## Contents

- **List of figures**
- **List of tables**
- **Preface**
- **Acknowledgements**

### 1 The study of language change

1.1. Introduction
1.2. Languages change all the time and in all aspects
1.3. Languages also keep old features around a long time
1.4. Evidence for language change
1.5. Why do languages change?
1.6. Is language change good or bad?
1.7. Why study language change?

### 2 Sound change

2.1. What is sound change?
2.2. Assimilation
   - 2.2.1. Assimilation as gestural retiming
   - 2.2.2. Anticipatory assimilation
   - 2.2.3. Palatalization of velars
   - 2.2.4. I-umlaut as palatalization
   - 2.2.5. Palatalization in early Romance
   - 2.2.6. Assimilation of point of articulation
2.3. Perseverative or carry-over assimilation
2.4. Conclusions regarding assimilation
2.5. Reduction or lenition
   - 2.5.1. Lenition
   - 2.5.2. Reduction towards zero
   - 2.5.3. Loss of oral articulation
   - 2.5.4. Voicing
   - 2.5.5. Degemination
   - 2.5.6. Chain shifts: degemination, voicing, spirantization
   - 2.5.7. Lenition as sonorization
   - 2.5.8. Consonant cluster reduction
   - 2.5.9. Contexts in which reduction occurs
   - 2.5.10. Vowel reduction and deletion
2.6. Reduction and retiming acting together
| 2.7. Ease of articulation and cross-linguistic similarities in sound changes | 37 |
| 2.8. Lexical diffusion | 39 |
| 2.9. Special reduction | 42 |
| 2.10. Fortition and insertion | 43 |
| 2.11. Causes of sound change | 46 |

3 Sound change and phonological change in a wider perspective 49
3.1. Introduction 49
3.2. Phonologization 49
3.3. Changes in phoneme inventories 50
  3.3.1. No change in phonemes 50
  3.3.2. Creation of a new phoneme 50
  3.3.3. Loss of a phoneme 51
3.4. Vowel shifts 52
  3.4.1. The Great Vowel Shift 52
  3.4.2. The Northern Cities Vowel Shift 55
  3.4.3. General principles of vowel shifts 57
3.5. The origins and evolution of stress accent 59
  3.5.1. Where does stress accent come from? 60
  3.5.2. Typical changes in stress-accent systems 61
3.6. Development of tone and tone changes 63
  3.6.1. Tonogenesis: how tones arise from consonants 63
  3.6.2. Tone changes 65
  3.6.3. Intonation interacting with tone 67
  3.6.4. Tone reduction 68
3.7. Language-specific changes 68
  3.7.1. Dissimilation 69
  3.7.2. Metathesis 70
  3.7.3. Change with phonotactic motivation 72
3.8. Causes of sound change and phonological change 73

4 The interaction of sound change with grammar 75
4.1. How sound change affects morphology 75
4.2. Morphologization 76
4.3. Alternations in morphosyntactic constructions 79
4.4. Rule inversion 81
4.5. Rule telescoping 82
4.6. The development of exceptions 83
4.7. Can sound change be grammatically conditioned? 85
  4.7.1. Changes in morphological context 85
  4.7.2. Changes at word boundaries 87
  4.7.3. Alternating environments within words 89
  4.7.4. Conclusion: sound change affected by grammar 91
4.8. Conclusion 92

5 Analogical change 93
5.1. Analogy 93
5.2. Proportional analogy 93
5.3. Analogical leveling 94
5.4. Productivity 97
5.5. Trends in analogical change: the basic–derived relation 99
5.5.1. The basic form of the paradigm 99
5.5.2. Under-analysis and the creation of zeroes 102
5.6. Change within more related categories 105
5.7. Extension 106
5.8. The development of suppletion 109
5.9. Morphological reanalysis 112
5.10. Parallels between analogical change and child language 113
5.11. Conclusion 114

6 Grammaticalization: processes and mechanisms 117
6.1. Introduction 117
6.2. Case study: will in English 117
6.3. Romance inflectional futures 120
6.4. Future markers from movement verbs 122
6.5. Some generalizations concerning futures and grammaticalization 122
6.6. Chunking and phonetic reduction 124
6.7. Specialization or loss of paradigmatic contrast 125
6.8. Category expansion 127
6.9. Decategorialization 129
6.10. Fixing of position 132
6.11. Meaning change: bleaching or generalization 132
6.12. Semantic change by adding meaning from the context 133
6.13. Metaphor 135
6.14. Other general properties of grammaticalization 136

7 Common paths of grammaticalization 139
7.1. Introduction 139
7.2. Tense and aspect 140
7.2.1. The past/perfective path 141
7.2.2. The present/imperfective path 144
7.2.3. The future path 145
7.2.4. Derivational aspect 146
7.3. Grams indicating modality and mood 147
7.4. Personal pronouns 150
7.4.1. Third person pronouns 150
7.4.2. Second person pronouns 150
7.4.3. First person pronouns 151
7.5. Person–number agreement 152
7.6. The development of definite and indefinite articles 153
7.7. The sources of adpositions 154
7.8. The development of case 156
7.9. Discourse markers and subjectification 156
# Syntactic change: the development and change of constructions

8.1. Introduction

8.2. From paratactic to syntactic
   8.2.1. Topics become subjects
   8.2.2. Two clauses into one
   8.2.3. Reorganization within the clause: how ergatives develop

8.3. Development and change in constructions
   8.3.1. How constructions begin and expand
   8.3.2. Layering and competition between constructions
   8.3.3. How constructions are lost

8.4. Word-order change: OV and VO languages
   8.4.1. Synchronic word-order correlations
   8.4.2. The diachronic source of word-order correlations

8.5. Pragmatic reasons for changing the order of subject, verb, and object: drift in Indo-European languages

8.6. Conclusion: the life cycle of constructions

# Lexical change: how languages get new words and how words change their meaning

9.1. Introduction

9.2. Where do new words come from?
   9.2.1. Internal resources: compounding and derivation
   9.2.2. Borrowing words from other languages
   9.2.3. Loanword adaptation

9.3. How do words change their meaning?
   9.3.1. Prototype categories
   9.3.2. Mechanisms of semantic change
   9.3.3. Change in non-denotational meaning
   9.3.4. Onomasiological change: words in competition

9.4. General tendencies in lexical semantic change

9.5. Changes in derivationally related forms

9.6. What happens to old words, morphemes, phrases?

9.7. Conclusion

# Comparison, reconstruction, and typology

10.1. Family relations among languages

10.2. The comparative method
   10.2.1. Cognate sets
   10.2.2. The rate of lexical replacement
   10.2.3. The phonological form of cognates
   10.2.4. When sound change is not regular
   10.2.5. Proto-phonemes are abstract place-holders

10.3. Typological evidence: PIE obstruents

10.4. Internal reconstruction