

Book review

Second Language Distance Learning and Teaching. Theoretical Perspectives and Didactic Ergonomics, Jean-Claude Bertin, Patrick Gravé and Jean-Paule Narcy-Combes. Hershey, PA: Information Science Reference, 2010. 258 pages. ISBN: 978-1-61520-707-7. Price: \$180 US// €158.00

A first quick look at this volume will lead readers to assume that we are looking at *another* new book on the subject of second language distance learning and teaching. A closer reading of the complete title, *Second Language Distance Learning and Teaching. Theoretical Perspectives and Didactic Ergonomics*, will reveal that this volume is different. In the Foreword to the book, Robert Fischer states that this volume “sheds light on the fundamental processes involved in distance language learning” and that the authors “support their analysis of distance language learning environments with theoretical constructs from several disciplinary perspectives”. The construct that the authors use is that of didactic ergonomics. In tutoring systems, didactic ergonomics involves making an interface that is efficient to support learning and establishing its configuration for different users. In particular, didactic ergonomics looks at the interactions between software and the studied object (Curilem, Azevedo & Barbosa, 2004).

The volume is divided in three sections and 12 chapters. In Section 1, *An Introduction to Didactic Ergonomics: Theoretical Stance*, Chapters 1 and 2, the ergonomics model is introduced. Section 2, *Discussing the Model in the Context of Distance Learning*, Chapters 3 to 9, offers a detailed discussion on the different components, or poles, or the ergonomics model advocated by the authors. In Section 3, *Operating the Model*, Chapters 10 to 12, the authors put the model into practice.

Chapter 1 is an essential read for those wishing to gain a deeper knowledge of the concept of pedagogic ergonomics and its applications in the field of CALL. The title of the chapter, *In Favor of a Model of Didactic Ergonomics*, leaves no doubt as to its purpose. Bertin & Gravé discuss how the ergonomics model can help us understand distance language learning by bringing up interesting notions such as complexity as an attribute of reality. The authors draw on systemics and interactionist theory to build on a pedagogic model that can account for the many variables that play a role in language distance learning. After reviewing a selection of language learning models, the authors go on to discuss the relevance of ergonomics in the realm of

Human-Machine systems. In this effort, they bring along theoretical contributions from engineering or technology, sociology and psychology. On page 12 they define the ergonomic perspective as “the study of the conditions for the integration of technologies within learning environments by the teachers who choose to use them as well as by the learners for whom they are designed.” Bertin & Gravé present a CALL and distance language learning model which integrates different agents or, in the authors’ words, sub-systems, namely, teacher, learners, peers and regulation, that is, the monitoring capacity of the computer. These sub-systems gravitate towards five poles: language, the learner, the teacher, technology and the context, which will receive subsequent attention in Section 2 of the book. The authors claim that their model together with these poles “suggest a conceptual framework to CALL researchers, practitioners, designers and administrators” (p. 30).

Chapter 2, *Introducing Distance into the Model*, takes the model outlined in Chapter 1 and discusses how distance may affect the different sub-systems which are part of it. Drawing on psychosocial studies, Bertin & Gravé resort to the notion of *analyzer* as a catalyst for the reflection on the concepts of absence, discontinuity and technology. The authors combine three dimensions of mediation, namely, pedagogic, technological and mediation by distance, to enrich a debate which has traditionally been biased by “linear typologies based on former experimental research” (p. 48). The authors conclude that it is necessary to “reassess the theories and their mutual relationships in order to take stock of those ‘hidden’ elements of the pedagogic situation revealed in distance learning contexts” (p. 51). Bertin & Gravé discuss terminological issues which will be useful for those seeking to get a hold on central CALL concepts. The discussion of the notion of distance learning and similar terms such as virtual learning or open learning on pages 38–40 is a good example. Chapter 2 also offers a very interesting discussion of the role of *time* in distance education, which deserves further attention in future research. Chapters 1 and 2 are enriched with a wealth of theories coming from different areas, from psychology to engineering, which will challenge the reader who is, presumably, more familiar with mainstream CALL theory.

Section 2 is devoted to the discussion of the different poles that are part of the didactic ergonomics model outlined in Chapter 1. In Chapter 3, *The Language Pole*, Narcy-Combes illustrates how both *language* as discourse and *language* as culture interact to enrich the model. In particular, the author is favourable to the combination of social situations and real-world activities with a notion of curriculum that, despite the incorporation of the CEFRL, can be “experienced as interaction”. Chapter 4, *L2 Learning Processes*, gives an overview of the most influential theories of second language learning, establishing a distinction between those which are all-encompassing, such as behaviourism or constructivism, and those which, in the words of the author, “do not cover every aspect” (p. 86) of second language learning, such as perception and attention or noticing. While it is debatable that the latter can really be considered as fully-fledged theories, the chapter is a valuable synopsis of the SLA theories and scholarly debates that have influenced and will continue to have an influence on CALL. The chapter ends with the outline of a learning cycle that integrates, among others, contents, tasks, tutor/ learner interaction and follow-up/ evaluation. Narcy-Combes admits that, given the varied origin of the cycle components,

“it will require some form of reflective practice [...] to measure the validity of the construction” (p. 99).

Narcy-Combes is also the author of Chapters 5, *The Learner Pole*, and 6, *The Teacher Pole*. Chapter 5 starts with an overview of individual differences in second language learning, including aptitude, multiple intelligences, styles of learning or foreign language anxiety. The author then describes the roles of autonomy and those of language awareness and reflective interaction in distance learning. The author brings up some interesting issues, such as the locus of agency in distance learning or the role of the learning environment as an organizing circumstance. As a result of the discussion, Narcy-Combes offers a modified version of the learning cycle presented in the previous chapter which integrates some specific directions in terms of learner actions. Chapter 6 introduces the topic of teacher roles and discusses more in depth the role of teacher as a mediator. The author draws on the specific skills and strategies of online teachers in White (2003) to offer, as he did in Chapter 5, a modified, enhanced version of the learning cycle presented in Chapter 4. The introduction of teacher *postures* is an interesting and novel contribution from the field of sociology which has received little attention in CALL so far.

The Technology Pole is the title of Chapter 7. Bertin & Gravé discuss in this chapter “the difficulty to provide an appropriate and comprehensive definition of the technology pole” (p. 141) for their model. The chapter looks at the relationships between language learning and technology by exploring myths of the technology applied to language learning. The authors present a very thorough and updated reference list of research which has looked at technology and language learning. However, the most relevant contribution of the chapter is the final discussion on the place of technology in distance language learning and the role of the computer and the learners in the context of the “learning database model” (p. 152).

Chapter 8, *The Context Pole*, by Bertin & Gravé, explores the contribution of the context of the distance second language learning experience(s) to their ergonomics model. From a socio-organizational perspective, the authors point out that a careful analysis of the roles of innovation and change is what distinguishes a CALL model which accounts for the “multiple relationships involved within a system” (p. 171). Bertin & Gravé illustrate their ideas about the adoption of change with two experiments carried out in Europe which involved teachers and educators facing the challenges of distance learning. The chapter ends with a discussion of different modes of adoption.

Section 2 ends with Chapter 9, *Interactions and Distance Learning*, where the authors discuss the places where interactions take place and how these may affect course organization. Anyone seeking to design, implement or teach a distance course will benefit from reading this chapter, as it contains reflections on the notion of interaction based on systemics which cover a wider scope of ideas than those typically pertaining to more analytical studies. The chapter offers a very interesting account of how different types of courses can be combined with learner support and the different functions that this support can take, both in self-instruction independent learning and in CMC environments.

In Section 3, *Operating the Model*, the authors “put the model into practice” considering “the practical applications of the principles outlined in earlier parts” of the volume (p. xvi). In Chapter 10, *Designing a Distance Language Learning*

Environment: An Engineering Perspective, Bertin & Gravé draw on an engineering approach to outline four phases which will guide the reflection on the design and the implementation of distant second language learning courses. These phases are course needs analysis, learning environment design, implementation and assessment. In each of these, the authors offer a list of elements and considerations which will be highly instrumental for teachers, researchers and, last but not least, administrators, who are key actors in the analysis of context. The authors stress the role of teachers and tutors, who will need to adapt to innovation and change and develop new competences, including action-research skills. Chapter 11, *Pedagogic Consequences: A Task-Based Approach to Distance Second Language Learning*, provides an outlook on the approaches to the creation of task-based courses, including task sequencing, guiding principles for task integration in distance language courses and a very useful taxonomy of tasks. Based on an existing distance course, Narcy-Combes offers suggestions and adaptation guidelines for those moving from blended to distance learning courses.

In Chapter 12, *Conclusion*, the authors summarize their efforts to “problematize the use of ICT for language learning purposes [by] understanding the nature of ICT and distance [and] providing suggestions for the design and development of soundly constructed environments” (P.250). The chapter summarises the motivation behind the volume and will, undoubtedly, help readers who choose to focus on particular chapters instead of reading the book from beginning to end.

Second Language Distance Learning and Teaching. Theoretical Perspectives and Didactic Ergonomics is a welcome contribution towards addressing the gap between everyday CALL practice and a more profound reflection on the epistemology of distance language learning. The authors claim that their work is explicitly focused on “theoretical and philosophical issues” [...] taking “a more integrative stance [...] to include a wide array of background theory” (p. 28). This is an excellent summary of the contents of the volume and one that does justice to the theoretical and multidisciplinary approaches that readers will find in its pages. Reading this book is a much-needed exercise of reflection on the nature of CALL and the complex variables which condition the implementation of distance second language learning and teaching.

The other strengths of this book include the chapter syntheses, explicit objectives at the beginning of each chapter, updated bibliographies, as well as figures and summary tables in all chapters. Each section of the volume can stand alone and could provide valuable supplemental reading to students or faculty interested in finding out more about each of the topics covered. However, the book reads much better when taken as a whole and read as a complete unit. In this sense, the three authors have been successful in putting together a coherent volume.

Although the book is more focused on problematizing distant second language learning, practitioners will find very valuable resources for their everyday teaching. Given the stress placed by the authors on the exploration of distance learning and teaching in terms of a complex systems, those who will benefit most from this volume will be professionals in a position to think about and implement the model, in particular administrators and researchers.

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