Book review

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A first reaction to this book is that it is exactly what ELT teachers engaged in using technology in their teaching have been waiting for. It addresses head-on questions that have niggled ever since the new medium entered the ELT classroom. How, and in what ways, does technology interplay with what we know of second language acquisition? How can we evaluate whether, and in what ways, technology promotes language acquisition? And how can applied linguistics inform developments in technology-based learning while itself accommodating to the new technologies? The overwhelming insurgence of technology into language pedagogy within a few short decades has been such as to seemingly obscure these and other vital questions, and they have remained, some may say, astonishingly, unaddressed in any comprehensive fashion. Chapelle notes (p.128) that it was not until 2000 that a comprehensive set of papers collectively addressed the subject of SLA research and technology (in a special issue of Language Learning & Technology). This was followed by her own 2001 publication Computer applications in second language acquisition: Foundations for teaching, testing and research, which grounded the use of technology in second language learning in a strong theoretical base. Chapelle’s latest work has a greater practical focus, due perhaps to the fact that it originated as a series of lectures.

The author sets out from the bold premise that the time has passed for the need for a case to be made for technology. Technology by now plays such a normal part of our day to day functioning that we may as well demand that a case be made for the use of sound and visual recordings. By extension, she eschews the need for comparison of CALL with language learning in the conventional classroom: 'I do not see any indication that the steadfast march of technology through our society is likely to hesitate [...] on the basis of research results indicating that learners do better with classroom instruction alone. In the face of such results [...] I believe the solution would be seen as a need to improve CALL rather than restore classrooms.' (p.74). Furthermore, this 'steadfast march of technology' means that there is a new 'strategic' dimension to communicative competence, involving the electronic literacy skills required in computer-mediated communication. It is no surprise that Chapelle, as an applied linguist, maintains a strongly applied linguistic perspective in the book, reiterating concerns for the ways in which technology is changing the practices of applied linguists and for including technology in the research agenda. Nevertheless, Chapelle makes clear from the start that theory-focused research and practice-focused research are both necessary and interdependent ('a synergy between theory and practice' p.178), if theoretical insights are to be developed to inform CALL.
An indication of the significance of this book for the field is that the titles of its chapters read like a taxonomy of the questions being asked by practitioners: the potential of technology for language learning (Chapter two); evaluating language learning and investigating learners' use of technology (Chapters three and four); and advancing applied linguistics (the intersection of applied linguistics and technology in the areas of L2 tasks and assessment) (Chapters five and six).

The first chapter sets the stage for the others, discussing the changes technology is effecting on language teaching and on language learning. In a society in which technology is already so deeply embedded as to be invisible, Chapelle stresses the need for applied linguists to expose the use of technology in, and its effect on, language learning and on language acquisition research. For this intersection between language learning and technology, she warns, is shifting underlying applied linguistic concepts such as communicative language ability, grammatical analysis and language register. She attempts a balanced view of a technology-infused future by taking three perspectives: that of the technologist, envisioning a future in which language pedagogy involves ever more interaction with technology; that of the social pragmatist, balancing the day-to-day realities of using technology for learning; and that of the critical analyst, questioning the inevitability, neutrality and benefits of technology. As well, Chapter one manages to give a broad range of perspectives on technology and ELT, from the learners - their motivations in using technology for language learning and the 'technology-shaped register' of English they encounter, to the teachers and the implications of the technology for their teaching (especially the issue of technology-mediated tasks, a recurring issue in the book, see Chapters two, three, four and five). Chapter one closes by homing in on applied linguistics, asserting that 'technology-based language teaching and research is not a departure from applied linguistic s. It is a continuation - the 21st century version of what applied linguists do' (p.31).

The second chapter promises to broach the first of the fundamental questions being asked: Which models of technology-based instruction can enhance learning? Drawing on classroom research studies as well as applied linguistic theory, Chapelle gathers evidence for the 'value and usability' of CALL (p.67) with reference to such L2 acquisition factors as enhanced input, repetition, input modification, production and interaction (all with their own interpretations via the interface/s technology offers). This last, vastly over-used term, 'interaction', is usefully explored before re-focusing the concept of interaction in the CALL context. In this chapter and the next, research from the field is integrated with applied linguistic theory to provide the reader-practitioner with some of the core research-based principles for the use of technology in language instruction: authenticity, autonomy and, of course, the task model.

Chapter three sets out the research agenda for CALL and gives some examples of empirical research. It sets up - and then, intriguingly, knocks down - the seemingly obvious need to evaluate the language learning achieved via technology. It is here that two of the book’s bugbears are raised. Chapelle challenges, firstly, the assumption that the conventional classroom and CALL both aim to achieve the same results, and, secondly, the need for a case to be made for technology at all. She suggests that, in a society where technologisation is a fait accompli, these preoccupations distract from the more essential concerns such as strengthening 'the empirical basis for software developers and applied linguists working in teacher education, pedagogy, and technology' (p.76). Accordingly, she goes on to describe a number of research studies that focus on the software, the learners and/or task pedagogy. The studies include the use of interactive listening, parallel concordancers and communications tasks using voice and text chat; samples of research that contribute to a knowledge base on how to promote language acquisition through CALL. A schema which clearly demonstrates this, is Table 3.7 (p.94), which cross-references some of the described CALL tasks to applied linguistic theory.

Chapter four, Investigating learners' use of technology, offers more on learning methodologies and research methods, focusing in particular on the unique capacity of CALL to document process data. The chapter starts by defining process data as 'data that constitute the observable record of learners' work on CALL tasks', often called 'tracking data' or 'computer logs' (p.98). It then gives some examples of the types of
process data that can be accessed, ranging from recorded human-to-human interactions around a business simulation program, to tracking a learner’s progress through a computer-based listening comprehension task. Starting from the observation that the technical capacity to provide such data contrasts with the complexity of the theoretical basis for analysing it, the chapter goes on to offer an outline of three analytic perspectives, description, interpretation and evaluation. The descriptive research methodologies discussed include interaction analysis, which analyses the particular moves a learner makes while working with the technology, as well as discourse analysis and conversation analysis, both of which reveal the unique new registers and interactional routines that technology is creating. Interpretation as a research perspective is a logical extension of description; what is of interest is not just the ‘raw’ process data, the data has to be interpreted in order to yield meaningful conclusions concerning the learner’s language competence and/or handling of the task. The final research perspective based on process data, evaluation, would appear to be the broadest one, in that ‘evaluation should reveal the degree to which data provide evidence that the goals of CALL activities have been met’ (p.119). Chapelle is at pains to point out that this should not be equated with evidence of ‘mastery after instruction’, since ‘CALL is typically only one source of language practice for learners in a larger programme of instruction’ (ibid.). For this reason, evaluation of CALL process data requires that learning goals be stated in terms of desired learning processes rather than outcomes (p.120). Such process-oriented tasks described here include evidence of negotiation of meaning in a jigsaw task, and evidence of the learner ‘noticing gaps’ in his/her interlanguage in an interactive reading task.

In Chapters five and six, Chapelle turns squarely to face the perceived undercurrent of discontent with technology: ‘I would like to turn the tide on the annoying technology that distracts applied linguists, and consider the attraction of technology as a tool for doing applied linguistics’ (p.127). The author maintains that ‘novel perspectives on theoretical issues and new tools for researching those issues’ can best be provided by ‘conducting practice through technology’ (p.150). Accordingly, in Chapter five, this is done via practical illustration, by focusing on L2 learning tasks and analysing evidence of the learning outcomes and processes they can provide. Especially useful is the exploration and analysis of the concept of task for the technology context (see, for example, Table 5.4, pp.138-9). Criteria for deciding task features which serve as ‘an expanded set of conceptual tools for task construction’ (p.146) are also discussed, with these features aiding assessment of such factors as the degree of authenticity of the tasks relative to those that learners have to perform outside the pedagogical context.

Chapter six continues working from the perspective of the previous one, that is, that applied linguistic theory has much to gain from technology-mediated L2 learning, focusing specifically on computer-assisted language assessment (also known as computer-assisted language testing, CALT). Chapelle uses as her starting point some of the conclusions of a state-of-the-art review of language testing: ‘the new task formats and modes of presentation that multi-media, computer-based test administration makes possible raise all the familiar validity issues, and may require us to re-define the very concepts we believe we are assessing’ (Bachman 2000: 9, cited on pp.152-3). As before, some of these complex issues are helpfully schematised (Tables 6.1, 6.4 and 6.6). The author’s most important conclusion in this chapter is that in the area of CALT research the ‘tunnel of efficiency’ (p.151) must be avoided: ‘the first step [...] is to set aside efficiency as the primary criterion [...] in order to seek solutions to the substantive issues of construct definition and validation’ (p.172).

Chapter seven, the concluding chapter, acts as a useful reference for, and précis of, the book, as it reviews the previous chapters, clearly restating the concerns voiced in them. Firstly comes a reiteration of the point of departure of the book, applied linguistics: ‘the primary message throughout the book has been that technology is changing practices of applied linguists in ways that prompt the need to conceptualise them and study them explicitly’ (p.173). Chapelle next calls attention to the principle implicit in the case studies and discussions in Chapters two, three and four, viz, that we need to use theory, hypothesis and methods from SLA research to give analytic and evaluative perspectives which enable us ‘to move beyond simplistic notions that technology should be evaluated solely through comparisons with outcomes attained through classroom
instruction’ (p.176). The other refrains of the book are also vigorously rationalised, firstly, Chapelle's refusal to backpedal towards a justification of CALL, what she calls 'reductionist attempts to make a case for technology in a society in which technology has already been sold many times over' (p.180): 'If the audience for CALL research is seen as our own profession of applied linguistics rather than someone who needs to be convinced of the value of technology (relative to classroom instruction) for language learning, more fruitful paths for research can be developed' (p.177). And research in this new and burgeoning area more than any other, requires synergy between theory and practice, as practitioners struggle to match traditional applied linguistics theory with learning activities that use state-of-the-art technologies.

This is a scholarly yet accessible book that will appear to many as an oasis of sound, substantive theory in the impenetrable tangle of information in this area. By placing technology-based language learning squarely within the scope of applied linguistics, Chapelle is both acknowledging the centrality of technology in our society and throwing much-needed theoretical weight behind the new media. The book asks and responds to the questions that need addressing at this stage in our technological evolution, and it constitutes a rich and reliable source of reference for practitioners and researchers alike.

References:


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