	79
2.2.1	Structure In The Foot Core	79
2.2.2	Cohesion Around The Foot Periphery	82
2.2.2.1	Demarcation Through (Paradigmatic) Omission.....	83
2.2.2.1.1	'Empty' Ictus: Lexicogrammatical Initiality.....	83
2.2.2.1.2	'Empty' Remiss: Lexicogrammatical Finality.....	84
2.2.2.2	Demarcation Through (Syntagmatic) Addition	84
2.2.2.2.1	Proclitic Cataphoric Phases: Lexicogrammatical Initiality	84
2.2.2.2.2	Enclitic Anaphoric Phases: Lexicogrammatical Finality	90
2.3	Weaving The Texture Of Intonational Fields.....	92
2.3.1	Structure Of The Tone Group.....	94
2.3.1.1	Periodicity: Textual Metafunction.....	94
2.3.1.2	Modification: Logical Metafunction.....	96
2.3.2	Cohesion Through The Tone Group	98
2.3.2.1	Extension: Integrative Tonal Fields	98
2.3.2.2	Demarcation	100
2.3.2.2.1	Demarcation Through Secondary Tone: Phoricity.....	100
2.3.2.2.2	Demarcation Through Omission	102
2.3.3	Cohesion Through Tone Groups In Complexes.....	103
2.3.3.1	Interdependent Information Units.....	103
2.3.3.2	Interdependent Clauses And Groups.....	104
2.3.3.2.1	Tone Concord: Group Relations	105
2.3.3.2.2	Tone Sequence: Clause Relations.....	106
2.4	Summary	108

CHAPTER 3 CREATING ARTICULATORY TEXTURE IN IRISH: STRUCTURE

3.0	Introduction	111
3.1	Decontextualised Articulatory Potential	111
3.2	In The Syllable (Core).....	117
3.2.1	Structural Phases.....	117
3.2.2	Systemic States	120
3.2.2.1	Systems At The Onset	121
3.2.2.1.1	Systems At The Onset Head	121
3.2.2.1.2	Systems At The Onset Modifier (Or Inset).....	126
3.2.2.1.3	Constraints On Onset Modification.....	127
3.2.2.1.4	Systems At The Onset Complex: Phonation.....	130
3.2.2.2	Systems At The Rhyme.....	131
3.2.2.2.1	Systems At The Rhyme Head (or Peak).....	131
3.2.2.2.1.1	Long Peaks	134
3.2.2.2.1.2	Transitional Long Peaks.....	139

3.2.2.2.1.3 Short Peaks	143
3.2.2.2.1.3.1 Distinct	143
3.2.2.2.1.3.2 Obscure	148
3.2.2.2.2 Systems At The Rhyme Modifier (or Offset).....	151
3.3 Summary	157

CHAPTER 4 CREATING ARTICULATORY TEXTURE IN IRISH: COHESION

4.0 Introduction	159
4.1 Syllable–Morpheme Correlation	159
4.1.1 Syntagmatic Phases.....	159
4.1.2 Systemic States	160
4.1.2.1 Systems At The Outset	161
4.1.2.2 Systems At The Coda.....	164
4.1.2.2.1 Systems At The Coda Head.....	164
4.1.2.2.2 The Coda Modifier	170
4.1.3 Cohesion And Word Morphogenesis.....	173
4.1.3.1 Syllable Concatenation Constraints	173
4.1.3.2 Incongruence: Loss Of Morpheme Demarcation.....	177
4.2 Syllable–Word Correlation	182
4.2.1 The Concatenative Function Of Posture Fields.....	182
4.2.2 The Phonetic Exponence Of Posture Field States	185
4.2.3 Word-Boundary Posture.....	192
4.3 Syllable–Group/Phrase Correlation	194
4.3.1 Paradigm: The Deformation Of Onset States.....	194
4.3.1.1 Eclipsis	195
4.3.1.1.1 Synchrony	195
4.3.1.1.2 Diachrony.....	197
4.3.1.2 Lenition	200
4.3.1.2.1 Synchrony	200
4.3.1.2.2 Diachrony.....	202
4.3.2 Syntagm: The Function Of Mutagenic Fields.....	205
4.3.2.1 Diachrony: Rhythmic And Lexicogrammatical Contexts	206
4.3.2.2 Synchrony: Mutagenic Fields.....	211
4.3.2.3 Nominal Group Integration	213
4.3.2.3.1 PreModifier Concatenation	213
4.3.2.3.1.1 Deictic^Entity Concatenation.....	213
4.3.2.3.1.2 Numerative^Entity Concatenation	215
4.3.2.3.1.3 Deictic^Numerative Concatenation.....	216
4.3.2.3.2 PostModifier Concatenation	218
4.3.2.3.2.1 Entity^Epithet Concatenation	219
4.3.2.3.2.2 Numerative^Entity(^Numerative)^Epithet Concatenation ..	220
4.3.2.3.2.3 Entity^Classifier Concatenation	221
4.3.2.4 Prepositional Phrase Integration	222
4.3.2.4.1 Process^Range Concatenation.....	222
4.3.2.4.2 Range Integration	223
4.3.2.4.2.1 Deictic^Entity Concatenation.....	223
4.3.2.4.2.2 Deictic^Numerative Concatenation.....	224
4.3.2.4.2.3 Entity^Epithet Concatenation	224
4.3.2.5 Verbal Group Integration.....	225
4.3.2.6 Copular Phrase Integration.....	227

4.3.3 Other Concatenative Processes	228
4.3.3.1 h-Provection.....	228
4.3.3.1.1 Nominal Group Integration.....	229
4.3.3.1.1.1 Deictic^Entity Concatenation.....	229
4.3.3.1.1.2 Numerative^Entity Concatenation.....	230
4.3.3.1.1.3 Deictic^Numerative Concatenation.....	231
4.3.3.1.2 Prepositional Phrase Integration	231
4.3.3.1.3 Verbal Group Integration.....	232
4.3.3.2 t-Provection.....	233
4.3.3.2.1 Deictic^Entity Concatenation	233
4.3.3.2.2 Deictic^Numerative Concatenation	234
4.4 Summary	234

PART III PHYLOGENESIS

CHAPTER 5 TOWARDS A DARWINIAN FRAMEWORK FOR LINGUISTICS: LANGUAGE AS A COMPLEX ADAPTIVE SYSTEM

5.0 Introduction	237
5.1 Orientation.....	238
5.2 Language As A Gene Replication Strategy	243
5.3 Universal Darwinism	246
5.3.1 Somatic Selection	247
5.3.1.1 Lower Level Processes.....	248
5.3.1.2 Emergent Higher Level Processes.....	249
5.3.2 Cultural Selection.....	253
5.4 Meme Systems.....	255
5.4.1 Unit Of Selection	256
5.4.2 Replication, Variation And Selection.....	257
5.4.3 Genotype/Phenotype Distinction.....	258
5.4.4 Embryology And Reproductive Cycles.....	260
5.4.5 Genetic, Somatic And Cultural Evolution	261
5.5 Language As Meme System	262
5.5.1 Unit Of Selection	262
5.5.2 Replication, Variation And Selection.....	263
5.5.3 Genotype/Phenotype Distinction.....	264
5.5.4 Embryology And Reproductive Cycles.....	267
5.5.5 Genetic, Somatic And Linguistic Evolution	268
5.6 Linguistic Meme Evolution	268
5.6.1 Linguistic Memes As Information Content-Medium Correlations	269
5.6.2 Logogenesis, Ontogenesis And Phylogenesis	271
5.6.2.1 Logogenesis.....	272
5.6.2.2 Ontogenesis	273
5.6.3 Microevolution: Phonology: Articulation.....	275
5.6.3.1 Initial Conditions: The Phylogenetic Self-Organisation Of Articulatory Feature Systems	276
5.6.3.1.1 The Provision Of Copying-Fidelity And Heredity By Consistent Sensory-Motor Correlations	276
5.6.3.1.2 Articulatory Features As Categorial Attractors In Neuronal Populations	278

5.6.3.2 The Generation Of Articulatory Variation	281
5.6.3.2.1 Generation And Variation (Revisited)	281
5.6.3.2.2 Articulatory Mutation Involving Retiming.....	282
5.6.3.2.3 Motor Generated Variation (Transmission)	287
5.6.3.2.4 Sensory Generated Variation (Reception)	289
5.6.3.3 The Selection Of Articulatory Variation	291
5.6.3.3.1 Selection, Selection Pressure And Adaptation.....	291
5.6.3.3.2 Selection Within The Language User As A Self-Contained Whole.....	294
5.6.3.3.2.1 Selection Pressure From The Expression Plane	295
5.6.3.3.2.1.1 Selection Pressure From Other Articulatory Repertoires	295
5.6.3.3.2.1.2 Selection Pressure From Other Phonological Repertoires: Rhythm And Intonation	300
5.6.3.3.2.2 Selection Pressure From The Content Plane: Lexicogrammar And Discourse	303
5.6.3.3.3 Selection Within The Language User As A Dependent Part Of A Community	306
5.6.3.3.3.1 Selection Pressure From The Hierarchy Of Semiotic Contexts: Register, Genre And Ideology.....	307
5.6.3.3.3.2 Selection Pressure From The Lectal Hierarchy	309
5.6.3.4 The Founder Effect And Random Drift	311
5.6.3.5 Articulatory Evolvability	313
5.6.4 Macroevolution.....	316
5.7 Summary	319

PART IV CONCLUSION

CHAPTER 6 IMPLICATIONS

6.0 Introduction	322
6.1 Theoretical Implications	322
6.1.1 Quantum Fields: Probability Wavicles	323
6.1.1.1 Clause Fields	324
6.1.1.1.1 Experiential And Interpersonal State Cycles.....	324
6.1.1.1.2 Metafunctional Preponderance	326
6.1.1.1.3 Textual Phases.....	326
6.1.1.2 Group Fields	331
6.1.2 Vectorfields: Phoricity	337
6.1.2.1 Clause Fields	337
6.1.2.2 Group Fields	338
6.1.3 Charged Integrative Fields	341
6.1.4 Morphogenetic Fields	344
6.2 Metatheoretical Implications	348
6.2.1 Discourse Meme Systems.....	349
6.2.2 Microevolution.....	350
6.2.2.1 Initial Conditions: Phylogenetic Self-Organisation	350
6.2.2.2 The Generation Of Variation	351
6.2.2.3 The Selection Of Adaptive Variation	353
6.2.2.4 The Founder Effect And Random Drift	355

6.2.2.5 Evolvability	356
6.2.3 Macroevolution	357
6.2.4 Comparison With Other Meme Models.....	358
6.2.5 Conclusions	361

APPENDICES

APPENDIX 1 CREATING ARTICULATORY TEXTURE IN AUSTRALIAN ENGLISH

A1.0 Introduction	367
A1.1 Decontextualised Articulatory Potential	368
A1.2 In The Syllable (Core).....	375
A1.2.1 Structural Phases.....	375
A1.2.2 Systemic States.....	377
A1.2.2.1 Systems At The Onset	378
A1.2.2.1.1 Systems At The Onset Head	378
A1.2.2.1.2 Systems At The Inset (Onset Modifier)	382
A1.2.2.1.3 Constraints On Onset Modification.....	383
A1.2.2.1.4 Systems At The Onset Complex: Phonation.....	388
A1.2.2.2 Systems At The Rhyme.....	388
A1.2.2.2.1 Systems At The Peak (Rhyme Head).....	389
A1.2.2.2.1.1 Distinct Short Vowels	391
A1.2.2.2.1.2 Phylogenetic Contributions To The Deformation Of Short Vowel Topology In AuE.....	397
A1.2.2.2.1.3 Obscure Short Vowels.....	399
A1.2.2.2.2 Systems At The Offset (Rhyme Modifier).....	403
A1.2.2.2.3 Constraints On Rhyme Modification	406
A1.2.2.2.4 Phylogenetic Contributions To Vowel Reduction In AuE	413
A1.3 Around The Syllable (Periphery)	415
A1.3.1 Syllable–Morpheme Correlation.....	416
A1.3.1.1 Syntagmatic Phases	416
A1.3.1.2 Systemic States.....	417
A1.3.1.2.1 Systems At The Outset.....	417
A1.3.1.2.2 Systems At The Coda	420
A1.3.1.2.2.1 Systems At The Head.....	421
A1.3.1.2.2.2 Constraints On The Coda Head.....	424
A1.3.1.2.2.2.1 After Short Vocalic Nuclei	424
A1.3.1.2.2.2.1.1 After Simple Rhymes	424
A1.3.1.2.2.2.1.2 After Complex Rhymes	426
A1.3.1.2.2.2.1.2.1 After The Nasal Offset /n/	426
A1.3.1.2.2.2.1.2.2 After The Lateral Offset /l/	427
A1.3.1.2.2.2.1.2.3 After The Voiceless Offset /s/	428
A1.3.1.2.2.2.2 After Long Vocalic Nuclei	429
A1.3.1.2.2.3 Systems At The Coda Modifier.....	431
A1.3.1.2.2.4 Constraints On The Coda Modifier	433
A1.3.1.2.2.4.1 After Short Vocalic Nuclei	433
A1.3.1.2.2.4.2 After Long Vocalic Nuclei	436
A1.3.2 Syllable–Word Correlation.....	440
A1.3.2.1 Syntagmatic Phases	441
A1.3.2.2 Systemic States.....	442
A1.3.2.2.1 Systems And Constraints At The Inflectional Cauda.....	442
A1.3.2.2.2 Systems And Constraints At The Derivational Cauda	451

A1.3.2.2.3 Fossils	455
A1.3.3 Cohesion And Word Morphogenesis	456
A1.3.3.1 Syllable Concatenation Constraints	456
A1.3.3.2 Incongruence	460
A1.3.3.2.1 Loss And Maintenance Of Demarcation	461
A1.3.3.2.2 Morpheme Integration.....	465
A1.4 Practical Applications	469
A1.4.1 Palæolinguistics	469
A1.4.2 Speech Recognition	471
A1.5 Summary	473
 APPENDIX 2 AUSTRALIAN ENGLISH SYLLABLE STRUCTURE EXEMPLARS.....	477

BIBLIOGRAPHY

Linguistic	490
Extralinguistic.....	499