

## Second Language Writing Systems

## **SECOND LANGUAGE ACQUISITION**

**Series Editor:** Professor David Singleton, *Trinity College, Dublin, Ireland*

This new series will bring together titles dealing with a variety of aspects of language acquisition and processing in situations where a language or languages other than the native language is involved. Second language will thus be interpreted in its broadest possible sense. The volumes included in the series will all in their different ways offer, on the one hand, exposition and discussion of empirical findings and, on the other, some degree of theoretical reflection. In this latter connection, no particular theoretical stance will be privileged in the series; nor will any relevant perspective – sociolinguistic, psycholinguistic, neurolinguistic, etc. – be deemed out of place. The intended readership of the series will be final-year undergraduates working on second language acquisition projects, postgraduate students involved in second language acquisition research, and researchers and teachers in general whose interests include a second language acquisition component.

### **Other Books in the Series**

Portraits of the L2 User

*Vivian Cook (ed.)*

Learning to Request in a Second Language: A Study of Child Interlanguage

Pragmatics

*Machiko Achiba*

Effects of Second Language on the First

*Vivian Cook (ed.)*

Age and the Acquisition of English as a Foreign Language

*Maria del Pilar García Mayo and Maria Luisa García Lecumberri (eds)*

Fossilization in Adult Second Language Acquisition

*ZhaoHong Han*

Silence in Second Language Learning: A Psychoanalytic Reading

*Colette A. Granger*

Age, Accent and Experience in Second Language Acquisition

*Alene Moyer*

Studying Speaking to Inform Second Language Learning

*Diana Boxer and Andrew D. Cohen (eds)*

Language Acquisition: The Age Factor (2nd Edition)

*David Singleton and Lisa Ryan*

Focus on French as a Foreign Language: Multidisciplinary Approaches

*Jean-Marc Dewaele (ed.)*

### **Other books of Interest**

Cross-linguistic Influence in Third Language Acquisition

*J. Cenoz, B. Huftisen and U. Jessner (eds)*

The Native Speaker: Myth and Reality

*Alan Davies*

Continua of Biliteracy: An Ecological Framework for Educational Policy, Research, and Practice in Multilingual Settings

*Nancy H. Hornberger (ed.)*

**For more details of these or any other of our publications, please contact:**  
**Multilingual Matters, Frankfurt Lodge, Clevedon Hall,**  
**Victoria Road, Clevedon, BS21 7HH, England**  
**<http://www.multilingual-matters.com>**

**SECOND LANGUAGE ACQUISITION 11**

Series Editor: David Singleton, *Trinity College, Dublin, Ireland*

# **Second Language Writing Systems**

Edited by

Vivian Cook and Benedetta Bassetti

**MULTILINGUAL MATTERS LTD**

Clevedon • Buffalo • Toronto

**Library of Congress Cataloging in Publication Data**

Second Language Writing Systems/Edited by Vivian Cook and Benedetta Bassetti, 1st ed.

Second Language Acquisition: 11

Includes index.

1. Second language acquisition. 2. Written communication—Study and teaching.

3. Language and languages—Orthography and spelling—Study and teaching.

I. Cook, V.J. (Vivian James). II. Bassetti, Benedetta. III. Second language acquisition (Buffalo, N.Y.); 11.

P118.2.S438 2005

418—dc22

2004022669

**British Library Cataloguing in Publication Data**

A catalogue entry for this book is available from the British Library.

ISBN 1-85359-794-5 (hbk)

ISBN 1-85359-793-7 (pbk)

**Multilingual Matters Ltd**

*UK:* Frankfurt Lodge, Clevedon Hall, Victoria Road, Clevedon BS21 7HH.

*USA:* UTP, 2250 Military Road, Tonawanda, NY 14150, USA.

*Canada:* UTP, 5201 Dufferin Street, North York, Ontario M3H 5T8, Canada.

Copyright © 2005 Vivian Cook, Benedetta Bassetti and the authors of individual chapters.

All rights reserved. No part of this work may be reproduced in any form or by any means without permission in writing from the publisher.

Typeset by Techset Ltd.

Printed and bound in Great Britain by the Cromwell Press Ltd.

# Contents

Acknowledgements . . . . .	vii
----------------------------	-----

Contributors . . . . .	viii
------------------------	------

1 An Introduction to Researching Second Language Writing Systems <i>Vivian Cook and Benedetta Bassetti</i> . . . . .	1
---	---

## Part 1: Writing a Second Language Writing System

2 L2 Japanese Kanji Memory and Retrieval: An Experiment on the Tip-of-the-pen (TOP) Phenomenon <i>Nobuko Chikamatsu</i> . . . . .	71
3 The Role of the Phonological Strategy in Learning to Spell in English as a Second Language <i>Ans Van Berkel</i> . . . . .	97
4 Orthographic Knowledge and First Language Reading: Evidence from Single Word Dictation from Chinese and Malaysian Users of English as a Foreign Language <i>Mick Randall</i> . . . . .	122
5 Learner Corpora and Handwriting <i>Harold Somers</i> . . . . .	147
6 A Corpus-based Study of Spelling Errors of Japanese EFL Writers with Reference to Errors Occurring in Word-initial and Word-final Positions <i>Takeshi Okada</i> . . . . .	164
7 Spelling and Pronunciation in Migrant Children: The Case of Italian-Swiss German Bilinguals <i>Stephan Schmid</i> . . . . .	184

## Part 2: Reading a Second Language Writing System

8 Are the L1 and L2 Word Reading Processes Affected More by Writing System or Instruction? <i>Phil Scholfield and Gloria Shu-Mei Chwo</i> . . . . .	215
9 Effects of Second Language Reading Proficiency and First Language Orthography on Second Language Word Recognition <i>Nobuhiko Akamatsu</i> . . . . .	238

10	Bilingual Interactive Activation Models of Word Recognition in a Second Language <i>Walter J.B. Van Heuven</i> . . . . .	260
11	The Effect of L1 Reading Processes on L2: A Crosslinguistic Comparison of Italian and Japanese Users of English <i>Miho Sasaki</i> . . . . .	289

### **Part 3: Awareness of Language and Second Language Writing Systems**

12	Learning to Read Across Writing Systems: Transfer, Metalinguistic Awareness, and Second-language Reading Development <i>Keiko Koda</i> . . . . .	311
13	Effects of Writing Systems on Second Language Awareness: Word Awareness in English Learners of Chinese as a Foreign Language <i>Benedetta Bassetti</i> . . . . .	335
14	Phonological Awareness and Spelling Skill Development in Bilingual Bilingual Children <i>Lily H.-S. Lau and Susan J. Rickard Liow</i> . . . . .	357

### **Part 4: Teaching a Second Language Writing System**

15	Different and Differing Views on Conceptualising Writing System Research and Education <i>Therese Dufresne and Diana Masny</i> . . . . .	375
16	Second Language Writing Systems: Minority Languages and Reluctant Readers <i>Tina Hickey</i> . . . . .	398
17	Written Language and Foreign Language Teaching <i>Vivian Cook</i> . . . . .	424

	Index . . . . .	443
--	-----------------	-----

## **Acknowledgements**

We are grateful to the authors who gave their time and support to this project and produced such interesting and diverse contributions. We hope they will be as pleased with the result as we are. We are also grateful to David Block and Iggy Roca for comments on various parts of this book, and to Charmian Kenner for permission to reproduce a figure from 'Biliteracy in a monolingual school system? English and Gujarati in South London', in *Language, Culture and Curriculum*, 13. The editors would also like to thank each other as this project could never have emerged from one of us alone.

Benedetta would like to thank her parents, Dr Francesco and Mrs Orietta Bassetti, for their constant psychological support and for sending tons of Italian chocolate from across the Channel.

Finally the editors would not have managed without the musical works of Miles Davis, Enrico Pieranunzi, Domenico Scarlatti, Padre Antonio Soler, Antonio Vivaldi and Cassandra Wilson. Fortunately the editors' views on writing systems were more harmonious than their musical tastes.

## ***Contributors***

**Nobuhiko Akamatsu** is a psycholinguist teaching at Doshisha University, Japan. He holds a Ph.D. in Education from the Ontario Institute for Studies in Education (OISE), Canada. His current academic interests include first language effects on second/foreign language reading, automatization of word-recognition processing, and the bilingual lexicon.

Department of English, Doshisha University, Imadegawa-Karasuma Kamigyo-ku, Kyoto 602-8580, Japan: nakamats@mail.doshisha.ac.jp

**Benedetta Bassetti** is completing her Ph.D. in Applied Linguistics at the University of Essex, UK, on reading processes in learners of Chinese as L2. She has presented her research at various international conferences. Her interests are: second language acquisition, second language writing systems and bilingual cognition.

benedetta@onetel.net.uk

**Nobuko Chikamatsu** teaches Japanese and Applied Linguistics in the Department of Modern Languages, DePaul University, USA. She holds a Ph.D. in Linguistics from the University of Illinois at Urbana-Champaign. Her research interests include second language word recognition, reading and writing.

DePaul University, Department of Modern Languages, 802 West Belden Ave., Chicago, IL 60614, USA: nchikama@condor.depaul.edu

**Gloria Shu-Mei Chwo** is currently completing her Ph.D. in Applied Linguistics at the University of Essex, UK. She worked at different levels in the education system of Taiwan. Her main interests are in word recognition in Chinese and English and the teaching of reading, especially in her home country, Taiwan.

Department of Language and Linguistics, University of Essex, Wivenhoe Park, Colchester, CO4 3SQ, UK: cho2.cheng@msa.hinet.net

**Vivian Cook** works at Essex University, UK. He is chiefly known for developing the multi-competence view of second language learning. He was founder and first President of the European Second Language Association. He has been involved in researching the English writing system for some time.



Department of Language and Linguistics, University of Essex,  
Wivenhoe Park, Colchester, CO4 3SQ, UK: [vcCook@essex.ac.uk](mailto:vcCook@essex.ac.uk)

**Therese Dufresne**, Ph.D., has a research affiliation with the University of Ottawa. She is currently a school principal and educational researcher in the Sir Wilfrid Laurier School Board, Rosemère, QC, Canada. Her broad research areas are language, learning and second language education, specifically language and literacy research and the sustainability of early interventions in promoting literacy.

Principal, Terry Fox School, 900 Des Lacasse, Laval, QC, Canada, H7K 3V9; 615 du Côte du Rhône, Rosemère, QC, Canada, J7A 4N6, [tdufresne@swlauriersb.qc.ca](mailto:tdufresne@swlauriersb.qc.ca)

**Tina Hickey** is a researcher in the Psycholinguistics Department at ITÉ, the Linguistics Institute of Ireland. Her current research interests are in L2 reading, first and second language acquisition, immersion education, and bilingualism.

Department of Psychology, Belfield, University College Dublin, Dublin 4, Ireland: [tina.hickey@ucd.ie](mailto:tina.hickey@ucd.ie)

**Keiko Koda** is Associate Professor in the Department of Modern Languages at Carnegie Mellon University. Her research interests include cross-language transfer of reading skills, second-language lexical learning and processing, and biliteracy development. She recently completed a monograph, *Insights into Second Language Reading*, exploring ways to apply cross-linguistic analyses to current, research-based, conceptions of monolingual reading. She also is involved in on-going projects on cross-linguistic variations in reading acquisition, which will be published in a volume, *Learning to Read across Language* (2006).

[kkoda@andrew.cmu.edu](mailto:kkoda@andrew.cmu.edu)

**Lily Lau**, recently graduated with a Masters in Applied Psychology from the National University of Singapore. She now works at Kids in Discovery, a centre which specialises in intervention programmes for children with mild-to-moderate learning difficulties. Her main research interest is on optimising the acquisition of bilingual literacy skills.

Kids in Discovery, 6 Fort Canning Road, YWCA 8th Floor, Singapore 179494: [hsl123@hotmail.com](mailto:hsl123@hotmail.com)

**Diana Masny**, Ph.D., works in the Faculty of Education at the University of Ottawa, broadly in the areas of language, literacy, culture and second language education. Her current interests include language and literacy research and minority language education.

145, JJ Lussier, Ottawa, ON, K1N 6N5, Canada: Diana.Masny@uottawa.ca; website: <http://aix1.uottawa.ca/~dmasny/>

**Takeshi Okada** works at Tohoku University, Japan. After studying conjugational patterns of verbs across text categories in large corpora, he worked at Birkbeck College, University of London, on the corpus analysis of spelling errors generated by Japanese EFL learners. His current interest is using corpus-based research to improve the performance of vocabulary acquisition in computer-assisted language learning (CALL) systems.

2-10-18 Sakurada-higashi, Yamagata City, Yamagata, Japan 990-2323: ty-okada@ma.catvy.ne.jp

**Mick Randall** is currently a visiting Senior Fellow at the National Institute of Education in Singapore. In addition to working with Malaysian and Chinese teachers, he has worked extensively in the Middle East and completed his doctoral research into Word Recognition in English and Arabic.

Institute of Education, British University of Dubai, P.O. Box 502216, Knowledge Village, Dubai, United Arab Emirates: mick.randall@buid.ac.ae

**Susan Rickard Liow** is an Associate Professor of psychology at the National University of Singapore. Her research interests include the development of reading and spelling skills in bilingual children, and models of skilled reading in English, Malay, and Mandarin.

Department of Social Work and Psychology, National University of Singapore, 10 Kent Ridge Crescent, Singapore 119260: swksusan@nus.edu.sg

**Miho Sasaki** is completing her Ph.D. in second language acquisition at the University of Essex, UK, and now working at Ibaraki University, Japan. Her current interests are L1 and L2 reading processes, acquisition of writing systems, and bilingual cognition, focusing on English and Japanese. Her research has been presented at various international conferences.

mihosasaki@yahoo.co.uk

**Stephan Schmid** works at the Phonetics Laboratory of the University of Zurich, Switzerland. He obtained a Ph.D. in Italian linguistics and spent two years as a research fellow at the University of Padua, Italy. His current interests deal with sociolinguistics, second language acquisition, and the phonetics and phonology of Italian (and Italian dialects).

Phonetisches Laboratorium der Universität Zürich, Freiestrasse 36,  
CH-0832 Zürich, Switzerland: schmidst@pholab.unizh.ch

**Phil Scholfield** is a senior lecturer in applied linguistics at the University of Essex, UK. His main research interest is vocabulary in English as a foreign language, including learners' dictionaries, vocabulary teaching methods and the strategies learners use when learning vocabulary and handling it in the process of speaking, writing and reading.

Department of Language and Linguistics, University of Essex,  
Wivenhoe Park, Colchester, CO4 3SQ, UK: scholp@essex.ac.uk

**Harold Somers** is Professor of Language Engineering at the University of Manchester, UK. Although his main field of research has been Machine Translation, he is also interested in corpus linguistics and its application to various areas of Computational Linguistics including CALL and SLA, as well as resources for minority languages, and in language engineering applications to assistive computing.

Manchester School of Informatics, University of Manchester, P.O. Box  
88, M60 1QD, UK: harold.somers@manchester.ac.uk

**Ans Van Berkel** is an applied linguist working at Free University Amsterdam, the Netherlands. After studying French and Applied Linguistics she worked in a teacher training college. Her current interests are dyslexia and L2 learning, and Writing Systems.

Vrije Universiteit, Faculteit der Letteren, De Boelelaan 1105, NL 1081  
HV Amsterdam, Holland: aj.van.berkel@let.vu.nl

**Walter Van Heuven** is a postdoctoral researcher working at the Radboud University of Nijmegen, the Netherlands, where he obtained his Ph.D. on visual word recognition in monolingual and bilingual readers. His current research project focuses on the wiring of the language network in the bilingual brain.

Nijmegen Institute for Cognition and Information (NICI), Radboud University Nijmegen, PO Box 9104, 6500 HE Nijmegen, the Netherlands:  
w.vanheuve@nici.ru.nl



## *Chapter 1*

# ***An Introduction to Researching Second Language Writing Systems***

VIVIAN COOK and BENEDETTA BASSETTI

Over the past 10 years, literacy in the second language has emerged as a significant topic of enquiry in research into language processes and educational policy. This book provides an overview of the emerging field of Second Language Writing Systems (L2WS) research, written by researchers with a wide range of interests, languages and backgrounds, who give a varied picture of how second language reading and writing relates to characteristics of writing systems (WSs), and who address fundamental questions about the relationships between bilingualism, biliteracy and writing systems. It brings together different disciplines with their own theoretical and methodological insights – cognitive, linguistic, educational and social factors of reading – and it contains both research reports and theoretical papers. It will interest a variety of readers in different areas of psychology, education, linguistics and second language acquisition research.

### **What this Book is About**

Vast numbers of people all over the world are using or learning a second language writing system. According to the British Council (1999), a billion people are learning English as a Second Language (ESL), and perhaps as many are using it for science, business and travel. Yet English is only one of the second languages in widespread use, although undoubtedly the largest. For many of these people – whether students, scientists or computer users browsing the internet – the ability to read and write the second language is the most important skill.

The learning of a L2 writing system is in a sense distinct from learning the language and is by no means an easy task in itself, say for Chinese people learning to read and write English, or for the reverse case of English people learning to read and write Chinese. Italian learners of English still face the problem to some extent since, even if both English

and Italian are written with the Roman alphabet, they are read and spelled in different ways. When L2 learners become fully-fledged L2WS users, they still differ from native users of the target writing system. From one perspective, they are less efficient than first language writing system (L1WS) users; they are slower at reading the second language than people who read only one writing system and often have problems with comprehension and memorising due to inefficient decoding. From a more positive perspective, they are simply different from L1WS reader-writers of the target writing system, with different reading and writing processes that result from the interaction of previously developed reading and writing processes with the characteristics of the new writing system. Not only do L2 researchers and teachers need to bear in mind these differences between L1 and L2 users of writing systems but so do those working in the psycholinguistics and neurolinguistics of reading and writing.

Research on L2 writing systems is at present scattered across different research areas within applied linguistics, psycholinguistics and other disciplines. This book aims to present this interdisciplinary research area to students, teachers and researchers in different fields of second language acquisition or writing system research. This introduction sketches the common background and terminology of writing systems research in general, concentrating on the cross-linguistic aspects, as a basis for outlining some of the previous achievements of L2WS research. It provides an introduction to the whole of this field, for those who are unaware of its scope and achievements, as well as to the papers in this volume. It is intended partly as a reference source that readers can go back to while reading the following chapters.

## **The Nature of Writing Systems**

Before looking at how L2WSs work, we first need to establish the basis for the concept of writing system itself. This section provides an overall view of writing systems, together with some of the crucial terms. First we outline the major types of writing system in terms of the meaning-based versus sound-based division, then the variations in sound-based systems, particularly in terms of phonological 'transparency'. Next we outline some other variable characteristics of writing systems relevant to their acquisition and use. More detailed accounts of writing systems can be found in Coulmas (1989, 2003), Cook (2004a) and Sampson (1985).

### **What is a writing system?**

The term 'writing system' has two distinct meanings, one attached to general ideas of writing, one to specific languages. In the first sense, a writing system is 'a set of visible or tactile signs used to represent units

of language in a systematic way' (Coulmas, 1999: 560). The various types of writing system are primarily distinguished by the type of linguistic unit represented, whether consonants (consonantal WSs), morphemes (morphemic WSs), phonemes (alphabetic WSs) or syllables (syllabic writing systems).

In this general sense 'writing system' is related to the terms 'script' and 'orthography'. A 'script' is 'the graphic form of the units of a writing system' (Coulmas, 2003: 35), that is to say, its actual physical form – letters, characters, or whatever. For instance, the Roman alphabet is a script, it is one of the actual physical forms of alphabetic writing systems. A particular type of writing system may in fact employ very different scripts. Alphabetic writing systems take many forms, say, the scripts used in Devanagari, Greek, Cyrillic or Roman alphabets. 'Orthography' on the other hand is the set of rules for using a script in a particular language (e.g. the English or Italian orthography for the Roman alphabet), such as symbol–sound correspondences, capitalisation, hyphenation, punctuation, etc. For instance, the Roman alphabet letter <j> is read as /dʒ/ in the English orthography and as /j/ in the Italian orthography (for native words). The same script may instantiate orthographic rules of different languages: the Roman alphabet is used in different ways in the English and Italian orthographies.

The second sense of 'writing system' overlaps with orthography by referring to the set of rules employed in a particular language for spelling, punctuation etc, namely 'the English writing system', 'the Japanese writing system', and so on. 'In this sense a writing system is language specific' (Coulmas, 1999: 560). The writing system for a language may include more than one script or general writing system type, as in the Japanese combination of kanji characters, kana syllabic symbols and Roman alphabet script. While Japanese is often considered the classic example of a mixed writing system, writing systems of other languages also have elements of other types nestling within them. For instance, English, which is primarily alphabetic, contains syllabic symbols, as in <c u l8er> ('see you later') and morphemic symbols, such as <£ & ed> (representing the meanings 'pound', 'and' and 'past'). We also feel it is important to distinguish a 'language' from a 'writing system' used to represent a particular language; 'Japanese' is not the same as the 'Japanese writing system'; the English language could logically be written in the roman alphabet or in Braille or in the Shavian alphabet and was indeed for a time taught to children through the initial teaching alphabet (ita) (Pitman, 1961).

Writing system researchers rarely agree on how these terms should be used, in particular shifting between the two meanings of 'writing system'. We will try to adopt a few standard terms here, mostly following Coulmas (1989, 2003). These are intended as a rough working guide rather than representing a theoretical position. We will also adopt the convention of