

Part Six

Language and technology



Introduction

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Technology or, more particularly, information (and communication) technology has become a pervasive element of language revitalisation work over recent decades, and it can be difficult to think of current language activities where some form of technology is not used to record, analyse or transmit the language, increasingly in integrated forms that support sound, images and text. Linguists and language workers have often been among the first to access each innovation as it comes along and test its potential to capture and present rich language data for preservation, future investigation or learning purposes. Some significant contemporary Australian examples not represented in this volume include the Ara Irititja project,² Miromaa database,³ Gayarragi, Winangali CD-ROM⁴ and the Ninti language learning site⁵ attached to the Ngapartji Ngapartji project (Sometimes & Kelly, this volume), as well as initiatives still under development to use video-conferencing and networked facilities to teach languages to their distributed owner populations.

However, while many are justifiably attracted to high-tech solutions for language revitalisation needs because of their high profile, apparent potential as a quick fix, and ease to fund as short-term, self-contained projects, it can also sometimes seem that otherwise successful initiatives not deemed to be cutting edge are not considered as valid. This enthusiasm for the new needs to be balanced against the apparent limitations of technology and the usefulness of its application. Witness, for example, the number of high-cost CD-ROMs that were going to 'save' a language but sadly collect dust on shelves because they failed to stimulate more than one viewing or no longer run under this year's software, as well as the ongoing crisis of salvaging audio- and videotape recordings of language 'preserved' only a decade or so past.

1 Koori Centre, University of Sydney.

2 See www.irititja.com

3 See www.miromaa.com.au

4 See www.yuwaalaraay.org

5 See ninti.ngapartji.org

Ostler (1999, cited in Hinton 2001, p. 267) has identified computer-based technologies as anti-traditional and deskilling in their nature, arguing that they often alienate Elders, are unnecessarily expensive and subject to rapid obsolescence, while Kroskrity & Reynolds observe that, 'the most important thing in language revitalization is to increase the opportunities for speakers to use and learn their ancestral language in interpersonal exchange ... [and that] multimedia technology will never replace this as the highest order priority' (2001, p. 328). Similarly Zhao (2005) provides a very telling meta-analysis of the broader use of technology in language learning, suggesting that, despite its widely assumed effectiveness, there is currently only limited evidence 'that technology-based language instruction can be as effective as teacher-delivered instruction' (p. 31).

Clearly technology in language revitalisation can be a double-edged sword, and it behoves us to think carefully before assuming it will always provide the best answer to our needs. In this regard Bird & Simons (2003), while primarily discussing the portability of data for language documentation and description, comprehensively articulate standards of good and bad practice that warrant wider application in this field, and should perhaps be compulsory reading.

Notwithstanding these issues the applications of technology to language revitalisation reported in this volume provide us with some exciting examples of what is being attempted and can be achieved locally.

Wilson's discussion of the use of the increasingly ubiquitous mobile (cell) phone to provide access to electronic dictionaries explicitly responds to key issues of best practice for data storage, while documenting a creative and effective way of bypassing the limitations of computer and network access for remote and mobile Indigenous Australian communities. Utilising the computing potential of these hand-held devices, speakers and learners of an increasing number of languages can have ready access to a significant complementary resource regardless of their location; they can always keep the language with them. This is an example of innovative elegance in the Australian revitalisation context that seems clearly destined for export to the rest of the world.

Bowe, Reid & Lynch report on the successful collaboration among linguists and technologists to retrieve archival records and sketch grammars of multiple Victorian languages from obscure locations and place them directly into the hands of revitalising communities and academic linguists through the medium of the internet. The *Aboriginal Languages of Victoria Resource Portal* is strongly based in open source software and has undergone substantial useability testing and development in terms of both its architecture and interface which the authors document at length, providing an excellent script for others to follow. Community consultation and user-centred design have been cornerstones of the project that combines static, reference content coupled with the dynamic facility for community members to contribute their own in multiple formats. It is clearly a profound leap forward in accessibility for Victorian language communities and has potential to be a significant locus of revitalisation activity for the region.

Similarly located in the application of open source software, Kutay, Fisher & Green document a series of bold attempts by technologist and community members to develop a generic set of utilities to assist in the documentation and teaching of NSW languages. Canvassing a broad range of possibilities, including speech synthesis and recognition as well as machine translation, they have sought to create computer resources that will generate teaching materials and directly support people learning their own languages. Their paper documents their journey, some of the pitfalls they have encountered and the outcomes to date.

Elsewhere in this volume Amery (Chapter 4), Gale & Sparrow (Chapter 32) and Giacon (Chapter 34) offer further discussion of the use of technology in revitalisation activities, particularly the application of FileMaker Pro to database management and, in the case of Amery, the addition of a web interface that affords integration with Google Earth allowing the virtual mapping of language onto the land. Eira & Solomon-Dent (Chapter 31) also discuss the application of recorded interactions in virtual classroom environments as a way to inform communities about the developmental processes being applied to their languages. Collectively these papers provide an encouraging, indicative snapshot of current directions in the application of technology to Indigenous Australian languages revitalisation.

References:

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