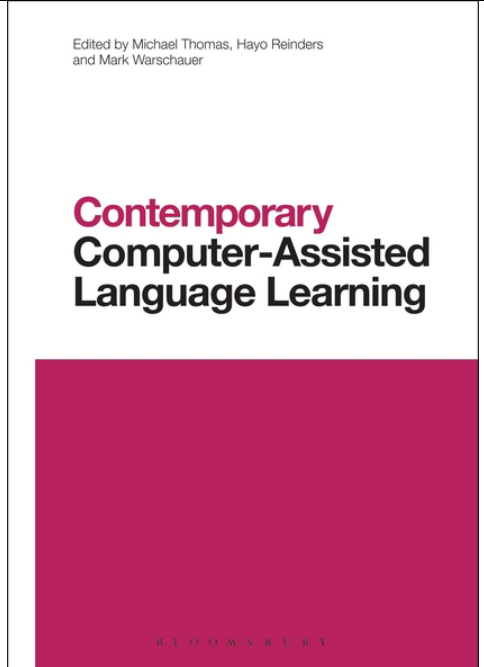# REVIEW OF *CONTEMPORARY COMPUTER-ASSISTED LANGUAGE LEARNING*

Contemporary Computer-Assisted Language Learning Michael Thomas, Hayo Reinders & Mark Warschauer (Eds.) 2013 ISBN: 978-1-4411-9362-9 US $133.00 389 pp. Bloomsbury London, UK. & New York, US.	

Review by Ciara R. Wigham, Clermont Université

Contemporary Computer-Assisted Language Learning, edited by Michael Thomas, Hayo Reinders, and Mark Warschauer, maps the parameters of contemporary computer-assisted language learning (CALL) and illustrates how a range of different areas, as well as research approaches, are shaping this field. The introductory chapter states four objectives fulfilled by the volume. Firstly, it offers an overview of the historical perspectives of CALL and identifies relationships with other disciplines. Secondly, it provides a critical synopsis of CALL research and ways in which this empirical base is leading to richer theoretical understandings. Thirdly, the introduction documents research that explores relationships between theory and practice in a range of educational settings, and finally, it outlines new research directions and approaches.

The edited volume offers a balanced representation of voices through its 18 chapters contributed by researchers in Canada, Germany, Hong Kong, Japan, Spain, the United Kingdom, the United States, and Venezuela. A wide range of topics are covered, which supports the editors' observation that CALL has developed from a narrow area of specialist interest to an area of scholarship in its own right, with independent subfields, including teacher education, evaluation, language testing, social media, and task design.

The contributions are organized in a three-part architecture: CALL context, CALL learning environments, and CALL in language education. The volume features an insightful foreword by Mike Levy, who examines reasons to employ the label CALL. He describes the book as essential reading for postgraduate students of language teaching, for CALL researchers—in short, for "old hands and newcomers alike" (p. xviii).

In Part I, The CALL Context, five chapters examine the historical development of the field and its research trends, in view of theories of language education and the process of technological integration and normalization.

In Chapter 2, the late Graham Davies and his colleagues Sue Otto and Bernd Rüschoff provide a historical backdrop for the overall volume. Following a discussion on the origin of the term CALL, the authors describe how CALL has been shaped, in a linear fashion by the technologies available, and in a multipronged fashion, by trends in SLA and other language education theories. In examining the history of CALL from the pioneer *PLATO* project of the 1960s to the social turn of the 2000s, the chapter matches technological developments with pedagogical and methodological progress in language learning.

Chapter 3 discusses CALL research trends and outlines their enrichment by methodological approaches from other disciplines. Carla Meskill and Joy Quah review techniques employed in studies of language learning with online social media. Firstly, they examine studies that consider that an online environment impacts in unique ways on communicative exchanges. How researchers develop and approach their datasets according to the theoretical underpinnings and purpose of their studies is exemplified. Secondly, datasets related to self-empowerment, community building and learner confidence are examined. Special methodologies are described, including learner self-reporting in diary data and class blogs, which allows for the investigation of social-affective dimensions of online social media. Finally, methodological approaches in studies that concern teaching practices are considered. Meskill and Quah conclude that CALL research trends are moving beyond learner interaction datasets, in large part due to new uses of technology that inspire new enquiry methodologies.

In Chapter 4, Gary Motteram, Diane Slaouti, and Zeynep Onat-Stelma suggest that CALL teacher education be considered in light of sociocultural theory and educational perspectives rather than only in SLA. The contributors use a number of up-to-date references to describe ways in which educational technology and the study of learner viewpoints and teacher beliefs have impacted teacher education. The authors then detail sociocultural theory and relate it to activity theory in order to represent "all of the different elements of a situation that need to be taken into account when we consider … teacher education" (p. 64). Applications of sociocultural theory are exemplified through an exploration of various teaching practices of language instructors from around the world. The data illustrate how teachers' beliefs about technology use relate to decision-making processes about technology in the classroom and how such beliefs can lead to different language learning opportunities.

The volume then turns to the subfield of language testing. James Dean Brown proposes an examination of past developments, current trends, and future perspectives in computer-based language testing (CBLT). He examines changes in CBLT that have taken place since his own synthesis over ten years ago (Brown, 1997). In particular, he details the move away from practical studies that address topics including item banking, computer-adaptive language testing, and the effectiveness of computers in testing, to studies that provide overviews of CBLT literature and that consider learners' experiences of taking CBL tests and teacher-training needs. This chapter offers a rich acronym glossary and an interesting reflection on the extent to which earlier predictions about CBLT research directions have been met.

The final chapter in Part I focuses on material design. Mirjam Hauck and Sylvia Warnecke forward that social presences (SPs) have important implications for material and task design. After examining the concept of SPs the researchers suggest the need for studies into SPs to consider learners' perspectives and not solely those of teachers and researchers. They illustrate this by focusing on an EAP tutor training course which employed asynchronous discussion forums. The study shows how course tasks, including collective reflections on issues including participation and motivation, produced and enriched SPs. This leads to the suggestions that SP be reconsidered in light of the Community Indicators Framework and that studies focusing on multimodal, rather than textual environments are required.

Part II is entitled CALL Learning Environments, which the editors say will be used to examine technologies that "go beyond the classroom in isolation… [to help] broaden students' access to learning opportunities" (p. 119).

The contribution by Robert O'Dowd focuses on telecollaboration. He reviews models and practices for

engaging language learners in virtual contact to develop language and intercultural skills. The chapter describes how telecollaboration has moved from text-based, asynchronous configurations to multimodal exchanges. O'Dowd focuses on research findings from telecollaborative projects in the areas of linguistic proficiency, learner autonomy and intercultural learning. He details ways in which qualitative studies have focused on project design and structure. Throughout the chapter, he outlines the complications of integrating telecollaboration into formal education but offers examples of initiatives that help to normalize this process; *Connect* and *Erasmus* programmes are highlighted as well as other curricular initiatives to integrate telecollaboration into language teacher training.

Marie-Noëlle Lamy offers the next contribution that distinguishes CALL from distance CALL (DCALL). Lamy outlines why the fields are often considered as overlapping, due to a lack of dedicated dissemination territories for DCALL researchers and terminological confusions related to distance education. She addresses this confusion by clarifying several terms, including *flexible learning, open learning, supported learning* and *e-learning.* She also discriminates between *distance* and *hybrid learning* and discusses the relationship of distance learning with DCALL and CALL. The concepts of flexibility and explicitness are central to her proposed model of teaching and learning in supported distance learning, a model which is built around a learning design approach and the presence of institutional and distributed learning strategies. The model is applied to examples from distance language learning literature. The conclusion discusses issues that currently occupy DCALL researchers. These issues emerge from a corpus of 54 DCALL research articles and include multimodality, knowing more about learners and distance language teacher training.

In Chapter 9, Randall Sadler and Melinda Dooly focus on virtual worlds. Their chapter is clearly divided into two sections. The first characterizes social virtual worlds and outlines their historical development, before providing a research review. The authors trace the history of these environments back to the *PLATO* project of the 1960s and describe how virtual worlds are aimed at particular age groups. They detail research studies grouped around three themes: collaboration, learner anxiety, and the representation of virtual world users as avatars. They then highlight the need for further studies into how these environments are being used for language learning, which leads directly to their second section focused on this topic. An ethnographic case study details a project that used *Second Life* to investigate project-based language learning approaches in primary education. The data analysis focuses on recurrent patterns of language use that are situated in response to the virtual world context.

Chun Lai, Ruhui Ni, and Yong Zhao, in Chapter 10, review three types of commercial digital games used in language learning: video games, massive multi-player role playing-games, and 3D collaborative virtual environments. The authors discuss the different affordances of each game type and the pedagogical considerations that teachers account for when preparing learners for gameplay and when connecting the latter with curriculum objectives. Emphasis is placed on scaffolding gameplay, debriefing gaming sessions, and designing tasks. The chapter then turns to the need to balance entertainment and learning in serious educational language learning game design. They illustrate this discussion with the example of *Zon,* a MMORG for Chinese language learning. They discuss lessons learned by the game's designers, which include fitting the game into the instructional context, enhancing its adaptability to the context and restructuring it to meet institutional needs.

In Chapter 11, Glenn Stockwell gives a balanced review of mobile-assisted language learning (MALL). After situating MALL with relation to *integrated CALL* and the concept of digital natives, Stockwell outlines the perceived advantages for mobile learning and describes ways that research studies have focused on podcasting using MP3 players, vocabulary learning and audio guides using PDAs, and vocabulary tasks using mobile phones. The chapter details physical, physiological and pedagogical issues of concern with mobile learning and the consequences for language learning. Issues related to small screen size, assumptions that learners can use the devices and the impact of students' non-pedagogical use of devices on their pedagogical use are discussed. Finally, future directions for MALL are detailed,

including the inclusion of GPS technologies and the interaction possibilities between learners and everyday objects. Stockwell concludes that the biggest challenge for MALL concerns how to combine physical spaces and virtual environments.

Whilst the previous chapters focus on sophisticated technologies that can foster learning in new contexts, in Chapter 12 Dafne Gonzalez and Rubena St. Louis offer a complementary study of CALL in low-tech contexts. The chapter compares factors that describe low-tech contexts in CALL literature with survey responses from language teachers worldwide. The aim of this study is to determine the factors for a low-tech context, describe the manner in which resources and tools are used in these contexts, and give practical examples of strategies used to overcome obstacles faced. The results show that low-tech contexts can be defined, first in terms of insufficient access to ICT (physical constraints), and second in terms of human constraints, whereby teachers are unable to use resources adequately. The number of recommendations given for using CALL in these environments is rich, and the authors situate their survey results with reference to a wide literature selection.

In Part III of the work, CALL in Language Education, seven chapters examine specialized areas of teaching and research that have stemmed from the diversity of CALL.

Mathias Schulze and Trude Heift's contribution concerns the developments in intelligent CALL (ICALL). The chapter offers two perspectives. Firstly, by concentrating on SLA theories concerning interaction and noticing, the authors suggest what ICALL resources offer to language teachers. They focus on projects concerning vocabulary and grammar acquisition, and on writing and reading comprehension. Their historically informed analysis details concrete examples including the *Robo-Sensei, FLUENT* and *QuickAssist* projects. Secondly, the researchers focus on three approaches for using corpora in ICALL. They illustrate how both learner and reference corpora are used to evaluate NLP tools and aid their design. They also examine the application of NLP tools and corpora to CALL environments.

Chapter 14 focuses on computer-supported reading. Firstly, Youngmin Park, Binbin Zheng, Joshua Lawrence and Mark Warschauer discuss the components of word decoding, language comprehension and text interpretation that are central to second language reading and review research in these areas. Secondly, they detail two approaches to using digital media to support the second language reading process: visual-syntactic text formatting and collaborative blogging. In the first approach, presenting texts in cascaded versions helps compensate for second language learners' limitations in syntactic knowledge and aids reading comprehension. The second example illustrates how blogging helped engage young learners of English and developed their sense of audience and authorship. The chapter concludes by presenting and exemplifying a typology of how digital resources can be used to enhance reading comprehension.

The volume then turns to writing skills. In Chapter 15, Volker Hegelheimer and Jooyoung Lee discuss classroom use of technology-assisted writing tools. After outlining six tips for teaching writing with CALL, the authors detail approaches to using automated essay and collaborative writing Web 2.0 environments that have the potential to shift focus in writing instruction from form to meaning. Each technology is considered in terms of current practice, its advantages and disadvantages, and future research agendas. The researchers provide readers with a discussion of considerations for the attention of teachers involved in teaching writing with technology.

CALL and less commonly taught languages (LCTL) are at the center of Chapter 16. Richard Robin, firstly, discusses how to define a LCTL in terms of the characteristics that are "subject to the offerings and challenges posed by current technology" (p. 304). The features of language level difficulty, proficiency expectations, and small Internet footprints are outlined. Robin then turns to resources the Internet may offer to LCTLs. He describes the increased availability of pedagogical materials, particularly pertaining to business language, the possibility for the creation of modular learning materials, and the opportunities offered to for self-study. Although this discussion is exemplified throughout, the chapter

then focuses on the tools *Google* offers and other resources for authentic listening. Following a discussion of the issue of representing non-Roman writing systems across computing platforms and the difficulties learners face in producing such scripts on screen, the chapter concludes that distance and hybrid courses could help save, if not expand, LCTL teaching.

Paige Ware and Greg Kessler take up the theme of digital feedback within CALL in Chapter 17. Rather than provide a strict definition of feedback, the authors explore three of its facets: mode of delivery, strategies for delivery, and focus on feedback provided. They then examine digital feedback in CALL on writing. Computer-generated feedback that largely concerns error correction is discussed, as well as electronically delivered peer feedback focusing on idea generation or form. The researchers subsequently explore digital feedback on speaking. They discuss the use of automated speech recognition to provide pronunciation pointers to students and recent technologies that allow for human-generated digital speech interaction. The chapter concludes by specifying that a future research agenda for this area should focus upon what constitutes effective feedback and quality across the three different facets of feedback.

In the penultimate chapter, Michael Thomas explores the relationships between task-based language teaching (TBLT) and CALL. Whilst these two fields were perceived, until the 1990s, as running in parallel, Thomas provides a historical outline of ways in which TBLT may inform CALL. He insists on the potential pedagogical implications relating to designing, sequencing and understanding tasks, as well as learners' behavior in a task cycle. A case study of two EFL learners at a Japanese university is then presented to explore collaborative technologies. The study draws on a virtual world and examines learner identity and learner challenges in using technology with authentic tasks. The author describes how the learners developed their L2 identities in ways "that could feedback positively into their academic learning contexts" (p. 355) but underlines an overreliance on their L1 for preparative and collaborative stages of the tasks.

To close the volume, Hayo Reinders and Philip Hubbard address learner autonomy. Their contribution offers a review of learner autonomy in language learning and teaching, before turning to the potential affordances offered and constraints posed by technology for learner autonomy development. The contributors structure these two sections using the same sub-headings, which offers the reader a balanced synthesis. The areas discussed include access, storage and retrieval, sharing and recycling of materials and situated learning. The researchers then focus upon ways in which the constraints discussed may be overcome. This revolves around the need to train learners to efficiently use technology-mediated materials, to guide them to make appropriate choices concerning materials and task selection, to encourage them to invest in communities of practice and to develop specific initiatives that target advancing learner autonomy.

As readers who have made it to this point of the review of *Contemporary Computer-Assisted Language Learning* will tell, the breadth and depth of the chosen topics for this book is impressive. Topics are treated from historical, theoretical, technological and practical perspectives in a very comprehensive manner. We must hope that university libraries are willing to add the work to their collections. Although proceeds from the book are to be donated to the Japanese Red Cross, the price risks impacting the number of students willing to invest in the resource independently.

Readers will appreciate the way in which they are carefully guided through the three different parts of the book by section introductions that clearly map out the contributions included and demonstrate the interest of each. However, at times more cross-references between the individual chapters would have been useful, and the lack of a concluding chapter by the editors to tie the three parts together is noticeable. The major strength of this volume is undoubtedly the way in which it takes a broad look at the evolution of CALL into a field of research and practice within its own right, whilst accounting for many of the key aspects that constitute the field in such a detailed manner.

ABOUT THE REVIEWER

Ciara R. Wigham is an EFL teacher and member of the *Laboratoire de Recherche sur le Langage* at *Université Blaise Pascal*, France. Her recently awarded PhD focused on how multimodal pedagogical communication is organized within synthetic (virtual) worlds. She investigated the interplay between verbal and nonverbal interaction that supports verbal participation and production in a foreign language.

Email: ciara.wigham@univ-bpclermont.fr

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