Table of contents

Preface ix

CHAPTER 1
Key concepts, framework, and clarifications 1
1. Definition of key concepts 1
   1.1 Definitions of “implicit” 3
   1.2 Automaticity 5
   1.3 Proficiency, accuracy, fluency, and other measures 6
2. Clarifications about the framework 9
   2.1 Serendipity or the birth of the application of the declarative/procedural distinction to language representation and processing 9
   2.2 Declarative/procedural models 12
   2.3 Why vocabulary and lexicon differ 16
   2.4 Degree of availability of procedural memory 22
   2.5 There is no continuum from automatic to controlled processing 26
   2.6 The content of metalinguistic knowledge and implicit competence 28
   2.7 Interference, variability, and other indicators of explicitness 30
   2.8 Macro-anatomical and micro-anatomical levels of representation 32
3. Conclusion 34

CHAPTER 2
Consciousness in L2 appropriation 37
1. Only specific types of representations can become conscious – others cannot 41
   1.1 Only a subset of explicit representations is active at any given time 45
   1.2 The threshold of consciousness 45
   1.3 Consciousness of input and output but not of implicit processes in between 47
   1.4 Consciousness and working memory 49
2. Perception, attention and noticing  50
   2.1 Attention in second language acquisition and learning  51
3. Explicit input is not implicit intake  53
   3.1 The double implicitness of intake  56
4. Neurobiological and neurochemical bases of consciousness  58
5. Conclusion  59

CHAPTER 3
The disintegration of the explicit/implicit interface debate
(or interface newspeak?)  61
1. The meaning of interface  61
   1.1 The premises: Learning and acquisition are distinct;
       explicit knowledge is not transformed into
       implicit competence  64
2. The so-called “dynamic interface” is no interface  65
   2.1 No interface but switching from one to the other  68
3. Consciousness cannot possibly be the interface  71
4. An indirect influence is not an interface  76
5. None of the proposed characterizations are
   compatible with an interface  79
6. Illusory and untenable would-be evidence  82
   6.1 From seeds to trees  83
   6.2 Tuning  84
   6.3 Proceduralization  85
   6.4 Ambiguities  87
   6.5 Inapplicable analogies and metaphors  88
7. Description of explicit phenomena contributing
   to metalinguistic knowledge  93
8. Why adults should need explicit metalinguistic knowledge  96
9. Indirect influence of metalinguistic knowledge
   on acquisition not denied  97
10. How explicit knowledge benefits implicit acquisition – indirectly  99
11. The contexts of learning and acquisition  101
12. Conclusion  103

CHAPTER 4
Ultimate attainment in L2 proficiency  109
1. Ultimate attainment in L1 and L2  110
2. The optimal period  113
CHAPTER 5

The pervasive relevance of the distinction between implicit competence and explicit knowledge

1. Implications of the declarative/procedural distinction for laterality studies 137
2. Implications of the declarative/procedural distinction for imaging studies 140
   2.1 Words of caution about the interpretation of neuroimaging studies 141
   2.2 Consequences of not distinguishing word studies from sentence studies 143
   2.3 The nature of the additional cortical resources reported to be recruited for L2 151
3. Procedural and declarative language switching and mixing 155
   3.1 Types of switches and consequences 155
   3.2 Switching data from neuroimaging studies 157
   3.3 Switching data from clinical studies 160
   3.4 Conscious and automatic control mechanisms in language switching 163
4. Data from clinical studies 169
   4.1 Data from bilingual neuropsychiatric disorders 169
   4.2 Data from bilingual aphasia 171
   4.3 Data from other cerebral accidents/conditions 174