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The lexicography of indigenous languages in Australia and the Pacific

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Abstract

The Australia and Pacific region is home to nearly a quarter of the world's languages. Wordlists of a few of these languages date back to the first European explorers, while detailed dictionaries have been prepared for somewhere less than 5 % of them. Where an indigenous language is the official language of a country of this region it is more likely to have a dictionary and ongoing administrative support for lexicographic work, and, in a few cases, a corpus from which terms can be sourced. For most indigenous languages dictionaries are prepared in the course of language documentation efforts by researchers from outside of the speech community, using modern lexicographic database tools and resulting in structured lexicons. As a result, it is possible to produce various output formats of these dictionaries, including print-on-demand, multimodal webpages, and mobile devices as increasingly popular methods of delivery. A major use of these dictionaries can be to support vernacular language programs in schools. This region was a test bed for computational bilingual lexicography, and is home to the two largest comparative lexical databases of indigenous languages.

Introduction

The Australia and Pacific region is home to nearly a quarter of the world's languages. This figure relies on Ethnologue's list of languages (Lewis et al. 2013), subtracting metropolitan languages (French, English, Hindi, Malay, Mandarin, Hakka, Javanese, etc.) and Pidgin/Creole varieties (Tok Pisin, Bislama, etc.) and sign languages (New Zealand, Australian) as follows: PNG 846; Australia 384; Pacific 274. For the purposes of this chapter the island of New Guinea is not dealt with as a whole, that is, the languages of West Papua are not included here. The languages of this region, most of which remain poorly or completely unrecorded, can be divided into three major groups: Australian, Papuan (an umbrella term for some 300 non-Austronesian languages of Papua New Guinea, Indonesia and the Solomon Islands that include several clear language family groups, in addition to a number of languages among which no current relationships are known) and Austronesian, the latter usually being further subdivided into Micronesian, Polynesian, and Melanesian (also known as Oceanic). For an overview of languages of Australia see Dixon (2002)), of Papuan languages see Foley (1986) and of languages of the Pacific see Lynch (1998). Excluded from this chapter, with its specific focus on indigenous languages, are dictionaries of postcontact pidgin or creole languages, such as Kriol (northern Australia), Torres Strait Broken, Bislama, Tok Pisin, and Solomons Pijin (cf. http://www.vanuatu.usp.ac.fj/sol_adobe_documents/usp%20only/pacific%20languages/slone.htm).

The Pacific Ocean covers somewhere around 170 million square kilometers and the 25,000 islands that make up the countries of the region take up just 1/300th of that surface area. Australia's land mass of 7.7 million square kilometers and PNG's mountainous interior pose similar problems for research. This geographic dispersion also has implications for the number of languages spoken and for the delivery of information to speakers who are often long distances away from urban centers. New methods of

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publication of dictionaries are particularly relevant to this region, as distance to metropolitan centers is a serious impediment to accessing analog materials, and the expense of purchasing books is often prohibitive either for individuals or for national or local libraries. Open Access dictionaries, either online or as downloadable files, are becoming more common and the ubiquity of portable devices indicates a vector by which dictionaries will be accessed.

In the Pacific and PNG there are commonly problems of erratic electricity supply and very slow internet connection speeds, and the internet is typically only available on computers in urban centers. Mobile phones also provide access to the internet, for example, in Vanuatu, eight in ten people now have a mobile phone connection (a 70 % increase from 2007; cf. http://www.worldbank.org/en/news/feature/2013/05/17/information-communication-revolution-in-the-pacific). In Australia, the ubiquity of computers and latest generation mobile phones or tablets means that dictionaries in these formats, with media and various search tools, are increasingly popular.

This chapter will give an overview of the lexicographic situation for indigenous languages in this region, and, while it cannot be comprehensive, it aims to describe the current situation and refer to major work and directions being taken in the creation and dissemination of dictionaries of indigenous languages. Lexicography in this region has been influential beyond the particulars of the local languages as can be seen by the contribution to broader lexicographic theory by linguists in the Pacific, e.g., Crowley (1999) on the responsibility of the lexicographer; Lichtenberk (2003) on rapid lexical change and the role of the dictionary; Corris et al. (2004) on the usability of dictionaries; Nathan and Austin (1992) on the automatic generation of finderlist forms; Pawley (2001a) on idiom, speech acts (2009) and (2001b, 2011) on ethnobiology; or Mosel (2011) on the particular lexicographic needs of indigenous, in particular endangered, languages. The current two largest comparative lexical datasets of languages of the region (Pama-Nyungan and Austronesian, discussed below) are the largest such comparative sets of indigenous languages.

Within the region covered by this chapter two main factors are clearly influential in whether or not an effort is put into the production of dictionaries for indigenous languages: the number of languages within a nation and the degree of political independence of the speakers of the indigenous language. For indigenous people subject to a dominant colonial society it is typically the case that metropolitan languages predominate and there are few resources to support the indigenous languages. This is exacerbated if there are many indigenous languages as is the case in Australia and Melanesia (despite the independence of all Melanesian countries from their colonial rulers over the past 40 years). The contrary is illustrated, for example, in the cases of Māori or Hawaiian, each being essentially one language with some variation over the whole state, despite their speakers being minorities, and thus able to support language revitalisation efforts and the development of corpora and detailed dictionaries. A further example can be seen in other Polynesian languages, which, where they are spoken as the main language of the country, have more detailed dictionaries (as will be seen below) than do Polynesian outlier languages in Melanesia (where they are one among many indigenous languages).

While wordlists of some of these languages date back to the earliest colonial contacts, most of this work is simply identifying that certain words exist in the language, valuable only up to a point and a long way from representing the wealth of information that is seen in the detailed dictionaries of, for example, Arrernte (Henderson and Dobson 1994) or Kalam (Pawley et al. 2011) which capture fine nuances of meaning and local knowledge that any language deserves from a dictionary.

The main publishers of dictionaries in this region have been Pacific Linguistics at the Australian National University (e.g., Heath 1982; Lichtenberk 2008), the Institute for Aboriginal Development (IAD Press; e.g., Henderson and Dobson 1994; Green 2010); the University of Hawai‘i Press (e.g., Sperlich 1997b; Rehg and Sohl 1979); SIL (Bugenhagen and Bugenhagen 2007); and Peeters (Bril 2000; Rivierre 1994)

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As an example of the scale of work yet to be done in creating dictionaries of languages of this region, Lynch and Crowley (2001, pp. 17–19) surveyed all 123 languages of Vanuatu and found 14 languages with at least a "fairly extensive" dictionary or grammar. A subsequent survey of Vanuatu languages (Thieberger 2013) found only twenty-two languages to have a wordlist or dictionary ranked at more than three out of five possible points. So, 71 languages of Vanuatu have virtually no wordlists of any significance.

Using the Open Language Archives Community (http://www.language-archives.org/) search for facets "Pacific" and "lexicon" gives 1,611 results, which include the 610 Rosetta Swadesh lists for this region (archive.org/search.php?query=swadesh%20collection:rosettaproject). By adding the term "lexicography" the total is 578. By filtering the creation date of the items to later than 2000 there are only 40 results (all from PARADISEC, see below), filtering between 1990 and 1999 gives 212 results.

Description

This survey of lexicography will mainly be concerned with developments that have occurred since a baseline established by several earlier survey articles, notably, for Australia, O'Grady (1971), Austin (1983, 1991) and Goddard and Thieberger (1997), and for Polynesian lexicography, Sperlich (1997a). These articles together show that, as would be expected, most indigenous languages have no dictionaries, but a few languages have been the focus of very detailed lexicographic work. So, for example, in Australia, long-term dictionary projects include Warlpiri (http://www.anu.edu.au/linguistics/nash/aust/wlp/index.html) and Arrernte (Henderson and Dobson 1994), and significant dictionaries have also been prepared for Yir-Yoront (Alpher 1991), Nunggubuyu (Heath 1982), Ngaanyatjarra (Glass et al. 2003), Dalabon (Evans et al. 2004), Yanyuwa (Bradley et al. 1992), among others.

In the Pacific, there have been a number of national dictionary projects, often associated with a national language academy. Language academies are a feature of the francophone Pacific, e.g., *Académie des langues Kanak* (http://www.alk.gouv.nc/), *Académie tahitienne* (http://www.farevanaa.pf/); with equivalents like the *Māori Language Commission* (http://www.tetaurawhiri.govt.nz/), or the *Tuvaluan Language Board* (Siegel 1996). Examples include Niue (Sperlich 1997b), Tonga (Taumoefolau 1998), Fiji (Geraghty 2007), Tahiti (Académie tahitienne 2008), Hawai'i (Pukui and Elbert 1986) with an additional dictionary of new terms, created by the Hawaiian Lexicon Committee (Kōmike Hua'ōlelo, 'Aha Pūnana Leo and Hale Kuamo'o 2003); and Māori (http://www.tetaurawhiri.govt.nz/), for which there are several dictionary projects, e.g., *Tirohia Kimihia*: *He Kete Wherawhera* (the first monolingual Māori dictionary: Morris 2006), *Ī-papakupu*: *Online Monolingual Māori Dictionary* (http://www.korero.maori.nz/), *Te Aka Māori-English*, *English-Māori Dictionary and Index* (http://www.maoridictionary.co.nz/).

The University of Hawaii's Pacific and Asian Linguistics Institute (PALI) had a project to describe languages of Micronesia and Polynesia that produced dictionaries of Chamorro (Topping et al. 1975), Marshallese (Abo et al. 1976), Mokilese (Harrison and Albert 1977), Palauan (Josephs and McManus 1990), Ponapean (Rehg and Sohl 1979), Woleaian (Sohn and Tawerilmang 1976), Nukuoro (Carroll and Soulik 1973), and Kapingamarangi (Lieber and Dikepa 1974).

In New Caledonia, dictionaries of several languages have been produced in the recent past (e.g., Xârâcùù: Moyse-Faurie 1989; Iaai: Ozanne-Rivierre 1984; Miroux and Jeno 2007; Cèmuhî: Rivierre 1994; Drehu: Sam 1995) typically with a French finderlist and separate topical lists for plants, cultivated plants and animals, and occasionally also with an English finderlist. Bril (2000) includes four languages: Nêlêmwa, a neighboring variety Nixumwak, French and English.

In Vanuatu, recent dictionaries include Araki (François 2002), Sye (Crowley 2000), Anejom̃ (Lynch and Tepahae 2001), Vurës (Malau 2011), Malo (Jauncey 2011) and South Efate (Thieberger 2011b). In the

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Solomon Islands, dictionaries include Toqabaqita (Lichtenberk 2008); Cheke Holo (White et al. 1988); Sikaiana (Donner 2012); Tolo (Crowley 1986); and Owa (Mellow 2013). In Papua New Guinea, the dictionary of Kalam (Pawley et al. 2011) has taken decades of collaborative work. Other PNG dictionaries include Oksapmin (Lawrence 2006); Ata (Hashimoto 1996); and Sinaugoro (Tauberschmidt and Snyder 1995).

Further to the Polynesian dictionaries discussed by Sperlich (1997a), and those mentioned above, there has been work on a Rapa dictionary by Mary Walworth and the Tomite Reo Rapa (Walworth p.c.).

Lexical Characteristics in the Relevant Languages

Languages of this region represent various types, including agglutinating (most Austronesian, Papuan and Pama-Nyungan Australian languages) and polysynthetic (non-Pama-Nyungan Australian languages). In northern Australia, polysynthetic languages result in long and complex word forms that would be rendered as sentences in other languages, for example, the Murrinh-Patha word *Perremnunggumangime* "Those few people gave things to each other," causing predictable difficulty for dictionary makers. Seiss and Nordlinger (2011) report on progress with automated morphological parsing of Murrinh-Patha. In Dalabon, morphophonemic variation means that *na-* "to see," which is cited in its present tense form *nan*, appears in example sentences variously as *ney*, *niyan*, *narrinj*, *nangey* and *narrûn* (Evans et al. 2004: xv).

New Caledonia languages include tone and complex phoneme inventories that require diacritics and doubling and tripling of letters to represent a single phoneme e.g., *phw*, *hmw*, *hny*, *hng* in Pije, with 35 consonant phonemes (Rivierre 1979). Some Papuan languages include tone (in the Eastern Highlands) and are phonologically rather simple, typically with just three points of articulation for consonants and a five-vowel system (http://sydney.edu.au/arts/research_projects/delp/papuan.php). Serial verb constructions are common throughout the region, with implications for the citation form used in dictionaries. In some languages the verb inventory is very small, making it necessary to combine verbs to form complex meanings. In Kalam, which has a small inventory of verbs, an example is *mon pk d ap ay* "wood hit hold come put (gathering firewood)". How to analyze these complex forms and at which point they become lexicalised is a common problem for lexicographers in the region.

A feature of some Australian languages is the special variety used in avoidance of certain classes of kin, known as a mother-in-law vocabulary (Dixon 1972) typically having distinct words from the everyday language that are used when in the presence of the tabooed relative. The Lardil dictionary (Ngakulmungan and Hale 1997) does not include reference to the ceremonial register, called Damin (Evans 2010, pp. 201–203).

In Kalam (Pawley et al. 2011) there is a register called "Pandanus language" spoken during expeditions to collect mountain pandanus, and words from this variety are included in the Kalam dictionary. While not a spoken language, the script of Rapanui (Easter Island) called Rongorongo (http://kohaumotu.org/Rongorongo/index.html) has so far proven impossible to decipher and continues to invite speculation (Fischer 1997).

Other features of words that pose challenges for lexicography in this region include the following:

- Commonly in Oceania inalienable possession is marked by suffixes on eligible nouns. A strategy is then to cite, for example, the 3sg form. In Raga (Vanuatu) Walsh (2007) reports on the need to include noun class information for possessive nouns, increasing the complexity of the entry.
- In some languages of Vanuatu verbs alternate initial consonants based on aspect, so one form is cited and the other is given as a cross-reference.
- Words in polysynthetic languages with complex morphophonemic changes to what could be "root" forms but are typically not recognized as such by speakers.

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- Conjugation classes for verbs in some Australian languages require the selection of a citation form, sometimes with paradigms either provided for each verb or once for an example verb that is cross-referred to by others in the same conjugation. In the Ngaanyatjarra dictionary (Glass et al. 2003), verbs are given in the future as it provides a diagnostic form for the paradigm in which the verb occurs. As noted by Corris et al. (2004, p. 47), in agglutinative languages with a number of inflected forms for any given root, users are "disappointed when they could not find particular inflected forms of verbs in the dictionaries."

Recently there have been dictionaries produced by speakers of indigenous languages of the region, either as sole authors (e.g., Sam 1995; Bell 2004) or in collaboration with a linguist (e.g., Inia 1998; Inia and Churchward 1998; Lynch and Tepahae 2001; Tepahae 2011; Ford and McCormack 2007). Speakers writing their own dictionaries may have no training in the principles of lexical databases, which is not to say that many linguists are not similarly untrained. Summer schools (e.g., CoLang (http://www.uta.edu/faculty/cmfitz/swnal/projects/CoLang/) or LLL (http://www.hrelp.org/events/3L/)) and short training courses teach both the principles of appropriate data structures and the practicalities of particular software tools, and journals (like *Language Documentation & Conservation* (http://www.nflrc.hawaii.edu/ldc/)) provide advice and software reviews.

It has been more usual for dictionaries to be produced in partnership with a linguist who is documenting the language or with a missionary who is translating religious texts into the local language. Clearly, the greater depth of knowledge of a speaker as lexicographer will allow a dictionary to explore idiomatic and poetic uses of the language that may escape the outsider lexicographer. An example is the long-term collaboration between a linguist and a speaker of Kalam that has produced the Kalam dictionary (Pawley et al. 2011).

Developments in the methodology of language documentation (Thieberger and Berez 2012) include the creation of a citable corpus consisting of primary recordings linked to their transcripts, which, in turn, allows the traditional textual analyses of concordances and collocation searches to be linked back to primary media. This simple advance has allowed, for example, prosodic features to be recovered more easily than was the case before. And clearly this method facilitates the citation of playable media for use in dictionaries.

A dictionary can be used to provide a standard form of words or spelling, and, in some cases a vernacular literacy program will only be allowed to proceed if there is a dictionary available (this was the case in Vanuatu in the late 1990s). However, given the typically low functional load of literacy in indigenous languages, there is also a great deal of variability in spellings in the cases when the language is written. An exciting development, but one that can lead to tension with the static authority of the dictionary, is the increase in use of literacy via variable forms and spellings in texting in social media.

What is Different About Dictionaries of Indigenous Languages?

Lexicography for indigenous languages can require particular methods, as discussed in the volume edited by Frawley et al. (2002), and also by Bowern (2008, pp. 203–207), Mosel (2011), Haviland (2006), Ogilvie (2011), Simpson (1993) and the December 2011 special issue of the *International Journal of Lexicography* on dictionaries of endangered languages (http://ijl.oxfordjournals.org/content/24/4.toc). Briefly, there are particular issues related to the number of speakers, the number of literate speakers, the role of literacy in the community, and the amount of information recorded in the language. With few speakers it can be difficult to find an enthusiastic lexicographer who speaks the language, especially given all of the priorities that minority communities have to deal with, so it is likely that most of the work of collecting and establishing a lexical database will rely on an outsider linguist whose language ability will

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be less than native-speaker competence. With low levels of literacy come associated questions of orthography design and the audience for the dictionary (Corris et al. 2004).

Another major difference noted by Mosel (2011, p. 337) between dictionaries of metropolitan and indigenous languages is that "the latter are non-profit enterprises with limited resources of time, money and staff." (While Mosel's observation relates specifically to endangered languages it applies equally to most indigenous languages.) She goes on to point out the sense of urgency that comes with recording what may be the last generation of speakers who have detailed linguistic knowledge.

Synchronic and Historical Principles in Dictionaries in This Region

In general, dictionaries arising from fieldwork are necessarily synchronic, but in Oceanic languages the existence of substantial reconstructions of proto forms (see below) allows these forms to be included in synchronic dictionaries for comparative purposes (e.g., Malau 2011). The Swadesh (1971) list or variants of it have been used in comparative work in Australia (Menning and Nash 1981). Claire Bowern (Bowern and Atkinson 2012) has built a comparative database of some 739,000 lexical items from 405 varieties of Pama-Nyungan languages.

POLLEX (http://pollex.org.nz/) is a lexical comparison project for Polynesian languages begun by Bruce Biggs in 1965 and migrated from paper slips to punchcards to databases and now to an online system (Greenhill and Clark 2011) containing some 55,000 entries from 68 languages, with the number of words from any given language varying depending on availability (over 3,200 words in Māori, 2,600 in Tongan). Robert Blust (Blust and Trussel 2010) is producing an ongoing web-based comparative Austronesian project and a subset of that project identifying regular sound correspondences in all Austronesian languages is also online (http://language.psy.auckland.ac.nz/austronesian/; Greenhill et al. 2008) containing 203,845 lexical items representing 210 words from each of 998 Pacific languages. A larger list of 1,200 items in 80 Austronesian languages was used in the *Comparative Austronesian Dictionary* (Tryon 1995).

A reconstruction of Proto-Oceanic vocabulary is being worked on and aims to produce seven volumes (the first four are Ross et al. 1998, 2003, 2008, 2011) organized by topic.

Principles of Definition Writing, Explanation, and/or Translation Followed in Dictionaries in This Area

Typically, for projects working to record indigenous languages, the initial lexical information is in the form of a wordlist. If the work continues, then the microstructure may become more detailed, for example, exploring semantic relationships in lexica. The Warlpiri dictionary includes "definitions" composed by Warlpiri people, both as examples of the usage of the headword, but also as an explication, for example, the word *jaaljaaj*(*pa*) has the sense "feeling, hunch, premonition" and is followed by the Warlpiri sentence with the English gloss "I have a feeling about something. Perhaps they are going to hit my son" (Simpson 1993, p. 140). The Warlpiri dictionary has been implemented using a platform called Kirrkirr (http://www-nlp.stanford.edu/kirrkirr/), allowing active links to media, and navigation of semantic relationships of synonymy, antonymy and other forms of relatedness (Manning et al. 2001), something that is also provided for in Matapuna (http://sourceforge.net/projects/matapuna/).

Despite the Natural Semantic Metalanguage originating in Australia (Goddard 2003) it has not been taken up in the construction of dictionaries, but has been used in explication of semantic concepts in some indigenous languages (see, for example, articles in the *Australian Journal of Linguistics*, Vol. 33(3), 2013).

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Software

Electronic lexicons in which the form is distinguished from the content (lexical databases) allow a variety of derived forms of dictionaries and, happily, there are many examples of well-structured lexical databases for languages of this region, among them the Australian dictionaries of Arrernte and Warlpiri and the more recent dictionaries of Vurës, Tamambo and South Efate (Vanuatu). Because many language documentation projects produce recordings with transcripts that are then interlinearised, the currently preferred software tools are *Toolbox* (http://www-01.sil.org/computing/toolbox/) and *Fieldworks* (http://fieldworks.sil.org/; see the review by Rogers 2010), which both allow a lexicon to feed text glossing, while *TLex or TshwaneLex* (http://tshwanedje.com/tshwanelex/) also has some users (see the review by Bowern 2007). *LexiquePro* (http://www.lexiquepro.com/) is used by a number of projects to present their Toolbox dictionaries as either standalone Windows-based executables, or exported to HTML. The online dictionary system *Matapuna* was developed in New Zealand and used for the development and presentation of Māori dictionaries (see the review by Bah 2010).

Lang et al. (1972) describe the use of 80-column punch cards for encoding a 5,500 headword dictionary of Enga (PNG), in perhaps the earliest example of computational lexicography for an indigenous language of the region. In the early 1980s in Hawaii, Robert Hsu built software to create lexical databases from which dictionaries in various forms could be derived. His *Lexware* (Hsu 1985) program worked with a text file with "bands"–fields delimited in a way very similar to that subsequently used by the popular tool *Shoebox*/*Toolbox*. Hsu acted as a consultant to over a hundred dictionaries from all over the world (Hsu, p.c.) with the result that many well-formatted dictionaries appeared as books, with the files allowing for later revisions to the original dictionaries or for the development of web-based dictionaries, like the Austronesian Comparative Dictionary, Combined Hawaiian Dictionary, Combined Kiribati-English Dictionary, Marshallese-English Online Dictionary, Micronesian Comparative Dictionary, Mokilese-English Dictionary, Pohnpeian-English Dictionary, and Yapese Dictionary (all at http://www.trussel2.com/).

While ideally dictionaries would be created using dedicated lexicographic tools, it is nevertheless the case that some fine dictionaries have been produced from word processors or databases (DBMSs), with lexicographers using the tools they are most comfortable with. It has, for example, been possible for the Ngarrindjeri dictionary project to use FileMakerPro to allow data entry and searching, and to export the content in XML using XSL to convert to a Toolbox format for formatting with the Multi-Dictionary Formatter (Thieberger 2011a) to produce more suitable paper-based copy. The dictionary display software *Miromaa* (http://www.miromaa.org.au/Miromaa/Miromaa-Features.html) is used by a number of language centers in Australia and was developed in Newcastle.

Where word processors have been used to create a dictionary and the digital data is still available it is possible to impose a marked-up structure on the file, using regular expressions or the online conversion service provided by OxGarage (http://www.tei-c.org/ege-webclient/). An example is the Tahitian dictionary, initially produced using the database *4thDimension* and then exported to a word processor for publication. As it was handcrafted and the project's time had run out, the French-Tahitian reversal was only produced for the letters *A* to *D*. The document could be converted to a structured file in a matter of several hours, thus making it possible to generate a full reversal.

In Australia, the National Lexicography Project (Simpson and Nash 1989) of the late 1980s and its successor, the Aboriginal Dictionaries Project (1990–1994), both based at the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), supported the creation of over 50 dictionaries. The Aboriginal Studies Electronic Data Archive (ASEDA, cf. http://www1.aiatsis.gov.au/aseda/docs/; Thieberger 1995), also at AIATSIS, was an early repository for curating and storing the underlying data files for these dictionaries and making them available for reuse, often in Aboriginal language centers (http://www.ourlanguages.net.au/language-centres.html). It was noted that this set of material could

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become the basis for a pan-Australian dictionary (Goddard and Thieberger 1997, p. 192)—a project yet to eventuate but still a possibility (Bowern's database, mentioned earlier, is largely based on material from ASEDA). Perhaps the first web-based dictionary of an Australian indigenous language was of Gamilaraay (Austin and Nathan 1998).

The only repository for digital files of Pacific dictionaries is Pacific and Regional Archive for Digital Sources in Endangered Cultures (PARADISEC) (http://catalog.paradisec.org.au/), which currently only holds seven dictionary files in editable text formats (Niuean, Namakir, South Efate, Chamorro, Koita, Kalam, and Golin) and includes many more image files of scanned dictionaries.

A problem faced by indigenous people in settler societies is that the colonists regard the indigenous society as being of little value, including its languages. Early popular wordlists of indigenous Australian languages (e.g., Kenyon 1975; Reed 1965) have tended to exoticize and mix words from different languages, doing little to educate about the nature and diversity of the languages. A project to counter this tendency was the publication of a collection of words in 17 Australian languages (Thieberger and McGregor 1994) produced by the Macquarie dictionary, with an introduction to the structure of each language and a topical wordlist.

The Language of the Dictionaries, Multilingual and Monolingual

For many languages with brief grammatical descriptions, a simple word translation is the first step in identifying words and meanings. Often the only dictionary of the language is in this form, sometimes as an appendix to the grammar, e.g., Moyle's (2011) Takuu grammar is 56 pages long with the dictionary taking up the remaining 370 pages (see also Shintani and Paita 1990; Senft 1986). Typically dictionaries are bilingual, or occasionally trilingual, with the local lingua franca and a language of wider communication, for example, *Nelemwa-Nixumwak-Français-Anglais* (Bril 2000), the Baruya dictionary in Baruya, Tok Pisin and English (Lloyd 1992), the Alawa-Kriol-English dictionary (Sharpe and Le May 2001), or the Melpa dictionary in Melpa, German and English (Stewart et al. 2011).

Fiji's monolingual dictionary of some 25,000 headwords (http://www.fijianaffairs.gov.fj/IILC%20Publication.html) was ready for publication in 1996 (Geraghty 2007) but has not yet appeared. Taumoefolau (1998, p. 23) reports on monolingual dictionaries in progress for Tongan, Samoan and Niuean. A monolingual Māori dictionary is being developed by the Māori Language Commission (http://www.tetaurawhiri.govt.nz/english/resources_e/) and the monolingual Palauan dictionary contains 13,800 entries (Ramarui and Temael 2000).

Online Availability of Dictionaries

Increasingly, new dictionaries and updates to older ones are being produced in electronic form only, as websites (e.g., the Cook Islands dictionary: http://mangaia.cookislandsdictionary.com/); in WordPress blog sites (e.g., Sikaiana: http://www.sikaianaarchives.com/dictionary-3/); as online dictionaries that can incorporate images and audio (e.g., Malau 2011; Thieberger 2011a; Cablitz 2011a); or the collection of online dictionaries produced by LexiquePro: http://www.lexiquepro.com/library.htm); as downloadable versions (e.g., the collection of dictionaries available from the Wangka Maya website: http://www.wangkamaya.org.au/pilbara-languages/resources-and-dictionaries); and occasionally with the use of publish-on-demand services like CreateSpace to allow for paper copies as required (e.g., the reprint of an 1865 Hawaiian dictionary: https://www.createspace.com/4186680, or the I-Kiribati dictionary: https://www.createspace.com/3513726). The Bible translating organization SIL's Papua New Guinea website (http://www-01.sil.org/pacific/png/show_subject.asp?pubs=online&code=DAV) provides links to some 70 online dictionaries, and their Australian site lists 13 dictionaries (http://ausil.org.au/node/3717).

Delivery of dictionaries on portable devices like mobile phones is also developing quickly (e.g., Ma! Iwaidja: http://www.iwaidja.org/site/ma-iwaidja-phone-app/, and a number of other examples: http://globalnativenetworks.wordpress.com/2013/06/18/idecolonize-indigenous-language-learning-mobile-

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apps/). The now superseded *Project for free electronic dictionaries* (PFED, http://pfed.info/) was an early example of using mobile phones for delivery of dictionary text. Multimedia presentation allows exploration and presentation of information that clarifies the meaning of words, especially biological identification and processes that would otherwise require long and detailed textual descriptions (Cablitz 2011b). A risk in early multimedia dictionaries was that the content became unplayable as software became outdated, but the focus on separation of content and form that is common to most current lexicographic projects should ensure that this is no longer a problem.

Taumoefolau (1998, p. 37) notes that native speakers can be disappointed in the content or usability of a dictionary if its primary audience is linguists. The inclusion of abstract grammatical information or cognate forms in proto languages is unlikely to make the dictionary friendly to general users. As many existing dictionaries were produced as monolithic works in a word processor, it is understandable that they tried to be as comprehensive as possible. However, now that lexical databases allow outputs in various forms (learner's dictionary, topical wordlist and so on) it should be easier to create user-friendly dictionaries in addition to maintaining a more technical version for access by linguists, perhaps as an online-only version. Dictionaries produced by community-governed language academies or language centers can be designed to be more accessible, e.g., the Bardi dictionary (Aklif 1999) with its copious illustrations, photographs, and a placenames list, or a number of Australian dictionaries that appear in both traditional textual format and also as picture dictionaries (http://iadpress.com/shop/category/aboriginal-languages/; Wangka Maya 2006; Ross and Turpin 2004; Moore and Blackman 2004), in which a set of a few hundred terms are presented with illustrations, usually arranged by topic, to broaden the accessibility of the dictionary. They can also include information like, for example, the god associated with each word as in Te Taura Whiri i te Reo Maori (2009) – an attempt to make lexicography more Māori.

Early dictionaries are being reprinted either in the absence of more recent research, or because they represent what is felt to be an older and hence more authoritative version of the language. For example, Bindon and Chadwick (2011) is a book printed from a database of Nyungar (Western Australia) words compiled from a collection of early sources. A dictionary of Puynipet (Caroline Islands), originally published in 1881 was reprinted in 2011 (P.A.C. 2011). The dictionary of Roviana (Waterhouse 2005/1928) was reprinted as facsimile in 2005, and the Kiribati dictionary of 1908 was reprinted in 2004 (Bingham 2004).

Out of print or out of copyright dictionaries are also being made available online, as text or pdf files (e.g., Cheke Holo: White et al. 1988; Sa'a and Ulawa, Solomon Islands in the Internet Archive (https://archive.org/details/dictionarygramma00ivenuoft); a Māori dictionary (Fletcher 1907) is available via Project Gutenberg. A Motu dictionary dictionary (Lawes 1896) is freely available at the internet archive. Once the dictionary is out of copyright and made openly available it can be reprinted and offered for sale on the internet. The potential complications and ethical issues around this kind of reuse of dictionaries is discussed by Peter Austin and others in a series of blog posts (cf. http://www.paradisec.org.au/blog/2008/07/copy-right/, and http://www.paradisec.org.au/blog/2011/04/theyre-out-to-get-you-or-your-data-at-least/).

Few lexicographic projects in the region have used the Text Encoding Initiative (TEI, http://www.tei-c.org/) to encode the primary data of a dictionary. The New Zealand Electronic Text Collection provides an XML version of a 1957 Maori dictionary (Williams 1957). XML has also been used to encode legacy material produced by the linguist Gerhardt Laves in the 1930s (Henderson 2008), consisting of a mix of dictionary and texts of Nyungar (Southern Western Australia). The earliest wordlist of an Australian language, William Dawes's (1790–91) manuscript, has been reproduced in digital form (http://www.williamdawes.org/), with a transcript in XML allowing location of parts of the manuscript. A similar project, using the TEI, is encoding a wordlist collection by Daisy Bates (http://languages-linguistics.unimelb.edu.au/current-projects/digital-daisy-bates) from the early 1900s.

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Strategies for Finding Words and Principles for Selecting Them

Language documentation encourages creating corpora of which a rich, perhaps encyclopedic, lexicon is a part. Ideally, a textual corpus provides the collocations and frequency counts that inform the dictionary (Boyce 2006), but, for most languages such corpora simply do not exist. Even where a linguist has been active in fieldwork, there is no tradition of creating a reusable corpus and, of the few corpora that are created, even fewer are publicly available. Much lexicographic practice for indigenous languages is clearly based on elicitation which can be driven by an existing questionnaire (e.g., Bouquiaux and Thomas 1992; Sutton and Walsh 1979) or by other forms of exploration (e.g., the "rapid word collection" approach: http://rapidwords.net/ and http://www-01.sil.org/computing/ddp/DDP_downloads.htm). Mosel (2011), with experience of working with Teop (PNG) and Samoan dictionaries, recommends against the use of standard wordlists and, instead, advocates using a thematic approach to focus on a single domain thus resulting in mini dictionaries that can feed into a larger work but which are self-contained in themselves.

The complementary task of text collection and the establishment of a corpus is labor intensive, but ultimately rewarding both for the lexicographer and for the speakers, who will have a lasting record of their narratives. More recent documentation projects typically include the construction of a corpus, which, while nowhere near the size of corpora for metropolitan languages, still provide contextual examples to be used in the dictionary. This is particularly useful for locating new words as can be found in several dictionaries, for example the Iaai dictionary has a section on the internet and on new words needed for the present day (Miroux and Jeno 2007, p. 315), and Stephens and Boyce (2011, 2013) report on a corpus of Māori legal terms (http://nzetc.victoria.ac.nz/tm/scholarly/tei-legalMaoriCorpus.html).

Beyond the traditional structure of a headword and lexical treatment, there are a number of examples of detailed explorations of particular topics in language of the region, for example, the classic ornithological study in Kalam by Majnep and Bulmer (1977), the ethnobiology of Pohnpei (Balick 2009), or the fruiting plants of Oceania (Walter and Sam 1999).

Conclusion

The number of languages and the geographically huge area of the Australia-Pacific region militate against extensive research on every indigenous language of that region. While a few detailed dictionaries have been created, much more work remains to be done. Prospects are good for the long-term storage and dissemination of dictionaries using existing methods and innovative technologies now being developed for mobile devices both for delivery and for crowd-sourcing content of new dictionaries.

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References

Austin, P. (Ed.). (1983). *Papers in Australian linguistics no. 15: Australian aboriginal lexicography.* Canberra: Pacific Linguistics.

Austin, P. (1991). Australian lexicography. In F. J. Hausmann, O. Reichmann, & H. E. Wiegand (Eds.), *Encyclopedia of lexicography* (pp. 2638–2641). Berlin: Walter de Gruyter.

Bah, O. (2010). Review of Matapuna dictionary writing system. *Language Documentation & Conservation, 4*, 169–176.

Bouquiaux, L., & Thomas, J. (Eds.). (1992). *Studying and describing unwritten languages*. Dallas: Summer Institute of Linguistics.

Bowern, C. (2007). Review of TshwaneLex dictionary compilation software. *Language Documentation & Conservation, 1*(1), 94–99.

Bowern, C. (2008). *Linguistic fieldwork: A practical guide*. New York: Palgrave Macmillan.

Bowern, C., & Atkinson, Q. (2012). Computational phylogenetics and the internal structure of Pama-Nyungan. *Language, 88*(4), 817–845.

Boyce, M. T. (2006). *A corpus of modern spoken Māori*. Ph.D. Dissertation, Victoria University of Wellington, Wellington.

Cablitz, G. H. (2011a). Documenting cultural knowledge in dictionaries of endangered languages. *International Journal of Lexicography, 24*(4), 446–462.

Cablitz, G. H. (2011b). The making of a multimedia encyclopaedic lexicon for and in endangered speech communities. In G. Haig, N. Nau, S. Schnell, & W. Wegener (Eds.), *Documenting endangered languages: Achievements and perspectives* (pp. 223–262). Berlin: Walter de Gruyter.

Corris, M., Manning, C., Poetsch, S., & Simpson, J. (2004). How useful and usable are dictionaries for speakers of Australian indigenous languages? *International Journal of Lexicography, 17*(1), 33–68.

Crowley, T. (1999). The socially responsible lexicographer in Oceania. *Journal of Multilingual and Multicultural Development, 20*(1), 1–12.

Dixon, R. M. W. (1972). *The Dyirbal language of North Queensland*. Cambridge: Cambridge University Press.

Dixon, R. M. W. (2002). *Australian languages: Their nature and development*. Cambridge: Cambridge University Press.

Evans, N. (2010). *Dying words: Endangered languages and what they have to tell us*. Oxford: Wiley-Blackwell.

Fischer, S. R. (1997). *Rongorongo: The Easter Island script. History, traditions, texts*. Oxford: Clarendon.

Foley, W. A. (1986). *The Papuan languages of New Guinea*. Cambridge: Cambridge University Press.

Frawley, W., Hill, K. C., & Munro, P. (Eds.). (2002). *Making dictionaries: Preserving indigenous languages of the Americas*. Berkeley: University of California Press.

Geraghty, P. (2007). The Fijian dictionary experience. In J. Siegel, J. Lynch, & D. Eades (Eds.), *Language description, history and development: Linguistic indulgence in memory of Terry Crowley* (pp. 383–394). Amsterdam: John Benjamins.

Goddard, C. (2003). Thinking across languages and cultures: Six dimensions of variation. *Cognitive Linguistics, 14*(2–3), 109–140.

Goddard, C., & Thieberger, N. (1997). Lexicographic research on Australian aboriginal languages, 1968–1993. In D. Tryon & M. Walsh (Eds.), *Boundary rider. Essays in honour of Geoffrey O'Grady* (pp. 175–208). Canberra: Pacific Linguistics.

Greenhill, S. J., & Clark, R. (2011). POLLEX-Online: The Polynesian Lexicon project online. *Oceanic Linguistics, 50*(2), 551–559.

DOI 10.1007/978-3-642-45369-4_92-1
© Springer-Verlag Berlin Heidelberg 2015

Greenhill, S. J., Blust, R., & Gray, R. D. (2008). The Austronesian basic vocabulary database: From bioinformatics to lexomics. *Evolutionary Bioinformatics, 4*, 271–283.

Haviland, J. (2006). Documenting lexical knowledge. In J. Gippert, N. P. Himmelmann, & U. Mosel (Eds.), *Essentials of language documentation* (pp. 129–162). Berlin: Mouton de Gruyter.

Henderson, J. (2008). Capturing chaos: Rendering handwritten language documents. *Language Documentation & Conservation, 2*(2), 212–243.

Hsu, R. (1985). *Lexware manual*. Manoa: Department of Linguistics, University of Hawai'i.

Lang, A., Mather, K. E. W., & Rose, M. L. (1972). *Information storage and retrieval: A dictionary project*. Canberra: Department of Linguistics, Research School of Pacific Studies, Australian National University.

Lichtenberk, F. (2003). To list or not to list: Writing a dictionary of a language undergoing rapid and extensive lexical changes. *International Journal of Lexicography, 16*(4), 387–401.

Lynch, J. (1998). *Pacific languages: An introduction*. Honolulu: University of Hawai'i Press.

Lynch, J., & Crowley, T. (2001). *Languages of Vanuatu: A new survey and bibliography*. Canberra: Pacific Linguistics.

Manning, C. D., Jansz, K., & Indurkhya, N. (2001). Kirrkirr: Software for browsing and visual exploration of a structured Warlpiri dictionary. *Literary and Linguistic Computing, 16*(2), 135–151.

Menning, K., & Nash, D. (1981). *Sourcebook for Central Australian languages*. Alice Springs: IAD.

Mosel, U. (2011). Lexicography in endangered language communities. In P. K. Austin & J. Sallabank (Eds.), *The Cambridge handbook of endangered languages* (pp. 337–353). Cambridge: Cambridge University Press.

Nathan, D., & Austin, P. (1992). Finderlists, computer-generated, for bilingual dictionaries. *International Journal of Lexicography, 5*(1), 132–164.

O'Grady, G. N. (1971). Lexicographic research in Aboriginal Australia. In T. A. Sebeok (Ed.), *Current trends in linguistics 8* (pp. 779–803). The Hague: Mouton.

Ogilvie, S. (2011). Linguistics, lexicography, and the revitalization of endangered languages. *International Journal of Lexicography, 24*(4), 389–404.

Pawley, A. (2001a). Phraseology, linguistics and the dictionary. *International Journal of Lexicography, 14*(2), 122–134.

Pawley, A. (2001b). Some problems of describing linguistic and ecological knowledge. In L. Maffi (Ed.), *On biocultural diversity: Linking language, knowledge, and the environment* (pp. 228–247). Washington: Smithsonian Institution.

Pawley, A. (2009). Grammarians' languages versus humanists' languages and the place of speech act formulas in models of linguistic competence. In R. Corrigan, E.A. Moravcsik, H. Ouali, and K. Wheatley (Eds) Formulaic Language: Volume 1. Distribution and historical change (pp. 3–26.)Amsterdam: John Benjamins.

Pawley, A. (2011). What does it take to make an ethnographic dictionary? On the treatment of fish and tree names in dictionaries of Oceanic languages. In G. L. J. Haig, N. Nau, S. Schnell, & C. Wegener (Eds.), *Documenting endangered languages: Achievements and perspectives* (pp. 263–287). Berlin: Walter de Gruyter.

Rivierre, F. (1979). Le Pije, langue de Tiendanite et de la vallée de Tipindje. In A. G. Haudricourt, J. Rivierre, F. Rivierre, C. Moyse Faurie, & J. de la Fontinelle (Eds.), *Les langues mélanésiennes de nouvelle-calédonie* (pp. 38–44). Nouméa: DEC, Bureau Psychopédagogique.

Rogers, C. (2010). Review of fieldworks language explorer (FLEx) 3.0. *Language Documentation & Conservation, 4*, 78–84.

DOI 10.1007/978-3-642-45369-4_92-1
© Springer-Verlag Berlin Heidelberg 2015

Seiss, M., & Nordlinger, R. (2011). An electronic dictionary and translation system for Murrinh-Patha. In *Proceedings of the EUROCALL 2011 conference*, University of Nottingham.

Siegel, J. (1996). *Vernacular education in the South Pacific*. Canberra: Australian Agency for International Development.

Simpson, J. (1993). Making Dictionaries. In M. Walsh & C. Yallop (Eds.), *Language and culture in Aboriginal Australia* (pp. 123–144). Canberra: Aboriginal Studies Press.

Simpson, J., & Nash, D. (1989). AIAS archive of machine-readable files of Australian languages: The National Lexicography Project. *Australian Aboriginal Studies, 1*(1989), 57–59.

Sperlich, W. B. (1997a). A review of advances in Polynesian lexicography. *Rongorongo*, *8*(1):25–35; *8*(2):59–72.

Stephens, M., & Boyce, M. (2011). Finding a balance: Customary legal terms in a modern Move to dictionary section. *International Journal of Lexicography, 24*(4), 432–445.

Sutton, P., & Walsh, M. (1979). *Revised linguistic fieldwork manual for Australia*. Canberra: Australian Institute of Aboriginal Studies.

Swadesh, M. (1971). *The origin and diversification of language*. Chicago: Aldine.

Taumoefolau, M. L. (1998). *Problems in Tongan Lexicography*. Ph.D. thesis, University of Auckland, Auckland.

Tepahae, P. (2011). Diksnari blong Aneityum. In J. Taylor & N. Thieberger (Eds.), *Working together in Vanuatu: Research histories, collaborations, projects and reflections* (pp. 67–72). Canberra: ANU E Press.

Thieberger, N. (1995). The Aboriginal Studies Electronic Data Archive. *International Journal on the Sociology of Language, 113*, 147–150.

Thieberger, N. (2011a). Building a lexical database with multiple outputs: Examples from legacy data and from multimodal fieldwork. *International Journal of Lexicography, 24*(4), 463–472.

Thieberger, N. (2013). Language archives for the Pacific [Presentation at the DoBeS conference *Language Documentation: Past – Present – Future*, Hanover, June 5–7, 2013].

Thieberger, N., & Berez, A. (2012). Linguistic data management. In N. Thieberger (Ed.), *The Oxford handbook of linguistic fieldwork* (pp. 90–118). Oxford: Oxford University Press.

Walsh, D. S. (2007). Structure, style and content in dictionary entries for an Oceanic language. In J. Siegel, J. Lynch, & D. Eades (Eds.), *Language description, history and development: Linguistic indulgence in memory of Terry Crowley* (pp. 371–381). Amsterdam: John Benjamins.

Dictionaries

Abo, T., Bender, B. W., Capelle, A., & DeBrum, T. (1976). *Marshallese-English dictionary*. Honolulu: University Press of Hawaii.

Académie tahitienne. (2008). *Dictionnaire français-tahitien. Tome 1 (A-D)*. Papeete: Académie tahitienne.

Aklif, G. (1999). *Ardiyooloon Bardi Ngaanka: One Arm Point Bardi dictionary*. Halls Creek: Kimberley Language Resource Centre.

Alpher, B. (1991). *Yir-Yoront Lexicon: Sketch and Dictionary of an Australian Language* (Trends in Linguistics 6). Berlin: Mouton de Gruyter.

Austin, P., & Nathan, D. (1998). *Kamilaroi/Gamilaraay Web Dictionary*. http://www1.aiatsis.gov.au/aseda/WWWVLPages/AborigPages/LANG/GAMDICT/GAMDICT.HTM

Balick, M. J. (2009). *Ethnobotany of Pohnpei: plants, people, and island culture*. Honolulu: University of Hawai‘i Press.

Bell, J. (2004). *Dictionary of the Butchulla language*. Hervey Bay: Korrawinga Aboriginal Corporation.

DOI 10.1007/978-3-642-45369-4_92-1
© Springer-Verlag Berlin Heidelberg 2015

Bindon, P., & Chadwick, R. (Eds.). (2011). *A Nyoongar wordlist: from the south-west of Western Australia* (2nd ed.). Welshpool: Western Australian Museum.

Bingham, H. (2004). *A Kiribati-English dictionary.* [Apia, Samoa]: Reprinted by the Institute for Research, Extension and Training in Agriculture (IRETA) and Technical Centre for Agricultural and Rural Cooperation (CTA).

Blust, R., & Trussel, S. (2010). *Austronesian Comparative Dictionary, web edition*. http://www.trussel2.com/ACD

Bradley, J., Kirton, J., & Yanyuwa Community. (1992). *Yanyuwa Wuka: language from Yanyuwa Country – a Yanyuwa dictionary and cultural resource.* http://espace.library.uq.edu.au/eserv/UQ:11306

Bril, I. (2000). *Dictionnaire nêlêmwa-nixumwak-français-anglais: avec introduction grammaticale et lexiques*. Paris: Peeters.

Bugenhagen, R. D., & Bugenhagen, S. E. (2007). *Ro ta ipiyooto sua Mbula Uunu = Mbula-English dictionary.* http://www.sil.org/pacific/png/abstract.asp?id=49817

Carroll, V., & Soulik, T. (1973). *Nukuoro lexicon*. Honolulu: University Press of Hawaii.

Crowley, S. S. (1986). *Tolo dictionary.* Canberra: Pacific Linguistics.

Crowley, T. (2000). *An Erromangan (Sye) dictionary.* Canberra: Pacific Linguistics.

Dawes, W. (1790–91). *Vocabulary of the language of N.S. Wales, in the neighbourhood of Sydney (Native and English), by Dawes*. London: School of Oriental and African Studies. Manuscript, Marsden Collection 41645b.

Donner, W. W. (2012). *Sikaiana Archives – Dictionary.* http://www.sikaianaarchives.com/dictionary-3

Evans, N., Merlan, F., & Tukumba, M. (2004). *A First Dictionary of Dalabon (Ngalkbon)*. Maningrida: Maningrida Arts and Culture.

Fletcher, H. J. (1907). *Hinemoa With Notes & Vocabulary.* http://www.gutenberg.org/ebooks/22009

Ford, L., & McCormack, D. (2007). *Murrinh tetemanthay ngarra murrinh law kardu bamam thanguna: Murrinhpatha – English Legal Glossary.* Bowden McCormack Lawyers + Advisors. http://www.bowden-mccormack.com.au

François, A. (2002). *Araki: a disappearing language of Vanuatu*. Canberra: Pacific Linguistics.

Glass, A., Hackett, D., & Newberry, B. (2003). *Ngaanyatjarra-Ngaatjatjarra to English dictionary.* Alice Springs: IAD Press.

Green, J. (2010). *Central & Eastern Anmatyerr to English Dictionary.* Alice Springs: IAD Press.

Harrison, S. P., & Albert, S. (1977). *Mokilese-English dictionary.* Honolulu: University Press of Hawaii.

Hashimoto, K. (1996). *Ata-English dictionary.* Ukarampa, Papua New Guinea: Summer Institute of Linguistics.

Heath, J. (1982). *Nunggubuyu dictionary.* Canberra: Australian Institute of Aboriginal Studies.

Henderson, J., & Dobson, V. (1994). *Eastern and Central Arrernte to English Dictionary.* Alice Springs: IAD Press.

Inia, E. K. M. (1998). *Fäeag 'Es Fuaga: Rotuman Proverbs, Compiled and Translated by Elizabeth K.M. Inia, with an essay on proverbs in Rotuman culture by Alan Howard and Jan Rensel*. Suva: Institute of Pacific Studies, University of the South Pacific.

Inia, E. K. M., & Churchward, C. M. (1998). *A new Rotuman dictionary: an English-Rotuman wordlist*. Suva: Institute of Pacific Studies, University of the South Pacific.

Jauncey, D. (2011). *Dictionary of Tamambo, Malo*. http://paradisec.org.au/vandicts/Tamambolexicon/index-english/main.htm

Josephs, L. S., & McManus, E.G. (1990). *New Palauan-English dictionary.* Honolulu: University of Hawai‘i Press.

Kenyon, J. (1975). *The Aboriginal word book*. Melbourne: Lothian.

DOI 10.1007/978-3-642-45369-4_92-1
© Springer-Verlag Berlin Heidelberg 2015

Kōmike Hua‘ōlelo, ‘Aha Pūnana Leo, & Hale Kuamo‘o. (2003). *Māmaka kaiao: a modern Hawaiian vocabulary . A compilation of Hawaiian words that have been created, collected, and approved by the Hawaiian Lexicon Committee from 1987 through 2000*. Honolulu: University of Hawai‘i Press.

Lawes, W. G. (1896). *Grammar and vocabulary of language spoken by Motu tribe (New Guinea), by Rev. W.G. Lawes . . . with introduction by the Rev. George Pratt*. Sydney: C. Potter.

Lawrence, M. (2006). *Oksapmin dictionary*. http://www-01.sil.org/pacific/png/abstract.asp?id=48954

Lewis, M. P., Simons, G. F., & Fennig, C. D. (Eds.). (2013). *Ethnologue: Languages of the World, Seventeenth edition*. Dallas: SIL International. http://www.ethnologue.com

Lichtenberk, F. (2008). *A dictionary of Toqabaqita (Solomon Islands)*. Canberra: Pacific Linguistics.

Lieber, M. D., & Dikepa, K. H. (1974). *Kapingamarangi lexicon*. Honolulu: University Press of Hawaii.

Lloyd, J. A. (1992). *A Baruya-Tok Pisin-English dictionary*. Canberra: Department of Linguistics, Research School of Pacific Studies, Australian National University.

Lynch, J., & Tepahae, P. (2001). *Anejom dictionary: diksonari blong Anejom: nitasviitai a nijitas antas Anejom*. Canberra: Pacific Linguistics.

Majnep, I. S., & Bulmer, R. (1977). *Birds of my Kalam country = Mnmon yad Kalam yakt*. Auckland: Auckland University Press.

Malau, C. (2011). *Dictionary of Vurës*. http://paradisec.org.au/vandicts/Vureslexicon/index-english/main.htm

Mellow, G. (2013). *A Dictionary of Owa: A Language of the Solomon Islands*. Canberra: Pacific linguistics.

Miroux, D., & Jeno, J. (2007). *Dictionnaire français-iaai: dictionnaire contextuel et thématique*. Nouméa: Alliance Champlain.

Moore, D. C., & Blackman, D. A. (2004). *Alyawarr picture dictionary*. Alice Springs: IAD Press.

Morris, B. (2006). *Tirohia Kimihia: a Māori learner dictionary*. Wellington: Published for the Ministry of Education by Huia.

Moyle, R. M. (2011). *Takuu grammar and dictionary: a Polynesian language of the South Pacific*. Canberra: Pacific Linguistics.

Moyse-Faurie, C. (1989). *Dictionnaire xârâcùù-français (Nouvelle-Calédonie)*. Nouméa: Éditions populaires.

Ngakulmungan, K. L., & Hale, K. L. (1997). *Lardil dictionary: a vocabulary of the language of the Lardil people, Mornington Island, Gulf of Carpentaria, Queensland, with English-Lardil finder list*. Gununa: Mornington Shire Council.

Ozanne-Rivierre, F. (1984). *Dictionnaire iaai-français (Ouvéa, Nouvelle-Calédonie), suivi d’un lexique français-iaai*. Paris: SELAF.

P.A.C. (2011). *Quelques mots de la langue de Puynipet (Île de l’Ascension) dans l’archipel des Carolines, recueillis par les Prêtres des Missions Étrangères de Milan et mis en ordre par le P.A.C.* Munich: Lincom.

Pawley, A., Bulmer, R., Kias, K., Gi, S. P., & Majnep, I. S. (2011). *A dictionary of Kalam with ethnographic notes*. Canberra: Pacific Linguistics.

Pukui, M. K., & Elbert, S. H. (1986). *Hawaiian dictionary: Hawaiian-English, English-Hawaiian* (Rev. and enl. ed.). Honolulu: University of Hawai‘i Press.

Ramarui, A., & Temael, M. K. (2000). *Kerresel a klechibelau: Tekoi er a Belau me a omesodel: Palauan language lexicon*. Koror: Belau National Museum.

Reed, A. W. (1965). *Aboriginal words of Australia*. Sydney: A. H. & A. W. Reed.

Rehg, K. L., & Sohl, D. G. (1979). *Ponapean-English dictionary*. Honolulu: University Press of Hawaii.

Rivierre, J. C. (1994). *Dictionnaire cèmuhî-français, suivi d’un lexique français-cèmuhî*. Paris: Peeters.

Ross, A., & Turpin, M. (2004). *Kaytetye picture dictionary*. Alice Springs: IAD Press.

DOI 10.1007/978-3-642-45369-4_92-1
© Springer-Verlag Berlin Heidelberg 2015

Ross, M., Osmond, M., & Pawley, A. (1998). *The lexicon of Proto Oceanic: the culture and environment of ancestral Oceanic society* (Vol. 1). Canberra: Pacific Linguistics.
Ross, M., Pawley, A., & Osmond, M. (2003). *The lexicon of Proto Oceanic: the culture and environment of ancestral Oceanic society* (Vol. 2). Canberra: Pacific Linguistics.
Ross, M., Pawley, A., & Osmond, M. (2008). *The lexicon of Proto Oceanic: the culture and environment of ancestral Oceanic society* (Vol. 3). Canberra: Pacific Linguistics.
Ross, M., Pawley, A., & Osmond, M. (2011). *The lexicon of Proto Oceanic: the culture and environment of ancestral Oceanic society* (Vol. 4). Canberra: Pacific Linguistics.
Sam, L. D. (1995). *Dictionnaire drehu-français*. Nouméa: C.T.R.D.P./C.P.R.D.P. des îles.
Senft, G. (1986). *Kilivila: the language of the Trobriand Islanders*. Berlin: Mouton de Gruyter.
Sharpe, M. C., & Le May, D. (2001). *Alawa Nanggaya Nindanya Yalanu junggulu = Alawa-Kriol-English dictionary*. Prospect, S. Aust: Caitlin Press.
Shintani, T. L. A., & Paita, Y. (1990). *Dictionnaire et grammaire de la langue de Païta*. Nouméa: Société d'Études Historiques de la Nouvelle-Calédonie.
Sohn, H., & Tawerilmang, A. F. (1976). *Woleaian-English dictionary*. Honolulu: University Press of Hawaii.
Sperlich, W. B. (1997b). *Tohi vagahau Niue = Niue language dictionary: Niuean-English, with English-Niuean finderlist*. Honolulu: University of Hawai'i Press.
Stephens, M., & Boyce, M. (2013). *He Papakupu Reo Ture: A dictionary of Maori legal terms*. Wellington: Lexis Nexis.
Stewart, P. J., Strathern, A. J., & Trantow, J. (2011). *Melpa-German-English dictionary*. Pittsburgh: University of Pittsburgh.
Tauberschmidt, G., & Snyder, D. M. (1995). *Sinaugoro dictionary*. Ukarumpa: Summer Institute of Linguistics.
Te Taura Whiri i te Reo Maori. (2009). *He Pataka Kupu – Te kai a te rangatira*. North Shore: Raupo Publishing/Penguin.
Thieberger, N. (2011b). *Dictionary of South Efate*. http://paradisec.org.au/SELexicon/index-english/main.htm
Thieberger, N., & McGregor, W. B. (1994). *Macquarie Aboriginal Words: a dictionary of words from Australian Aboriginal and Torres Strait Islander languages*. Sydney: Macquarie Library.
Topping, D. M., Ogo, P., & Dungca, B. (1975). *Chamorro-English dictionary*. Honolulu: University Press of Hawaii.
Tryon, D. T. (Ed.). (1995). *Comparative Austronesian Dictionary: an introduction to Austronesian studies*. Berlin: Walter de Gruyter.
Walter, A., & Sam, C. (1999). *Fruits d'Océanie*. Paris: IRD Éditions.
Wangka Maya Pilbara Aboriginal Language Centre. (2006). *Payungu picture dictionary*. South Hedland: Wangka Maya Pilbara Aboriginal Language Centre.
Waterhouse, J. H. L. (2005/1928). *The Roviana and English dictionary*. Sydney: Shepp Books.
White, G., Kokhonigita, F., & Pulomana, H. (1988). *Cheke Holo (Maringe/Hograno) Dictionary*. Canberra: Pacific Linguistics.
Williams, H. W. (1957). *A Dictionary of the Maori Language*. Wellington: Government Printer.