Case Study XIV

Towards an Indigenous Language Knowledge Base: Tools and Techniques from the Arwarbukarl Community

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The Arwarbukarl Cultural Resources Association (ACRA) is a leading indigenous cultural representation and coordination body in the Hunter Valley region of New South Wales, Australia. A particular focus of ACRA is language revitalisation — made more difficult since only a smattering of documentary evidence of the language exists from the 1830s. In 2005, the number of individuals involved in learning the Arwarbukarl language was 20. While indigenous language documentation and revitalisation efforts are by no means unique to the Arwarbukarl context, this particular indigenous community has made significant progress in the development of software tools for language analysis. Here we briefly consider a number of the important aspects (technological, functional, cultural and social) that have contributed to the success of this project.
Many indigenous cultural organizations involved in language documentation and revitalisation find commonly used linguistic analysis tools inaccessible because of the complexity of the learning curve needed to operate them and because they were not initially designed to serve language communities as primary users. Consequently, such organisations tend to either fail to realise the benefits of computational approaches to language analysis and data systematisation, or develop esoteric solutions in isolation of wider consensus as to particular methods and approaches that are grounded in the broad discipline of documentary linguistics. The linguistic knowledgebase application developed and used by ACRA is even more important in the context of the omission from a majority of linguistic analysis software of concern for the non-linguistically-trained user in terms of interface design and usability by non-experts (i.e., language learners as opposed to linguists).

The development of database software for the Arwarbukarl language is a prime example of linguistic knowledge management software that addresses the particular needs of indigenous language development work by providing a simple user interface for the analyst, yet powerful analytical capabilities, combined with an approachable user interface for the language learner. A variety of interfaces to the language data repository, including a multimedia dictionary and indexing

Figure 1. Analytical interface for language worker (Used with permission from Arwarbukarl Cultural Resource Association Incorporated)
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