Case study: A Talking Dictionary of Paakantyi NSW

This case study outlines the development of one component of the interactive multimedia CD-ROM *Paakantyi* (Hercus and Nathan, 2002), emphasising the value of community consultation throughout the project lifespan. In our initial consultations with members of the Paakantyi community of NSW about producing a CD-ROM to support their new language revival efforts, community members put forward the idea of a 'talking dictionary'. The value that many Aboriginal people place on dictionaries as symbols of a language's significance is well-known; and, particularly following the publication of the (text-only) Kamilaroi/Gamilaraay Web Dictionary (Austin & Nathan, 1996), we had heard many people in many places express a preference to simply to *hear* the words.

So we set out to develop the first comprehensive interactive talking dictionary of an Australian Indigenous language. This promised to be a challenge. Not only was the design of a good speaking dictionary initially unknown, but the very serious degree of language loss in the community meant that we were unsure how many words we would even be able to include.

We did know that protocol required that recordings be made with Paakantyi language consultants whose authority to use language was recognised by the community. As we set out on our second field trip, Luise and I discussed methodologies for recording words for the talking dictionary. Luise, a prominent field linguist who had worked with the Paakantyi community over a period of forty years, wanted to make 'authentic' recordings using traditional elicitation methods to both populate the talking dictionary and to further her research on the language. As the multimedia developer, I was more focused on

recording enough words to create a reasonable-sized dictionary, and felt that due to limited language knowledge in the community we might need to 'stage' many of the recordings by asking people to read words from lists.

The consultants themselves plugged for authenticity; they invariably commented if they were prompted with words that they were not familiar with (and in the later editing process their judgements governed the inclusion or otherwise of words). Nevertheless, the outcome surprised all the participants, researchers and community members alike. The number of words (and other materials; see below) recorded was way beyond what any of us had expected, probably as a result of the unbridled enthusiasm of the consultants, and our shared attention to methodology. During the three fieldwork visits, our 'team' evolved comfortable working styles and the consultants found it increasingly easier to recall and pronounce words and expressions that they had not heard or used for decades. And as other community members saw the draft CD taking shape, they also offered to record with us.

We not only recorded many more words than anyone had thought possible, but also discovered important parameters for the talking dictionary's design among the patterns of the consultants' contributions. For example, our main consultants (Renie Mitchell, Lottie Williams, John Mitchell and Badger Bates) would often follow Paakantyi words with English glosses and explanations, and possibly some expressions to illustrate usage. For example, John Mitchell provided the recorded entry for the word *murarta* "fast, quick" (as in Hercus, 1993). He said: *mura-mararta* 'hurry up'... *mura-mararta thikalanaapa* 'hurry up, I'm going home.' To accommodate such contributions, several non-trivial linguistic and functional design decisions needed to be made, including the following:

- Paakantyi speakers sometimes used forms that were different from those in the published dictionary. In some of these cases, the new data led to revision/correction of the dictionary; however, in most cases we simply juxtaposed the published (upper part of screen—see Figure 1) and the speaker's (lower part of screen) forms. It is up to the user of the CD to choose the form that appeals to them.
- Originally we had assumed that the voices in the talking dictionary would be solely speaking Paakantyi. But the "mixed" pattern (Paakantyi followed by English gloss) was pervasive across speakers and recordings. We realised that including the English commentary offered useful design and pedagogical advantages, since it makes the sound content independent of the written entries and therefore accessible to young children, or people with poor eyesight or sitting away from the computer.
- For some words, several usage examples were provided. We used a database to manage the assignments of examples to entries, ii and designed a presentation interface with numbered access buttons that, when clicked, reveal the usage example text and play its sound (in Figure 1, there is only one usage example).

Fig 1. Paakantyi CD: design of the "Talking Dictionary" interface talking dictionary mingka minha Dictionary minha-manti headword minha-minha mintaulu mira muka Dictionary murarta mukutya muni-muni muni-muni muranta muritya muurpa Speaker's muurpa-na word & gloss muurpa-p ngaangka Example -mararta: hurry up* ngamaka (click to ngamuka show & hear nganatya example) "mura-mararta thikalanaapa: hurry up, I'm going home nganti ngantyi-Example ngapa Look-up list (click to select & hear word)

The usage examples are a crucial linguistic asset of the CD. They address a pervasive problem in language revival situations: the vast, increasingly empty space between dictionary and grammar, where people no longer know how to express ordinary, everyday meanings (cf. Pawley & Syder, 1983).

The preferences of the consultants and the types of materials they contributed had a defining influence on the design of the talking dictionary interface. Ultimately, the CD included three dictionaries: a full Paakantyi dictionary (an update of Hercus, 1993); an English to Paakantyi dictionary (recognising that for most Paakantyi people the access to Paakantyi words is via English); and the talking dictionary described here, which was presented as a self-contained dictionary so that community members could easily find the resource that they had fostered, and for consistency, so that within the talking dictionary, any word clicked on can be heard.

Thus the talking dictionary was more richly structured and populated than all had initially expected, and when we finally presented the Paakantyi CD to community members they told us that it was exactly what they had wanted! Elsewhere (Nathan, 2006), I describe how the distribution of art used throughout the CD mirrors the kinship relationships between the speakers and the artists represented, which resulted, like the talking dictionary, from the ongoing engagement with community members in development and the regular presentation of working drafts to show people how the product was evolving.

References

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ⁱ The CD was produced by Luise Hercus of the Australian National University and David Nathan (then) of the Australian Institute of Aboriginal and Torres Strait Islander Studies, together with Paakantyi language consultants Mrs Renie Mitchell, Mrs Lottie Williams, Badger Bates, and Mr John Mitchell (also Doreen and Julie Mitchell).

ii Described in Nathan 2005