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Tasaku Tsunoda

**Language Endangerment
and
Language Revitalization**

An Introduction

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by

Tasaku Tsunoda

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Preface

In almost every part of the world, minority languages are threatened with extinction. At the same time, dedicated efforts are being made to document endangered languages, to maintain them, and even to revive once-extinct languages. The present volume presents a comprehensive overview of issues that concern language endangerment and language revitalization.

It will be useful first to outline the present writer's involvement in endangered languages, which spans more than thirty years. He has been working on Australian Aboriginal languages since 1971. The languages studied include Warrungu of North Queensland, in the north-east part of the continent, and Djaru (also spelt Jaru) and Wanyjirra in the north-west part. For many of the languages he worked on, he was able to find only one or two speakers, and three at best. In his fieldwork experience, working with the last speakers of moribund languages is almost the norm, and not an exception. Most of the languages he worked on are now extinct (e.g. Warrungu) or facing extinction (e.g. Wanyjirra). Among the languages he worked on, the one that has the largest number of speakers is Jaru. It probably has as many as 150 to 200 speakers (!) as of 2002, but the younger generation is in the main no longer learning the language. Since 2000, the writer has been participating in the movement to revive a number of languages of North Queensland, and since March 2002 he has had the privilege of conducting Warrungu lessons for Warrungu people. To sum up, the present work is one of the outcomes of the writer's more than 30 years' involvement in endangered languages.

This book is a revision of the lecture notes for the course "Language endangerment and language revitalization", which the writer conducted at the University of Tokyo from the 1999 academic year to the 2002 academic year, and in the 2004 academic year. It is intended as a textbook for postgraduate and advanced undergraduate students. Nonetheless, it does not require knowledge of advanced linguistics. Students who have completed an introductory course in linguistics should be able to easily comprehend its contents.

This book has the following features, which may not be shared by other works on language endangerment and/or language revitalization. First, it is written by someone who has first-hand experience with both of documentation of endangered languages and language revitalization activities. Second, it contains a large number of anecdotes that are drawn from the writer's own fieldwork experience in Australia. It will give a vivid presentation of what it is like to work on endangered languages and to participate in language revitalization

activities. Third, it deals with a wide range of topics, some of which are not discussed by other works on language endangerment and/or language revitalization. Fourth, it contains ample references to the relevant literature – not only in References, but also in the main text. This will provide useful guidance for further research.

This volume will be of interest to a wide readership, including linguists, anthropologists, sociologists, and educators.

Tokyo, July 2004

Tasaku Tsunoda

Acknowledgements

The present work is dedicated to many Aboriginal Australians who taught/teach the writer their languages. It is due to their efforts that their linguistic heritage was/is recorded and is passed on to posterity.

In particular, this book is dedicated to the memory of the late Mr. Alf Palmer (Warrungu name: Jinbilnggay) (see Photos 1 and 2), the last fluent speaker of the Warrungu language of northeast Australia, who used to say to the writer, “I’m the last one to speak Warrungu. When I die, this language will die. I’ll teach you everything I know, so put it down properly”. In retrospect, it was Alf Palmer who taught the writer the importance of documenting endangered languages. It was in the early 1970s, long before linguists began to pay attention to the crisis of language endangerment. He was a man of wisdom and foresight.

The present work refers to a large number of community members the writer interviewed in Australia and New Zealand. (The only exception is the late Harry Gertz; he was not interviewed by the writer.) It cites, for example, their poem, language activities, views, statements, and/or language proficiency. Some of them are now deceased. Every effort was made to obtain citation permission from the people concerned, or – in the case of deceased people (indicated by †) – from their family members. The following people issued such permission regarding the people whose names follow the colon.

Australia: (a) Tanbar Banks (Jaru name: Jidngarri, Danbangali): herself, (b) Eric Bunn: †Harry Bunn, (c) Kathleen Cox: herself, (d) Rachel Cummins: herself, †Alf Palmer (Warrungu name: Jinbilnggay), John Cummins, Knomi Cummins, Tahlia Cummins, Mheelin Cummins, (e) Bonnie Deegan: herself, (f) Dale Gertz, Janine Gertz: †Harry Gertz, (g) Mona Green: herself, (i) Arthur Johnson: †Alec White, (j) Lyle Johnson: himself, †Alec White, (k) Susan Johnson: †Alec Collins (Warrungu name: Wulngarra), (l) Tiny McCale (Wanyjirra names: Wajngarri, Wajayi): herself, (m) Walter Palm Island, Jr.: †Reggie Palm Island, (n) Maggie Scott (Wanyjirra names: Dalyngarri, Dangayi): herself, and (o) Stephen Walsh: himself, †Eddie Barker. Kimberley Language Resource Centre obtained permission from the following people on behalf of the writer: Tanbar Banks, Kathleen Cox, Bonnie Deegan, Mona Green, Tiny McCale, and Maggie Scott. It was not possible to obtain permission regarding the following people: Chris Duncan, Kathleen Duncan, †Jack Jugayarri (Jaru name: Jugayarri), †Barney Moses, †Robert Moses, †Nyun.gaja Paddy (Wanyjirra names: Nyun.ganyun.ga, Nyun.gaja), and Ruby (Wanyjirra (?) names: Janyjiwug, Yurun). The reader is requested to re-

spect the traditional practice among Aboriginal Australians whereby mention of the name of a deceased person – in particular, recently deceased – is avoided.

New Zealand: (a) Tamati Te Hau: himself, and (b) Rhonda TeWheoro: herself.

These community members are mentioned to acknowledge their efforts to have their linguistic heritage recorded or to pass it onto posterity.

The preparation of this book has benefited from assistance and advice provided by a large number of people: the people mentioned above, and also those mentioned below.

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Hisanari Yamada drew the map of the languages cited. Yuki Inaida assisted in preparing Index of languages and Index of persons and authors; Yasuhiro Kojima Index of languages, Index of persons and authors, References; Ayako Sakamoto Index of subjects; and Zofia Stankiewicz the three indexes. Mark Rosa corrected and polished the writer's English.

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no permission is required for citation from their publication(s), but they, too, are acknowledged.

(a) Aboriginal Studies Press, Canberra: Figure 5 “The language loss process” on p. 121 from Annette Schmidt, 1990, *The Loss of Australia's Aboriginal Language Heritage*.

(b) The Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra: passages from 2002 *Guidelines for Ethical Research in Indigenous Studies*.

(c) Berg, Oxford/New York: excerpts from R.M.W. Dixon, 1991, The endangered languages of Australia, Indonesia and Oceania. In Robert H. Robins and Eugenius M. Uhlenbeck (eds.), *Endangered Languages*, 229–255.

(d) Cambridge University Press, Cambridge: (i) sentential examples from R.M.W. Dixon, 1994, *Ergativity*. (ii) Excerpts from Susan Gal, 1989, Lexical innovation and loss: the use and value of restricted Hungarian. In Nancy C. Dorian (ed.), 1989, *Investigating Obsolescence[:] Studies in Language Contraction and Death*, 313–331. (iii) Excerpts from Christopher Jocks, 1998, Living words and cartoon translations: Longhouse texts and the limitations of English. In Lenore A. Grenoble and Lindsay J. Whaley (eds.), *Endangered Languages*, 217–233. (iv) Table 12 “Scope of typical pluralization in English and Yucatec lexical noun phrases in terms of features of reference” on p. 61 of John A. Lucy, 1992, *Grammatical Categories and Cognition[:] A Case Study of the Linguistic Relativity Hypothesis*. (v) Excerpts from Elizabeth Mertz, 1989, Sociolinguistic creativity: Cape Breton Gaelic's linguistic tip. In Nancy C. Dorian (ed.), *Investigating Obsolescence[:] Studies in Language Contraction and Death*, 103–116. (vi) Figures, tables, sentential examples, and passages from Annette Schmidt, 1985, *Young People's Dyrbal*.

(e) Carfax Publishing, Taylor and Francis Ltd.: excerpts and sentential examples from Rob Pensalfini, 1999, The rise of case suffixes as discourse markers in Jingulu – a case study of innovation in an obsolescent language, *Australian Journal of Linguistics* (<http://www.tandf.co.uk/journals>) 19 (2): 225–240.

(f) Center for Applied Linguistics, Washington DC, and James A. Bauman: a table on p. 6 of James A. Bauman, 1980, *A guide to Issues in Indian Language Retention*.

(g) Mary Duroux and Nicholas Thieberger: a poem by Mary Duroux on p. v of Nicholas Thieberger (ed.), 1995, *Paper and Talk*, Canberra, Aboriginal Studies Press.

(h) Stephen Greymorning and Jon Reyhner: an excerpt from Stephen Greymorning, 1999, Running the gauntlet of an indigenous language program. In Jon Reyhner, Gina Cantoni, Robert N. St. Clair, and Evangeline Parsons Yazzie

(eds.), *Revitalizing Indigenous Languages*, 6–16, Flagstaff, Arizona: Northern Arizona University.

(i) Leanne Hinton: excerpts from Leanne Hinton, 1994, *Flutes of Fire*, Berkeley, California, Heyday Books.

(j) Hituzi Syobo, Tokyo: excerpts from Suwilai Premsrirat, 1998, On language maintenance and language shift in minority languages of Thailand: a case study of So (Thavung). In Kazuto Matsumura (ed.), *Studies in Endangered Languages*, 149–75.

(k) Indiana University Press, Bloomington/Indianapolis: the figure on p. 325 of, and an excerpt from, Wolfgang U. Dressler, 1982, Acceleration, retardation, and reversal in language decay? In Robert L. Cooper (ed.), *Language Spread[:] Studies in Diffusion and Social Change*, 321–336.

(l) Christian Lehmann: excerpts from Christian Lehmann, 1999, Documentation of endangered languages. A priority task for linguistics. Erfurt: Seminar für Sprachwissenschaft der Universität (ASSidUE, 1). URL: <http://www.db-thueringen.de/servlets/DerivateServlet/Derivate-1763/ASSidUE01.pdf>

(m) Linguistic Society of America: (i) excerpts from Ken Hale, 1992, Language endangerment and the human value of linguistic diversity, *Language* 68 (1): 35–42. (ii) Figures, tables, sentential examples, and excerpts from Annette Schmidt, 1985, The fate of ergativity in dying Dyirbal, *Language* 61 (2): 378–396.

(n) Richard E. Littlebear and Jon Reyhner: an excerpt from Richard Littlebear, 1999, Some rare and radical ideas for keeping indigenous languages. In Jon Reyhner, Gina Cantoni, Robert N. St. Clair, and Evangeline Parsons Yazzie (eds.), *Revitalizing Indigenous Languages*, 1–5, Flagstaff, Arizona: Northern Arizona University.

(o) MIT Press: an excerpt from Benjamin Lee Whorf, [1956] 1976, *Language, Thought, and Reality[:] Selected Writings of Benjamin Lee Whorf*, edited and an introduction by John B. Carroll.

(p) Multilingual Matters, Clevedon: excerpts from Joshua A. Fishman, 1991, *Reversing Language Shift*.

(q) Jon Reyhner: (i) excerpts from Jon Reyhner, 1999, Introduction: some basics of indigenous language revitalization. In Jon Reyhner, Gina Cantoni, Robert N. St. Clair, and Evangeline Parsons Yazzie (eds.), *Revitalizing Indigenous Languages*, v–xx, Flagstaff, Arizona: Northern Arizona University. (ii) An excerpt from Gina P. Cantoni, 1999, Using TPR-storytelling to develop fluency and literacy in Native American languages. In Jon Reyhner, Gina Cantoni, Robert N. St. Clair, and Evangeline Parsons Yazzie (eds.), *Revitalizing Indigenous Languages*, 53–58, Flagstaff, Arizona: Northern Arizona University.

(r) University of California Press, Berkeley/Los Angeles: an excerpt from Edward Sapir, 1951, *Selected Writings of Edward Sapir in Language, Culture and Personality*, ed. by David G. Mandelbaum.

(s) Annette Wellings (née Schmidt): (i) figures, tables, sentential examples, and passages from Annette Schmidt, 1985, The fate of ergativity in dying Dyrbal, *Language* 61 (2): 378–396, Linguistic Society of America. (ii) Figures, tables, sentential examples, and passages from Annette Schmidt, 1985, *Young People's Dyrbal*, Cambridge, Cambridge University Press. (iii) Figure 5 “The language loss process” on p. 121 from Annette Schmidt, 1990, *The Loss of Australia's Aboriginal Language Heritage*, Canberra, Aboriginal Studies Press.

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(t) Follow-up Committee: Universal Declaration of Linguistic Rights.

(u) Michael Krauss: an excerpt from Michael Krauss, 2001, Mass language extinction, and documentation: the race against time. In Osamu Sakiyama (ed.), *Lectures on Endangered Languages: 2 – from Kyoto Conference 2000 –* (ELPR Publication Series C002), 19–39, Osaka: Osaka Gakuin University.

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xii *Acknowledgements*



Photo 1. Alf Palmer (Warrungu name: Jinbilnggay) (circa 1880–1981) the last fluent speaker of the Warrungu language of Australia (see 8.3)
(photo taken by Tasaku Tsunoda on Palm Island, Queensland, Australia, in July 1972)



Photo 2. “Master and apprentice”: Alf Palmer (r.) and Tasaku Tsunoda (l.) (See 11.5.5. for Master and apprentice.)
(photo taken on Palm Island, Queensland, Australia, in September 1974)

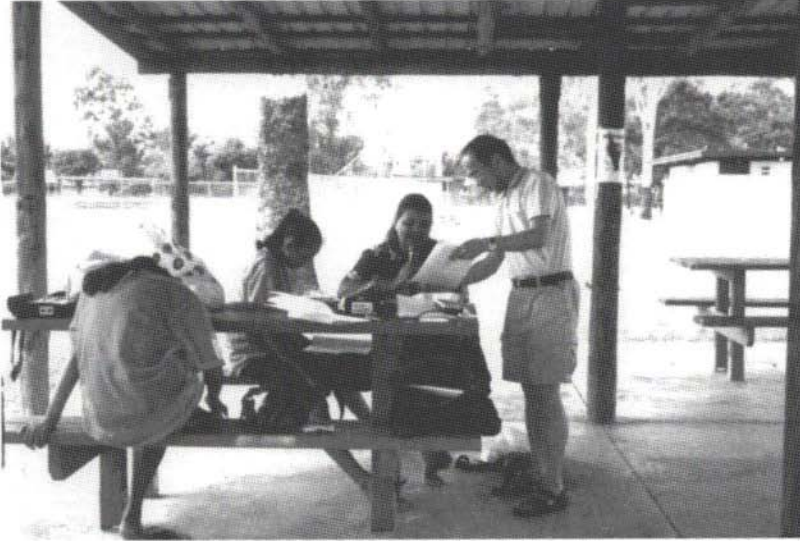


Photo 3. Language revival: Warrungu lesson in progress. From left to right: Mheelin Cummins, Tahlia Cummins, Rachel Cummins, and Tasaku Tsunoda (Rachel is Alf Palmer's granddaughter, and Mheelin and Tahlia are his great-granddaughters.) (See 11.5.14.) (photo taken by Mie Tsunoda in Townsville, Queensland, Australia, in March 2002)

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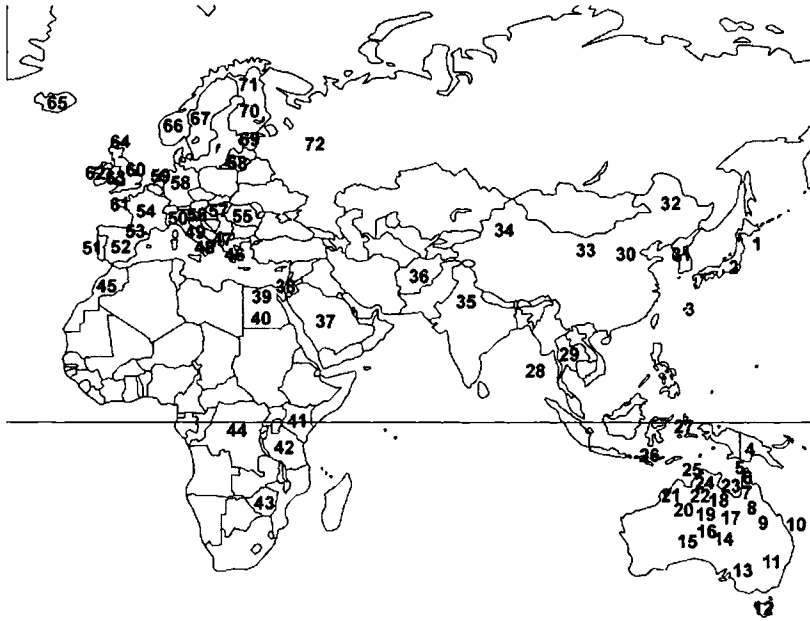
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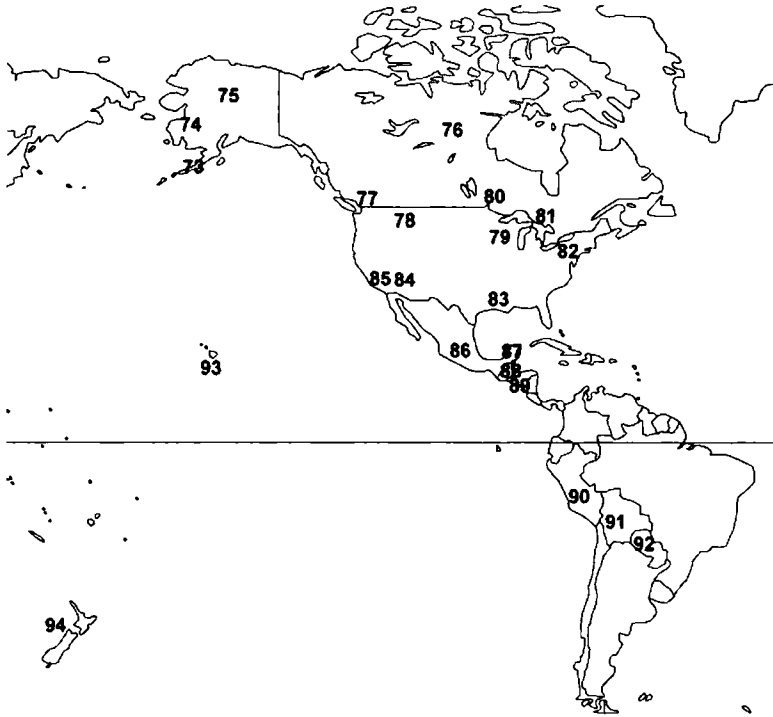
List of abbreviations

A	transitive subject
ABS	absolutive
AC	Alec Collins
ACC	accusative
ANTIPASS	antipassive
ASP	aspectual
C	carrier
DAT	dative
DU	dual
ERG	ergative
EXC	exclusive
FOC	focus
FUT	future
GEN	genitive
HAB	habitual
INTR	intransitive
n.d.	no date
NOM	nominative
NONFUT	nonfuture
NP	noun phrase
O	transitive object
p.c.	personal communication
PERF	perfective
PL	plural
PRES	present
S	intransitive subject
SG	singular
TD	Traditional Dyirbal
TT	Tasaku Tsunoda
V	verb
YD	Young Dyirbal
1	first person
2	second person
3	third person

Approximate location of languages cited



- | | | |
|--|--|--|
| 1 Ainu | 12 Tasmanian languages | 27 Moluccan languages |
| 2 Japanese | 13 Kaurna and Ngarrindjeri | 28 Andamese |
| 3 Ryukyuan | 14 Aranda (also spelt Arrente) | 29 Ugong, So (Thavung) and Thai (including Thai-Lao) |
| 4 Kaluli | 15 Western Desert language | 30 Mandarin Chinese |
| 5 Western Torres Strait language | 16 Warlpiri | 31 Korean |
| 6 Gugu-Yalanji and Guugu Yimithirr | 17 Yalamnga and Kalkatungu | 32 Manchu |
| 7 Nyawaygi, Warrgamay, Dyirbal (including Ngadjan, Mamu, Jirrbal, and Girramay dialects), Yidiny, and Djabugay | 18 Kriol | 33 Xixia (also called Tangut) |
| 8 Gujaj (also called Gujajala), Gugu-Badhun, and Warrungu | 19 Gardangaruru and Ngardi | 34 Xibo (also called Sibe) |
| 9 Biri (also called Birigaba), Gabilgaba, and Buluguyban | 20 Jaru (also spelt Djaru), Malngin, Wanyjirra, and Gurindji | 35 Sanskrit and Hindi |
| 10 Bajala | 21 Ngarinyin, Gooniyandi, and Kija | 36 Örmürü and Parāci |
| 11 Dyirringan, Gamilaraay, Yuwaalaraay, and Bandjalang | 22 Jingulu and Jawoyn | 37 Arabic |
| | 23 Anindilyakwa and Lardil | 38 Hebrew |
| | 24 Dhuwal/Dhuawala (also called Yolngu Matha) and Nunggubuyu | 39 Coptic |
| | 25 Tiwi | 40 Egyptian Nubian |
| | 26 Tamboran | 41 Dahalo |
| | | 42 Swahili |
| | | 43 Nguni languages |
| | | 44 Shaba Swahili |
| | | 45 Amazigh (also called Berber) |



- 46 Arvanitika
- 47 Albanian
- 48 Faetar
- 49 Etruscan, Latin, and Italian
- 50 Sauris and Cimbrish
- 51 Portuguese
- 52 Spanish
- 53 Basque
- 54 French
- 55 Rumanian
- 56 Slovene
- 57 Hungarian
- 58 German
- 59 Dutch
- 60 English
- 61 Breton
- 62 Irish
- 63 Manx, Welsh, and Cornish
- 64 Scottish Gaelic (including St. Kilda dialect and East Sutherland Gaelic)

- 65 Icelandic
- 66 Norwegian
- 67 Swedish
- 68 Lithuanian
- 69 Estonian
- 70 Finnish
- 71 Sami
- 72 Russian
- 73 Aleut
- 74 Deg Xinag
- 75 Yup'ik Eskimo
- 76 Inuit (also called Inuktitut)
- 77 Gitksan, Nisga'a, Strait Salish, and Sm'algyax
- 78 Dakota, Nakoda, Cheyenne, Gros Ventre, and Montana Salish
- 79 Menomini
- 80 Cayuga and Cree
- 81 Mohawk and Ojibwa
- 82 Pennsylvania German and Oneida

- 83 Biloxi
- 84 Hualapai, Navajo, Acoma, Arapaho, and Shoshoni
- 85 Luiseño, Cupeño, Tübatulabal, Esselen, Wappo, Yuki, Southwestern Pomo, and Yahi
- 86 Tzeltel, Pochutec, and Aztec (also called Mexicano and Nahuatl)
- 87 Yucatec Maya
- 88 K'iche'
- 89 Cacaopera, Lenca, and Pipil
- 90 Quechua (including Quichua)
- 91 Aymara
- 92 Paraguayan Guarani
- 93 Hawaiian
- 94 Maaori

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1. Introduction

1.1. Introductory notes

There are said to be approximately 6,000 languages in the world (cf. Krauss 1992: 5, 1998: 103). The vast majority of languages are minority peoples' languages, rather than so-called major languages, such as English. In almost every part of the world, minority peoples' languages are disappearing and this is taking place at an alarming speed. Also, a great many languages have already become extinct. In recent decades, much attention has been paid to the fate of disappearing languages. Language loss is, however, not a recent phenomenon in human history. It has happened in historic times and, no doubt, in prehistoric times as well. This chapter first presents a very brief – and sometimes speculative – history of the origin, development, endangerment, and loss of languages (1.2, 1.3). (Terms such as “language endangerment” and “language loss” will be characterized in Chapter 2.)

Phenomena similar to loss of languages are taking place, i.e. loss of dialects, migrant languages, and languages spoken in enclaves. These losses exhibit differences as well as similarities. They are examined in 1.4.

Choice of a term to refer to a given group of people is a sensitive issue. Thus, original inhabitants of Australia and their descendants are known, for example, as “Aborigines” and “Aboriginals”. However, some people seem to resent the term “Aborigines”, and to prefer “Aboriginals”. Issues that surround the choice of such terms are discussed in 1.5.

Finally, the summary of this chapter and a list of suggested readings are given in 1.6.

1.2. Origin and development of language

It is not known when human beings began to use language. Spoken words were not preserved, unlike fossils and artifacts. In a textbook on general anthropology, Marvin Harris (1975: 75) states: “The fossil record shows that between 300,000 and 100,000 years B.P., hominids with human-size brains were evolving in many parts of Eurasia and Africa. But these hominids had crania and vocal tracts unlike our own. Hence, the neural and anatomical bases of their language competence may not have reached human levels”.

Some linguists have speculated that humans have been using language for 100,000 years or so (Dixon 1991a: 232, 1997: 46) or even more than 500,000 years (Hinton 1994: 211). However, in view of Harris' remark, such speculations do not seem to be supported by the fossil evidence.

On the basis of fossil evidence, Lieberman (1973, 1975) hypothesizes that Neandertals (*Homo sapiens neanderthalensis*) – who constitute a branch of hominids and who survived until about 50,000 B.P. to 35,000 B.P. (Harris 1975: 90, 1997: 66; Lieberman 1975: 175) – did not have the kind of language we use now. They were unable to “produce the range of sounds that occurs in human language” (Lieberman 1973: 115). Specifically, they “lacked the vocal tract that is necessary to produce the human ... vowels [a], [i], and [u]” (Lieberman 1973: 125). The “Neandertal vocal tract would not be able to produce velar consonants like the English [g] and [k]. However, bilabials like [b], [d], and [t], as well as continuants like [s] and [z], would be possible” (Lieberman 1975: 142). However, Lieberman's hypothesis is not free from problems. For example, there are experts “who challenge the validity of Lieberman's techniques for reconstructing the Neandertal vocal tract” (Harris 1975: 89). See also Harris (1997: 67–68) and Bickerton (1994: 2882).

Specialist opinion differs but, in one view, *Homo sapiens sapiens*, the subspecies to which we belong, appeared as early as 125,000 B.P. (Harris 1997: 69, 72). By 40,000 to 30,000 B.P., they occupied all of inhabited areas of the Old World (Harris 1975: 75, 1997: 71).

Now, as Lieberman suggests, Neandertals (*Homo sapiens neanderthalensis*) may not have possessed the kind of language we use now. However, this does not necessarily imply that the *Homo sapiens sapiens* of the time, also, lacked language. Indeed, there is a reason to suspect that *Homo sapiens sapiens* began to use language more than 50,000 years ago. That is, recent archaeological evidence suggests that *Homo sapiens sapiens* reached Australia 53,000 or more years ago, from what is now Indonesia or New Guinea (Flood 1995: 32). Without the use of language, the voyage to Australia would have been extremely difficult, if not impossible – consider the infeasibility of planning the voyage, constructing the watercraft, and negotiating the sea (Alan Rumsey, p.c.). This suggests, though it does not prove, that the first Australians possessed language 53,000 or more years ago. The same might apply to modern humans in other parts of the world. However, this is again merely a speculation, and no evidence seems forthcoming.

It is not known whether language has a monogenesis or polygenesis. It may have originated in one place somewhere in, say, Eurasia or Africa and subsequently spread to other parts of the world, such as the Americas and Oceania. Conversely, it may have originated in two or more places independently of

one another and subsequently spread to other parts on the earth. Irrespective of whether language has a monogenesis or polygenesis, it seems likely that language kept diversifying for a very long time, for tens of thousands of years (cf. Dixon 1991a: 232). One language would have split into two or more languages, each of which in turn would repeat the same split, and so on.

According to Krauss' (1998: 105) speculation, the number of languages reached its maximum about 10,000 years ago. It was on "the eve of the Neolithic invention of food production" and "before any societies acquired the capability of enormously increasing in size and density at the expense of others by the advantages of food production over hunting and gathering" (Krauss 1998: 105). The number of the languages 10,000 years ago estimated by Krauss ranges from 5,000 to 20,000.

1.3. Language loss: a brief history

Krauss (1998: 105) speculates that, after it reached a maximum about 10,000 years ago, the number of languages plateaued and has been declining ever since. However, since the sixteenth century, the number of languages has reduced drastically in many parts of the world (Dixon 1991a: 232). No doubt, language loss repeatedly happened in prehistoric times. It has occurred in historic times as well. Perhaps the most devastating cause of language loss is colonization by European nations, and "language loss in the modern period is of a different character, in its size and in its implication" (Hale 1992a: 1). It is, therefore, convenient to divide the history of language loss into two periods: the pre-European colonial period and post-European colonial period.

1.3.1. Language loss in the pre-European colonial period

There must have been numerous instances of language loss, caused by tribal battles or the like, but they were mainly on a rather small scale. However, there were instances of language loss on a much larger scale. We shall look at three selected instances, involving Latin, Nahuatl, and Quechua, respectively.

[1] Involving Latin

Expansion of the Roman Empire was accompanied by the expansion of the Latin language. Many colonized peoples abandoned their languages and adopted Latin. This, in turn, developed into Romance languages, such as Rumanian, French, Portuguese, and Spanish. In this process, Latin must have replaced a

large number of languages, including Etruscan of pre-Roman Italy (cf. Ridgway 1994; Swadesh 1948: 226) – although it failed to replace many other languages, e.g. Basque (spoken in northern Spain and in southern France) and the languages of the tribes of what is now Germany.

[2] Involving Nahuatl or Aztec, and involving Quechua

The Aztec empire of Central America and the Inka empire of South America achieved great dominance in their respective regions, with Nahuatl or Aztec (the language of the Aztec empire) and Quechua (the language of the Inka empire) expanding and terminating neighbouring languages for some centuries, until they were invaded and defeated by the Spaniards (Dorian 1998: 4; Garza and Lastra 1991: 97–99).

It is interesting to note that apparently the spread of Nahuatl and Quechua continued for some time even after the Spanish colonization had started. They appear to have been used as the *lingua franca* of the respective areas for Spanish colonization and Christianization (Garza and Lastra 1991: 101; Grinevald 1998: 129).

The current language situations of the Central and South Americas will be described in 3.7 and 3.6, respectively.

1.3.2. Language loss in the post-European colonial period

As seen above, there have been innumerable cases of language loss in human history. However, colonization by European nations has exerted perhaps the most devastating damage in the way of language loss. The languages of the European powers spread to other parts of the world and exterminated, or at least diminished, a large number of aboriginal languages. Nowadays, European languages such as the following are spoken in addition to, and, in many cases in place of, the aboriginal languages of the areas mentioned: English in Africa, Australia, New Zealand, and North America; Spanish in Central and South Americas; Portuguese in Brazil; French in Canada; and, Russian in Siberia. Even in Europe, there are languages that are retreating due to the expansion of dominant languages. They include Sami (of Scandinavia; see 3.10), Celtic languages (see 3.11), and Basque.

The history of language loss and the language situation in specific areas are examined in Chapter 3.

1.4. Dialects, migrant languages, and enclave languages

The present work deals mainly with the endangerment of “languages”. Related to this issue is the endangerment of dialects, migrant languages, and enclave languages.

Dialect death (Heine 1992; Jones 1998) or dialect loss (Jones 1998: 260) appears to be a widespread phenomenon, like language death or loss. Thus, in Japan the Tokyo dialect is expanding at the expense of other dialects, and in many localities young people can no longer speak their traditional dialect. Jones (1998) provides a detailed account of dialect death of Welsh.

The term “enclave languages” is used by Suwilai (1998: 149) to refer to “small languages surrounded by other totally different languages”. This term may also be used to refer to a language spoken by a community that is separated from its homeland. Examples of enclave languages include Albanian spoken in Greece (Tsitsipis 1989), Hungarian spoken in Austria (Gal 1989), Cimbrish, a Germanic language spoken in northern Italy (<http://www.generell.de/cimbri/>), and Korean in Japan (a large number of Koreans were brought to Japan virtually as slaves, particularly during the World War II, and they and their descendants live in Japan; see Miyawaki 1992: 361–363).

In a broader sense, enclave languages include migrant languages, such as Norwegian in the USA (Haugen 1989), Scottish Gaelic in Nova Scotia, Canada (Mertz 1989), French in Newfoundland, Canada (Ruth King 1989), French in Ontario, Canada (Mougeon and Beniak 1989), Pennsylvania German in the USA (Huffines 1989), and Estonian in Sweden (Maandi 1989). Further information on migrant languages in Canada is provided by Saint-Jacques (1979) and von Raffler Engel (1979).

Now, as mentioned above, the present work looks mainly at the endangerment of “languages” rather than that of “dialects”. Also, in the main it examines the endangerment of so-called aboriginal or indigenous languages, rather than that of enclave languages (including migrant languages). However, many of the circumstances that surround the endangerment of languages are similar to those of dialects and enclave languages (cf. Swadesh 1948: 226). The similarities include the following.

(a) Social setting: they have similar – if not identical – social settings. For example, they are surrounded by a dominant dialect or language. (See Chapter 6.)

(b) Disuse: their use decreases, often leading to their demise. (See Chapter 7.)

(c) Structural changes: they go through similar structural changes. (See Chapter 8.)

However, there is a crucial difference:

(d) An enclave language has its homeland and consequently, even if it dies in the enclave, the language itself does not become extinct. That is, such an enclave language is “locally endangered”, according to the classification proposed by Allan Weschler (cited by Florey and van Engelenhoven 2001: 197). Thus, even if Norwegian in the USA becomes extinct, the Norwegian language is alive in Norway. Likewise, if a given dialect disappears, the standard dialect (e.g. the Tokyo dialect of Japanese) will survive, and the language as a whole will be alive. On the other hand, if an aboriginal language becomes extinct, it is terminated completely. There is no homeland in which the language survives. Nor is there any standard dialect to replace it. Such an aboriginal language is “globally endangered”, according to Allan Weschler.

There are cases in which the language in the homeland, too, is endangered. In such a case the language as a whole seems unlikely to survive. Thus, Scottish Gaelic in Nova Scotia, Canada is endangered (Mertz 1989), as is Scottish Gaelic in Scotland (Dorian 1981; Watson 1989), and the future of the language does not seem bright. See 3.11 for more on Scottish Gaelic, and 7.2.2-[5] for more on Scottish Gaelic in Nova Scotia.

1.5. Notes on terminology

Various terms such as those listed below are employed in the literature.

(a) nouns: aborigine, Aborigine, aboriginal, Aboriginal.

(b) adjectives: aboriginal, Aboriginal, indigenous, Indigenous, native, Native.

Regarding the adjectives, the three words appear to have much the same meaning. Thus, the characterizations provided by *The Australian Pocket Oxford Dictionary* (1976) include the following:

aboriginal: indigenous
 indigenous: native
 native: indigenous

Note that each of the words listed above has two spelling versions: one starts with a small letter (e.g. *aborigine*) and the other begins with a capital letter (e.g. *Aborigine*). There does not seem to be any rigid rule concerning the use of two versions, but the following tendency has been observed. In Australia, *Aborigines*, *Aboriginal*, and *Indigenous* – rather than *aborigines*, *aboriginal*, and *indigenous* – are used (though not always) in a discussion of a relevant people or a language of Australia. Similarly, in North America, the adjective *Native* rather

than *native* is used referring to a relevant people or language of North America. That is, in these instances, the version with a capital letter is used in reference to a relevant people or language of the continent in question.

Recently, due to the stigma that has been attached to some of these words, the choice of these words has become a very sensitive issue. For example, one Aboriginal person of Australia stated, “The word *Aborigines* (or *aborigines*) is bad, but the word *Aboriginals* (or *aboriginals*) is OK”. (As this statement was given orally, it is impossible to decide whether it was a capital *A* or a small *a* that was intended.)

It should be added, however, that this view is not shared by everyone else. Thus, another Aboriginal person of Australia in effect stated the following in writing. (She consistently used a capital *A*.) “The word *Aborigine* means ‘native’ of any country, whereas the word *Aboriginal* refers to the native people of Australia. Therefore, the Aborigine of Australia is the Aboriginal.”

The same person also added as follows: “Many Aboriginals take offence at being called an Australian Aboriginal or Australian Aborigine. They prefer to be known as Aboriginal Australian”.

The choice of a capital letter as against a small letter, too, has assumed political significance. Thus, Greymorning (1999: 16) notes that in “Canada, an effort to outdistance the stigma has resulted in using *Native*, with a capital ‘N’”.

In the writer’s view (Tsunoda 1996a: 149–150), it is not words but people that discriminate against people, and mere replacement of one word with another does not provide a fundamental solution. It is a certain attitude that must be replaced. Nonetheless, the feeling of people who suffer from the stigma must be respected. Unfortunately, however, it is difficult to know which words are offensive. Recall, for instance, the words *aboriginal*, *indigenous*, and *native* are provided with much the same characterizations in the dictionary cited above. Also, it is difficult to know which words are offensive to whom. One person’s view is not necessarily shared by another.

In view of this, in the chapters that follow, we shall generally adopt the word, spelling, and convention employed in the sources consulted – except that the term “Aboriginal Australians” will be used to refer to original inhabitants of Australia and their descendants.

1.6. Summary of Chapter 1

Although it is not known how long humans have been using language, according to one speculation, the number of languages reached its maximum about 10,000 years ago and has since been declining. Language loss has been a com-

mon phenomenon in human history, but it has been accelerating since the colonization by European powers started.

Although the present work in the main deals with the loss of languages – in particular, so-called aboriginal or indigenous languages – the loss of dialects and enclave languages (including migrant languages) exhibits very similar characteristics.

Care needs to be taken when choosing a term to refer to a given group, for it is a highly sensitive issue.

Suggested readings on the general subject of language endangerment and related issues include Campbell (1994), Crystal (2000), Dorian (2001b), Nettle and Romaine (2000), and Tsunoda (2001d). Collections of papers include Brenzinger (1992b), Dorian (1989b), Grenoble and Whaley (1998b), Hale et al. in *Language* (1992), Vol.68, No.1, Matsumura (1998), Robins and Uhlenbeck (1991), Sakiyama (2001), and Shoji and Janhunen (1997). Reading lists include Woodbury (1996) and Tsunoda (2002). The updated version of the latter is available at http://www.tooyoo.l.u-tokyo.ac.jp/~tsunoda/dlg_1st.html.

2. Degree of language endangerment

2.1. Introductory notes

Language endangerment is a matter of degree. While the world's languages constitute a continuum, with fully thriving and viable ones at one end and extinct ones at the other, it is useful to classify languages discretely in terms of the degree of their endangerment or, conversely, the degree of their viability. Such a classification is important for the purpose of surveying the endangerment situations, as we shall see in Chapter 3. The present chapter looks at the proposed classifications in 2.2.

Various terms are used in these classifications, e.g. (i) endangered languages, weakening languages, dying languages, and (ii) language death, language loss, and language endangerment. In 2.3 they are listed and then classified, and the way they will be used in the ensuing chapters is shown.

2.2. Previous classifications

A fair number of such classifications have been proposed. Most of them appear to employ one or more of the following criteria:

(a) number of speakers – in particular, of fluent speakers or mother-tongue speakers (or first language speakers);

(b) age of speakers – in particular, of fluent speakers or mother-tongue speakers;

(c) transmission of the language to children, i.e. whether or not the children are learning the language, and;

(d) functions of the language in the community/society.

Most of these factors will be further discussed in 6.2. In addition, the factor (d) will be examined in some detail in 7.2. The concept of “first language speaker” is discussed in 9.3, and that of fluency or proficiency in 9.5.

Strictly speaking, the criterion (c) should be included under the rubric of the criterion (b). However, it is convenient to set it up as a separate criterion, for the survival of a given language crucially depends on whether or not the children learn it.

The proposed classifications vary regarding the number of degrees, ranging from three to as many as nine. Selected examples of these classifications follow. They will be arranged in terms of the criteria employed.

[1] Krauss (1992: 4, 6, 1997: 29–30, 1998: 102, 2001: 22–23) puts forward three very similar classifications, which may be combined as follows. They are mainly concerned with (c) “transmission to children”.

(a) Safe languages: they are most likely still to be spoken by (at least some) children in the year 2100.

(b) Endangered languages: they will cease to be learned by children during the 21st century.

(c) Moribund languages: they are no longer learned as mother-tongue by children or no longer spoken by children.

((d) Extinct or dead languages: this category is not explicitly mentioned by Krauss.)

Similarly, Brenzinger (1999: 4) proposes a classification that mainly concerns (c) “transmission to children”.

In addition, Krauss (1996: 17, 1997: 25–26) sets up classifications that are based on (c) “transmission to children” to a limited degree, but largely on (b) “age of speakers”.

[2] Fishman (1991: 87–109) proposes the following classification, which is to a large extent concerned with (d) “functions of the language”. It consists of eight stages, as characterized below. (The term “Xish” stands for the name of any language, the term “Xmen” refers to the members of that community, and the term “Ymen” to the members of some other community; see Fishman 1991: 11.)

Stage 1: some use of Xish in higher level education, occupational, governmental and media efforts (but without the additional safety provided by political independence).

Stage 2: Xish in lower governmental services and mass media but not in the higher spheres of either.

Stage 3: use of Xish in lower work sphere (outside of the Xish neighborhood/community) involving interaction between Xmen and Ymen.

Stage 4: Xish in lower education that meets the requirement of compulsory education laws.

Stage 5: Xish literacy in home, school and community, but without taking on extra-communal reinforcement of such literacy.

Stage 6: the attainment of intergenerational informal orality and its demographic and institutional reinforcement.

Stage 7: most users of Xish are a socially integrated and ethnolinguistically active population but they are beyond child-bearing age.

Stage 8: most vestigial speakers of Xish are socially isolated old folks and Xish needs to be re-assembled from their mouths and memories and taught to demographically unconcentrated adults.

In order to make the scale complete, we would need to posit Stage 9, at which no speakers remain.

As is indicated by the title *Reversing Language Shift[:] Theoretical and Empirical Foundations of Assistance to Threatened Languages*, Fishman (1991) furnishes advice for language maintenance and revival. It is due to this that the characterization above includes phrases such as “attainment of ...” and “needs to be ...”.

In terms of Fishman’s scale, all of the languages the writer worked on in North Queensland, Australia, in early 1970s, were already at Stage 8 at that time (and have since become extinct). Among the languages that the writer has been working on in Kimberley, Western Australia, only Jaru (also spelt Djaru) (cf. Tsunoda 1981) can be said to be at Stage 7, and the rest are at Stage 8, at best. But even Jaru is in a precarious state. This shows that a large portion of Fishman’s scale is irrelevant to the situations in North Queensland and Kimberley. No doubt, the same applies to many other areas in Australia and elsewhere. Fishman’s proposal will be further discussed in 11.3.2.1.

Bamgbose (1993) (cited by Brenzinger 1998a: 92–93), Kibrik (1991: 257), and Sasse (1992a: 21) each propose a classification that is based mainly on (d) “function of the language” and, to a lesser extent, (a) “number of speakers”.

[3] Dixon (1991a: 237) sets up the following five stages in the loss of Australian Aboriginal languages, which are being replaced by English. This classification is in the main concerned with (a) “number of speakers”, but refers to (b) “age of speakers” and (d) “functions of the language” as well.

Stage 1: language X is used as the first language by a full community of at least some hundreds of people and is used in every aspect of their daily lives.

Stage 2: some people still have X as their first language, but for others it is a second language.

Stage 3: only a few old people still have X as their first language. For most of the community, English is the dominant language.

Stage 4: nobody now knows the full or original form of X. Some members of the community speak a modified version of X, with simplified grammar.

Stage 5: everyone in the community speaks in English.

[4] The classification by Hudson and McConvell (1984: 29–30) and that by Kinkade (1991: 160–163) each look at (a) “number of speakers”, (b) “age of speakers”, and (c) “transmission to children”. Hudson and McConvell’s classification is as follows.

(a) Strong languages: the traditional language is still the main, first language for everybody, including children.

(b) Sick languages: they will pass away soon if they do not receive treatment. Young people may understand a sick language when it is spoken in a simple way and may be able to say only a few words.

(c) Dying languages: no young people are learning them.

(d) Dead languages: they are no longer spoken.

[5] The following classifications each deal with all of (a) “number of speakers”, (b) “age of speakers”, (c) “transmission to children”, and (d) “functions of the language”: Krauss (forthcoming), Schmidt (1990), and Wurm (1998). Schmidt’s (1990: 54) classification is the following.

(a) Healthy languages: all generations actively use the language in a wide range of activities.

(b) Weakening languages: they are usually spoken by older people, but not fully transmitted to the younger generation.

(c) Dying languages: only a few speakers remain.

(d) Extinct languages: no speakers remain.

The classification by Krauss (forthcoming), which is the most recent of his classification, is as follows.

(a) Safe languages: they are not only being learned as mother-tongue by children as the norm, but, we predict, will still be being so learned for the foreseeable future, i.e. throughout this new century, still having at least a viable community, critical mass, of children speakers in the year 2100.

(b) Endangered languages.

(b-i) Stable languages: they are still being learned as mother tongue by children. (Presumably they are not so safe as safe languages.)

(b-ii) Languages in decline.

(b-ii-i) Instable and eroding: some of the children speak the language.

(b-ii-ii) Definitely endangered: the language has passed the crucial basic threshold of viability, is no longer being learned as mother-tongue by children, and the youngest speakers are of the parental generation.

(b-ii-iii) Severely endangered: the youngest speakers are of grandparental generation and parents cannot teach the language to their children.

(b-ii-iv) Critically endangered: the youngest speakers are in the great-grandparental generation, and are also very few.

(c) Extinct languages: they are no longer spoken or even potentially spoken (remembered) by any one, and no new documentation for them can be obtained.

Other proposed classifications include that by Bauman (1980: 10) (cited by Dauenhauer and Dauenhauer 1998: 59), and that by Craig (1997: 258). (Bauman’s classification will be discussed in 11.3.2.1.)

Among the classifications listed above, the type of four-degree classification that is proposed by Hudson and McConvell, cited in [4], and by Schmidt, cited in [5], seems the most convenient for practical purposes, and it will be adopted for the present work, together with the labels such as the following:

- (a) healthy, strong, safe, flourishing
- (b) weakening, sick
- (c) moribund, dying
- (d) dead, extinct

The term “endangered languages” is used by different authors in different senses, but in the present work it will be used to refer to both weakening and moribund languages. (See Figure 2-1.)

2.3. Terms employed

The terms elaborated above are adjectives. In addition, there are related noun-collocations, such as language death (Craig 1997: 258; Dorian 1981; Dressler 1972: 448; Hill 1973: 33; Thomason 2001: 222), language decay (Dressler 1981: 5, Sasse 1992a: 15), language decline (Kinkade 1991: 157; Sasse 1992a: 8; Watahomigie and Yamamoto 1992), language demise (Craig 1997: 258), language displacement (Brenzinger 1997: 273; Fishman 1964: 32, 1972: 110), language endangerment (Krauss 1998: 102), language erosion (Campbell 1994: 1961), language extinction (Dorian 1981: 1), language imperilment (David Wilkins 1992: 172), language loss (Gal 1989: 313; Thomason 2001: 223), language obsolescence (Elmendorf 1981: 48; Dorian 1989b), and linguistic death (Dorian 1973: 437). Campbell (1994: 1961) lists many more related terms, two of which will be cited shortly: language attrition and language contraction. The present work will use terms such as those shown in Figure 2-1 in the way indicated below.

14 2. Degree of language endangerment

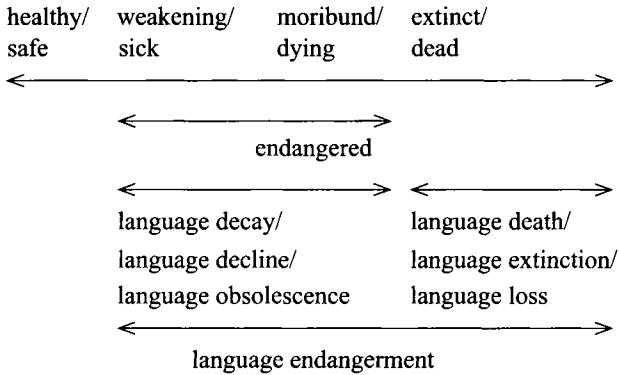


Figure 2-1. Terms for language endangerment

We shall use “language decay”, “language decline”, and “language obsolescence” interchangeably. These terms refer to a state of languages that includes both weakening and moribund languages. Also, we shall use “language death”, “language extinction”, and “language loss” interchangeably. They refer to the stage where the language becomes extinct. As noted above, “endangered languages” contain both “weakening” and “moribund” languages.

We shall use the term “language endangerment” to cover the stages from “weakening” to “extinct”. This use of the term “language endangerment” is in agreement with Krauss’ (1998: 102) view that “Language endangerment’ is probably the best choice for the general subject”.

Now, it is important to look at endangered languages from two different, though related, viewpoints: reduced use of the language (see Chapter 7) and structural changes – mainly in the nature of simplification and reduction – in the language (see Chapter 8). If there is any need to distinguish between these two aspects, terms such as those listed below may be used as follows. (The term “language disuse” has been coined for this book.)

(a) Regarding the use:

(a-i) nouns: language contraction (Campbell 1994: 1961), language obsolescence, language disuse;

(a-ii) adjectives: contracted (Menn 1989: 341), contracting (Dorian 1989a: 2; Jones 1998: 350), declining (Brenzinger 1997: 273), disappearing (Brenzinger 1997: 273), extinguishing (Rigsby 1987: 371), obsolescing (Dorian 1986b: 72), obsolescent (Swadesh 1948; Dorian 1973: 413), receding (Brenzinger 1997: 274; Dorian 1973: 413; Dressler 1982: 324; Fishman 1991: 23).

(b) Regarding the structure:

(b-i) nouns: language attrition (Abbi 1995: 178; Craig 1997: 257; Dorian 1999a: 107), language degeneration (Craig 1997), language decay;

(b-ii) adjectives: decaying (Dressler 1982: 325), disintegrating (Cook 1989: 252; Dressler 1982: 326).

In passing, we note that Matisoff (1991: 201, 224) proposes the Greek-based terms *thanatoglossia* (roughly, ‘death-tongue’) and *necroglossia* (roughly, ‘dead-tongue’) to refer to language death. He adds: “In a perhaps unseemingly haplological vein we might call the branch of study that deals with such languages *perilinguistics*. (This term has the advantage of a fortuitous association with the Greek prefix *peri* ‘around’, suggesting languages which are on the periphery, not in the mainstream.)”

2.4 Summary of Chapter 2

Language endangerment is a matter of degree, and it will be useful to classify the world’s languages in terms of the following four degrees of their viability: (i) healthy, strong, (ii) weakening, sick, (iii) moribund, dying, and (iv) dead, extinct. The term “endangered languages” refers to both weakening and moribund languages, while the term “language endangerment” is reserved for the general subject. Terms such as “language disuse” and “disappearing” may be used regarding reduced use of languages, while those such as “language attrition” and “decaying” may be employed for the structural changes observed in such languages.

3. Current state of language endangerment

3.1. Introductory notes

In Chapter 2, we examined the degree of language endangerment (or conversely, language viability) and various terms employed in the literature on this issue. We are now in a position to look at the language endangerment situation worldwide (3.2). We will then look at several specific areas, each accompanied by a brief account of the region's history (3.3 to 3.14).

3.2. Current state worldwide

Krauss (1992, 1998) provided surveys of endangerment situation worldwide. At a symposium held in Kyoto, Japan, November 2000, Krauss stated that the situation had not changed significantly since the publication of the above-cited works. See Krauss (2001: 24).

The estimated number of the world's languages is around 6,000. Their distribution is very uneven. All the Americas together have only 900 languages, that is, 15%. Europe and the Middle East together have only 275 languages, or 4%. The other 81% of the world's languages are in Africa (1,900) and in Asia and the Pacific (3,000) (Krauss 1992: 5).

It is important to emphasize that the vast majority of the world's languages are spoken by small groups. Thus, those languages which have a million or more speakers number around only 300 (i.e. 5%), but they account for over 90% of the world's population, with the remaining 5,700 languages being spoken by less than 10% (Krauss 2001: 25). (See also Crystal 2000: 14–16.)

Krauss (1992: 6, 1998: 104) assesses the endangerment situation in selected regions as follows. In North America, of the 210 remaining languages, about 86% are moribund, no longer spoken by children. The only safe languages are Greenlandic Inuit and perhaps Inuit in Eastern Canada. About 50 of 300 languages, i.e. 17%, in Central America, and 110 of 400 languages, i.e. 27%, in South America, are likely to be moribund. That is, in all the Americas, about one third are moribund. Of approximately 30 languages of the former Soviet Union minority languages, only 3 are generally being learned by children. The worst case of language loss is observed in Australia; see 3.5 for details.

Krauss (1998: 103) gives the following figures for the global situation: of the 6,000 languages, at least 20% to perhaps 50% are moribund; 5% to 10% are

safe; and the rest, thus 40% to 75%, are weakening. Krauss (1998: 105) goes on to say that, according to a likely scenario, the number of languages will be reduced to 300 in the next 150 years.

This situation is indeed alarming although it would be utterly beyond the comprehension of people who live in places such as Tokyo, Melbourne, London, New York, or Moscow, or of people who speak a “major” language, such as Japanese, English, or Russian. An example from the present writer’s experience may bolster Krauss’ statement. Of the Australian Aboriginal languages he has worked on since 1971, most are now extinct or almost extinct. They include Warrungu, Gujal, Biri, and Buluguyban of north Queensland; and Malngin and Gardangaruru of east Kimberley, northwest Australia. A few are moribund or probably moribund, e.g. Wanyjirra and Ngardi of east Kimberley. Among the languages the author has worked on, the one with the largest number of speakers is Jaru. It probably has about 150 to 200 speakers, but even Jaru is becoming a weakening language. Except for a community called Ringer Soak, the language seems to be no longer being learned by children.

We have seen a global picture of language endangerment as described by Krauss. We shall now turn to the situation in selected areas. We shall look at only those areas for which convenient summaries of the history and language situation are available.

For further details, the reader is advised to consult the relevant works cited or listed. In particular, Wurm (ed.) (2001) indicates the location of endangered languages of the world. Information on the state of individual languages can be obtained at the following websites: <http://www.sil.org/>, and <http://www.tooyoo.l.u-tokyo.ac.jp/ichel.html>

A word of caution is in order. As pointed out by Zepeda and Hill (1991: 137) and as experienced by the present writer, a survey sometimes provides an optimistic picture, the reality of which turns out to be much more pessimistic than is suggested by the survey. The gloomy reality is portrayed in works such as Schmidt (1990).

The following accounts of specific areas are horrifying stories, often exposing some of the ugliest facets of human history.

3.3. Ainu of Japan

Relevant works include Kirikae (1997), Maher (1995), Miyawaki (1992: 358–360), Okuda (1998, 2001), Sawai (1998), Shibatani (1990, 1994), Shoji (1997: 59), and Tamura (2000a). The following website contains a bibliography (in English) on the Ainu language: <http://jinbunweb.sgu.ac.jp/~ainu/biblio/european.html>.

Traditionally, the Ainu people inhabited the island of Hokkaido and the northern part of Japan's main island of Honshu, as well as Sakhalin and the Kuril Islands. Nowadays, most of them live in Hokkaido, and a fair number live elsewhere in Japan and outside Japan (Osami Okuda, p.c.). In Hokkaido, from the mid-fifteenth century, they suffered invasion, exploitation and brutal treatment by non-Ainu Japanese, which resulted in a considerable decrease in their population. From the latter half of the 19th century, the number of speakers of the language declined drastically due to causes such as the following, among many other causes:

(a) the assimilation policy by the Japanese government, which included the imposition of the Japanese language and the prohibition of the use of the Ainu language in the classroom;

(b) the dispossession of much of their traditional land, and;

(c) discrimination and humiliation by the non-Ainu Japanese.

As of 1998, out of the total population of 23,800, there are estimated to be only 20 or 30 speakers, that is, less than 1%. The Japanese Government has traditionally showed no interest in, or concern for Ainu people, their language, and culture. Still now, the Ainu language does not have the status of an official language. It is not taught in schools, although it has been taught at Waseda University, Tokyo, by Suzuko Tamura since 1975. Nor is it used as a medium of instruction in schools. However, interest in the Ainu language and culture is increasing both among Ainu and non-Ainu Japanese. There are privately conducted Ainu language classes not only in Hokkaido (14 classes, as of 1998), but also in other parts of Japan, including Tokyo. Also, there is now an Ainu language course broadcast on the radio from 6:05 to 6:20 on Sunday mornings.

3.4. Austronesian languages

The Austronesian family of languages covers a wide area that includes Madagascar in the west, Taiwan and Hawaii in the north, Easter Island in the east, and New Zealand in the south. The Maori (or Maaori) language of New Zealand is well-known for its maintenance program called "language nest". This method has subsequently been adopted by many peoples elsewhere in the world.

3.4.1. Maori of New Zealand

Relevant works include Grenoble and Whaley (1998a: 49–52), Jeannette King (2001), Moeka'a (1999), and Spolsky (1995). (Vowel length in this language is

marked by the use of either the macron or by reduplication of the vowel; cf. J. King 2001: 127, note 3. The present work employs the latter method.)

The Maaori people arrived in what is now New Zealand about 1000 AD. Since then, their language developed into several mutually intelligible dialects. Initial contact by Europeans occurred in 1642 with the arrival of Abel Tasman, who was followed in the late 1700s by James Cook. At that time the Maaori population is estimated to have been around 100,000. From about 1800, European whalers, sealers and missionaries began arriving in New Zealand, and Maaori became the language of trade. The missionaries produced an orthography as well as grammars and dictionaries of the Maaori language, and taught reading and writing in Maaori at the mission schools, which reached a peak in the 1830s. The Government and church presses produced newspapers and periodicals in Maaori, and from the 1860s to 1930s Maaori-owned presses produced newspapers and periodicals. It is argued that at this time there were proportionately more Maaori literate in Maaori than there were English people in England literate in English.

However, with the arrival of English settlers from 1840 onward, things began to change. Initially Maaori was still the main language of communication between the newcomers and Maaori, with the Government employing licensed interpreters to translate letters and documents for official correspondence with the Maaori populace. However, in 1867 Native School Act was passed, which made English the language of literacy in schools. This resulted in the outlawing of the Maaori language in schools and punishing children for speaking it. English became the language of officialdom and government – the language of power. Furthermore, the Maaori population began to decrease due to warfare and lack of immunity to western diseases.

By mid-1970s there were about 70,000 fluent speakers of Maaori, but they constituted only 18–20% of the Maaori population and were virtually all aged fifty and over. It was around that time that the movement to establish the famous “language nest” program started; see 11.5.2. Despite the travails which the Maaori language has encountered, the situation surrounding it is far better than that which surrounds, say, Australian Aboriginal languages; see 3.5.

3.4.2. Other languages of the Austronesian family

The Hawaiian language followed a very similar history of decline to that of Maaori. Thus, a number of factors – such as dominance of English, reduction in the Hawaiian population, annexation by the United States, and policy decisions by the Department of Education – caused a drastic drop in the number of native Hawaiian speakers. Recently, however, people of Hawaii have been making ef-

forts to preserve their language and culture, and have adopted the “language nest” method for revitalizing their language. Immersion schooling is now offered up to the secondary level. (See Kamanaa and Wilson 1996, Kapono 1995, Niedzielski 1992, and Schütz 1995, 1997.) The revitalization of Hawaiian will be looked at in 11.5.2.

Other works on language endangerment situations in the Pacific region include Crowley (1995), Dixon (1991a), Florey and van Engelenhoven (2001), Grimes (1995), Himmelmann (forthcoming), and Pawley (1991).

3.5. Languages of Australia

Archaeological evidence indicates that humans reached what is now Australia more than 53,000 years ago (Flood 1995: 32). At the time of the first British colony at Port Jackson (Sydney) in 1788, there are estimated to have been about 250 languages. Likewise, the Aboriginal population at that time is estimated to have been from 300,000 up to several times more. However, over the subsequent centuries, most Aboriginal Australians were dispossessed of their land, and their population reduced drastically, due to massacre (by shooting, poisoning, etc.), introduced diseases such as smallpox, measles and influenza (diseases to which they had no immunity), forced relocation, and so on. Most of the earlier Aboriginal languages are extinct, and there are only 100 or so languages still spoken, mostly by old people. Only about 20 languages are viable, being used as a means of communication and transmitted to children. They are all spoken in northern and central Australia. (See Blake 1994a: 266, Blake and Dixon 1991: 1–2, 27–28, Dixon 1991a: 235–236, and McGregor 1994: xii.) Seven of these languages have between 1,000 and 5,000 speakers, namely, the Western Desert language, Aranda, Warlpiri, the Western Torres Strait language, Dhuwal/Dhuawala, Tiwi, and Anindilyakwa, but the others are each spoken by fewer than 1,000 people (Dixon 1991a: 236; see also Schmidt 1990: 4–5 and McGregor 1994: xiii).

As alluded to in 3.2, for most of the Australian Aboriginal languages the writer worked on in the 1970s, he was able to find only one speaker or two, and three at best. That is, in his fieldwork experience, working with the last speakers of moribund languages is almost the “norm”, and not an exception. This is often the case in Australia; see, for instance, Evans (2001). Apart from Australianists, the writer has not come across any fieldworker who has worked on languages that have so few speakers.

The speed with which Australian Aboriginal languages have disappeared is truly astonishing. One specific example is the following. According to a sto-

ry the present writer collected, Wanyjirra people of the Northern Territory had their first contact with Europeans around 1894. As of 2002 – only 100 years or so from the initial contact – out of the estimated 100 (or less?) descendants, less than 10 can speak the language. No doubt, much the same applies to many other languages on the continent.

The Aboriginal Australians of Tasmania were almost completely terminated by genocide. This is internationally known and is mentioned by Swadesh (1948: 226–227), as early as in the 1940s. The fate of Aboriginal Tasmanians and their languages is described by Crowley (1993). It will be briefly referred to in 5.2.3 and 5.2.4-[2].

Concern for the fate of Aboriginal languages has been spreading recently, perhaps since the 1970s, both among Aboriginal and non-Aboriginal Australians. A large number of language centers have been established (McGregor 1994: xxxiv–xxxv), including Kimberley Language Resource Centre, which is located in Halls Creek, Western Australia. These language centres have played a central and invaluable role in activities for language maintenance, and even for language revival in certain cases. See Schmidt (1990) and McKay (1996). Language revitalization efforts in Australia will be discussed in Chapter 11.

Other relevant works on Australian Aboriginal languages include Dalton et al. (1995), Dixon (1991b), and McGregor (2002).

3.6. Languages of South America

Adelaar (1991, 1998) provides detailed country-by-country accounts of the post-contact history and the current state of South American Indian languages. The following account is largely based on his work. The situation of Quechua in pre-contact times was briefly mentioned in 1.3.1.

Since Columbus explored the coast of what is now Venezuela in 1498, the native Indians have suffered a continuous and radical transformation in many different respects. Since that time, epidemics and violent colonization, including slavery and attempts at genocide, have caused a most dramatic population collapse.

A large number of native languages have disappeared, and many others are now endangered. Except for one language (i.e. Paraguayan Guarani; see below), they are in the process of being replaced by a handful of European languages, namely, Spanish, Portuguese, French, English, and Dutch (Grinevald 1998: 128).

The number of living languages in South America is estimated to be around 500, but there is no doubt that they constitute a fraction of the languages spoken in South America at the arrival of the Europeans. Thus, for Brazil, the to-

tal number of languages spoken about 1500 AD is estimated to have been 1,175, but today the total number of native languages is less than one sixth of that number. In an extreme case, Uruguay no longer has a native population, and no indigenous language remains there.

The only native language that is not threatened is Paraguayan Guarani. It is maintained in stable bilingualism, co-existing with Spanish, as will be seen in 7.2.2. (See also Garvin and Mathiot 1972 and Joan Rubin 1972.) Quechua, the language of the former Inka empire (discussed in 1.3.1 and also 6.2-[2]-(b)), Aymara, which is spoken in Bolivia and Peru, and Guarani have several million speakers. But the prospects for the future of these languages, especially Quechua and Aymara, are not bright (Adelaar 1991: 45). The fate of Quechua and Aymara under the Spanish colonization is described by Heath and Laprade (1982).

3.7. Languages of Central America

The endangerment situation and related issues in Central America, including the West Indies, are discussed by England (1998), Grinevald (1998), Hill (1983), and Douglas Taylor (1977: 13–28). Greenwood and Hamber (1980: 27–29) describe the genocide of the Arawaks of the West Indies. The situation of Nahuatl or Aztec – the language of the Aztec empire – in pre-contact times was briefly mentioned in 1.3.1. The following account of the situation in Mexico is based in Garza and Lastra (1991).

Since 1521, when the Aztec capital of Tenochtitlan – the present-day central district of Mexico City – was taken by the Spanish conquerors, Mexican Indian languages have suffered dramatic erosion. The indigenous population of Mexico decreased from 25 million in 1519 to 1 million in 1605. This constitutes one of the greatest demographic catastrophes in the history of humanity. This demographic loss was caused by the four factors listed below.

(a) Genocide.

(b) Loss of will to live. “Their collective frustration expressed itself through sexual abstinence, abortion, and even suicide and the disappearance of entire groups” (Garza and Lastra 1991: 104).

(c) Economic and social reconditioning. An instance of this is forced relocation to unproductive and inhospitable lands.

(d) Epidemics of smallpox, measles and the common cold, diseases to which Indians had no immunity.

Mexico has been characterized by a great linguistic diversity from the time of the Spanish Conquest up to the present. As many as 16 language stocks

and 95 languages are currently found in Mexico. Nonetheless, the numbers of the speakers of Mexican Indian languages have been severely reduced, as seen above, and even one conservative estimate indicates that 113 languages have disappeared since the seventeenth century.

The future of Mexican Indian languages does not seem bright. No provisions are made for the right of the Indians to have their languages recognized and to be able to use them for official purposes.

3.8. Languages of North America

[1] USA

The following account is based on Zepeda and Hill (1991). At the beginning of the sixteenth-century, in what is now the USA (including Alaska and Hawaii), there must have been many hundreds of languages. However, fewer than 200 remain, and the future of these is decidedly insecure. Even the remoteness of the location (e.g. Eskimo in northern Alaska) or the large size of the speech community (e.g. Navajo in the southwest) does not seem to protect a language from being lost.

As elsewhere in the world, the aboriginal population was reduced by diseases, among other detrimental factors, and according to one estimate, only one in twenty-five of the original populations survived.

It is difficult to assess precisely the current numbers of Native American languages and their speakers, but the number of languages that are still spoken may be below 150. There are, however, many active groups of people who work for language revitalization, and hundreds of language maintenance programs have been undertaken since the late 1960s. They are discussed in 11.5.2, 11.5.5, 11.5.6, and 11.5.7.

[2] Canada

The following account is based on Kinkade (1991). The native languages of Canada, too, have been in decline since the first Europeans arrived in the sixteenth century. To a large extent, language decline has resulted directly from population decline. For example, on the narrow coastal strip from southern Alaska to southern Oregon, within the first hundred years of white contact (from about 1774) the aboriginal population (which may have numbered 200,000 people) dropped by over 80 per cent. This catastrophic depopulation was caused almost entirely by introduced diseases, such as smallpox, malaria and measles, to which the native population had no immunity.

At least sixty languages are known to have been spoken in what is now Canada. At least eight languages are extinct and fewer than half of the remaining

languages are likely to survive for another fifty years. Only one third of the languages originally spoken in Canada have a good chance of survival, including Cree (possibly 60,000 speakers in Canada), Ojibwa (possibly 30,000 in Canada, and 20,000 in the USA), Dakota (5,000 in Canada and 15,000 in the USA), and Inuktitut (16,000–18,000 in Canada, 6,000 in northern Alaska, and 41,000 in Greenland). It is interesting to note that Kinkade's account is less pessimistic than Krauss' cited in 3.2 above.

Apart from Zepeda and Hill (1991) and Kinkade (1991), relevant works include Beeler (1977), Bergsland (1998), Cook (1979), Dauenhauer and Dauenhauer (1998), Grubb (1979), Hallamaa (1997), Hill (1983), Kaye (1979a, 1979b), Krauss (1992, 1996, 1997), Swadesh (1948), Vakhtin (1998), and Yamamoto (2001).

3.9. Languages of the former USSR

The Russian expansion into Siberia started in the sixteenth century and reached Kamchatka in 1695. It crossed the Bering Strait, arrived at Alaska in 1741, and went down south as far as the present-day state of California. In this process, the Russian language has left many influences on the aboriginal languages – even in Southwestern Pomo of California (see Oswalt 1958, 1994). (The preceding account is largely based on Hikita 1992.)

In Russia, there are 54 minority languages. They have continued to be replaced by Russian (Grenoble and Whaley 1998a: 45), due to the contact with Russian and the assimilation policy, among others factors. Today it can be said that “these peoples appear to be in the zone of a linguistic calamity” (Mikhalchenko 1998: 115–116). Many, if not most, of minority languages of the former USSR seem to be endangered.

The situation of minority languages of the former USSR is surveyed by Kibrik (1991: 262–273), Krauss (1997: 13–25), and Wurm (1997: 42–44). Other relevant works include Atkine (1997), Comrie (1981), Helimski (1997), Kazakevitch (1998), Kozhemiakina (1998), Mikhalchenko et al. (1998), Salminen (1997), Shoji (1997), Solntsev, Mikhalchenko, and Bachnyan (1994), Solntsev, Mikhalchenko, and Krychkova (1994), and Tsumagari (1997). The following website furnishes (mainly sociolinguistic) information on 54 indigenous minority languages of Russia: <http://www.tooyoo.l.u-tokyo.ac.jp/Russia/bibl/index.html>.

3.10. Languages of Northern Europe

Huss (2001) provides an account of minority languages in Sweden, and Heinsoo (2000) an overview of the Finnic languages (i.e. Finish, Estonian, etc.) of the Uralic family of languages.

A brief account of Sami is given below, based on Bergsland (1998), Helander (1997), and Krauss (1997: 22–25). Sami is a member of the Uralic family, and is closely related to the Finnic languages. Sami people are also known as Lapps by outsiders. Their territory is divided by four states, viz. Norway, Sweden, Finland, and Russia, and consequently their language has been influenced by Norwegian, Swedish, Finnish and Russian. Of the total Sami population of about fifty thousands, about seventy percent are considered as speakers of Sami. Nonetheless, only the northern variety is thriving, and certain varieties in the east, the west and the south are endangered. A sign for a brighter future has emerged; in many villages the Sami ethnic consciousness has recently been revitalized, so that people are eager to learn the Sami language, and some people have even begun to wear the almost-forgotten Sami national costume.

3.11. Celtic languages

Celtic languages constitute a branch of the Indo-European family of languages. They once covered a vast area, and in the first millennium BC they extended from Portugal and Ireland to Poland and Bulgaria through Bavaria and northern Italy, with an enclave in central Anatolia (Hamp 1994: 1663). Nowadays, they are spoken in the periphery of France, the United Kingdom, and Ireland. They are clearly minority languages, when compared with English (in the United Kingdom and Ireland) and with French (in France).

In the academic field of language endangerment, four Celtic languages have become well known:

(a) Scottish Gaelic, through a series of works by Dorian, on the East Sutherland dialect of Scottish Gaelic, e.g. Dorian (1973, 1977, 1978, 1980, 1981, 1986a, 1986b, 1994a);

(b) Irish, through Maguire's (1991) account of the Irish revitalization program in Belfast (see 11.5.3);

(c) Welsh, through Jones' (1998) study of the decline and revitalization program of Welsh, and;

(d) Breton, through works such as Dressler (1972), Dressler and Wodak-Leodolter (1977b), and Kuter (1989).

See also Watson (1989) on Scottish Gaelic and Irish, Williams (1992) on Welsh, Jones (1998: 334–348) on Cornish, and Denez (1998) and Jones (1998: 296–333) on Breton.

3.12. Languages of Africa

Africa, along with Asia, has the highest number of indigenous languages. European languages, mainly English, French and Portuguese, have spread throughout the African nations during the last 200 years. However, until today, the use of these European languages has been mostly restricted to certain domains, such as higher education, politics and business, and also to a relatively small number of people (Brenzinger, Heine, and Sommer 1991: 19).

According to Scotton (1982: 68), only 10 per cent or less of the rural African population have substantial competence in European languages, and African vernaculars are generally not in danger of being replaced by European languages. However, the future situation is not bright. The use of African vernaculars is diminishing. Nearly 200 languages are endangered (Sasse 1992a: 7), and every year several languages are lost for posterity (Brenzinger, Heine, and Sommer 1991: 20).

What is interesting about the African situation is that – in contrast with areas such as Australia, Americas and Siberia, where European languages have replaced, or are replacing, aboriginal languages – it is, for the most part, the more prestigious African languages that are replacing minority African languages. That is, African languages are wiping out African languages (Brenzinger 1998a: 89; Brenzinger, Heine, and Sommer 1991: 19); see Brenzinger (2001) for a full discussion. A similar situation is in fact observed in other areas as well. In Europe, for example, English is replacing Scottish Gaelic, Welsh, and Irish, and French is ousting Breton (Nancy Dorian, p.c.) (see 3.11), and in Asia, Japanese is ousting Ainu (see 3.3). This is reminiscent of Nahuatl of Central America and Quechua of South America, which replaced other languages of the respective regions (see 1.3.1).

Apart from the works cited above, relevant works include Batibo (1992), Brenzinger (1992a, 1998a, 1998b), Dimmendaal (1989, 1992), Grenoble and Whaley (1998a: 42–45), Heine (1992), Kapanga (1998), Legère (1992), Nurse and Walsh (1992), Rottland and Okombo (1992), Gabrielle Sommer (1992), Tosco (1992), and Winter (1992).

3.13. Languages of India and neighbouring regions

India is an outstandingly multilingual country, as illustrated by the number of languages shown on banknotes and also as is elaborated by Mahapatra (1991) and Annamalai (1998). The following account is based on these two works.

There are 2,000 languages in India, and they are divided into four language groups: Indo-European (54 languages and 27% of the languages), Dravidian (20 and 10%), Austro-Asiatic (20 and 10%), and Sino-Tibetan (84 and 42%); the rest are foreign and unclassified languages .

Although there are many languages, such as Hindi, that are flourishing, with millions of speakers, there are also many languages that are facing endangerment or extinction. They include Andamese languages spoken in the Andaman Islands. (They do not seem to belong to any of the four language families listed above; see Mahapatra 1991: 181).

Works on languages in the neighbouring regions include Kieffer (1977) on Afghanistan.

3.14. Languages of China and neighbouring regions

Bradley (1998) provides an account of the language policy and the current state of languages of China. For millennia, the Mandarin-speaking Han population has increased their territory, starting with the core regions along the lower Yellow and Yangtze rivers and gradually expanding to the north, south, west and southwest. In this process, substantial numbers of minorities have amalgamated themselves into the Mandarin-speaking Han population, abandoning their languages in favour of Mandarin. After the establishment of the People's Republic of China in 1949, there were major changes in policy on minority languages. The right of each national minority to use and develop their language is specifically recognized. In practice, however, these rights have sometimes not been asserted or implemented, and many of the languages of the smaller minorities are dying; many more are endangered.

Manchu – which is an indigenous language of Manchuria, considered to be a member of the Tungusic family of languages, and not linguistically related to Chinese (Janhunen 1997: 126; Tsumagari 1997: 175) – is an interesting case in which the conquerors have given up their own language and adopted that of the very people whom they have conquered (Dorian 1998: 4). “In 1644 the Manchus took power, at first in Manchuria and northern China and thereafter, after defeating the Chinese Ming Dynasty, in the whole of China; this they held until December 1911” (Menges 1994: 2357). But the Manchu ruling elite of Chi-

na were massively Sinicized (Janhunen 1997: 126; Wurm 1991: 14) and shifted to Chinese. Also, they did not protect the territorial integrity of the Manchu-speaking rural population. Today, the Manchu language is among the most seriously endangered in the country. Speakers of Manchu are reported to survive in three localities in Manchuria, and also a dialect of Manchu called Xibo (or Sibe) is spoken by a diaspora population transferred during the Qing period (1763) from Manchuria to the newly-conquered Ili (*Yili*) region of Sinkiang (*Xinjiang*) (Janhunen 1997: 126–127; Krauss 1997: 17).

Works on the language situation in China and/or neighbouring areas include the following:

- (a) Northeast Asia, including Xibo: Kane (1997), Krauss (1997), Tsumagari (1997);
- (b) China: Bradley (1998), Janhunen (1997), Matisoff (1991), Menges (1994), and;
- (c) Southeast Asia: Bradley (1998), Dixon (1991a), Matisoff (1991), Suwilai (1998).

3.15. Summary of Chapter 3

Almost in every part of the world, minority languages are disappearing, or have already disappeared, being wiped out by major languages, which include European languages such as English, Spanish, and Russian, and local and non-European languages such as Japanese and Chinese. One of the most seriously affected areas is Australia, where more than 90% of the languages spoken at the time of British colonization have become extinct.

4. Approaches to language endangerment

4.1. Introductory notes

The present chapter points out that there are two research approaches to language endangerment. One (see 4.2) attempts to record a given endangered language in its most traditional form, while the other (see 4.3) examines the phenomenon of language endangerment itself. On the basis of 4.3, the present chapter surveys three proposed models of language endangerment (4.4).

4.2. Language documentation approach

In this approach, the linguist attempts to record what a given language was like when it was healthy. This is no easy task, but at least the linguist will aim at “salvaging the most conservative usage” (Hill 1983: 258) or “to gather what remains of the language in decline” (Walsh 1982: 54). This field of linguistics is sometimes termed “salvage linguistics” (Craig 1997: 257).

This approach is the one that has traditionally been adopted by researchers working on endangered languages. Documentation is the most important thing to do about such languages, and it is the most urgent task of linguists (see 12.3.1). Ideally, documentation of a given language should include a grammar, vocabulary, and texts/stories, among others, employing audio- and video-recording. Methods of documentation will be discussed in detail in Chapter 13.

4.3. Language endangerment phenomenon approach

4.3.1. Characterization of the approach

In contrast with the language documentation approach, the language endangerment phenomenon approach is concerned with the phenomenon of language endangerment itself, and salvage is not the most important aim of the research.

4.3.2. Negligence of the language endangerment phenomenon

The speech of speakers of an endangered language almost inevitably deviates from the traditional norm of the language. Such speech was once described as atrocious, meagre, inept, barbarous, or the like (cf. Bloomfield 1927: 437).

As seen in Chapters 1 and 3, language endangerment is a very common phenomenon, occurring virtually in every part of the world. Until recently, however, researchers working on endangered languages in general have not been concerned with the endangerment phenomenon, e.g. a deviation from the traditional norm, and apparently have not considered this phenomenon as worthy of study in its own right (Dorian 1981: 3, 1989a: 2; Hill 1983: 258; Schmidt 1985b: 1). The major reason for this negligence of the language endangerment phenomenon is no doubt the following. As noted in 4.2, researchers have been mainly attempting to record the “uncontaminated” form of a given endangered language, and have considered deviations from the traditional norm as “corrupt” and unworthy of study (Dorian 1981: 3; Hill 1983: 258; Schmidt 1985b: 2), and even as a nuisance (Hill and Hill 1977: 55). Schmidt (1985b: 2) lists another reason for this negligence: pressure from within the speech community for the investigator to deal with its most knowledgeable members. (The writer has not experienced this in the fieldwork situation in Australia, *pace* Schmidt.)

4.3.3. Interest in the language endangerment phenomenon

However, since early 1970s there has been a growing interest in the phenomenon of language endangerment itself, with the number of works on this issue rapidly increasing (Craig 1997: 257; Dorian 1981: 3; Hill 1983: 258). Language endangerment now constitutes a flourishing field in the discipline of linguistics, as attested by the large amount of literature cited in the present work and of those listed in the following website: http://www.tooyoo.l.u-tokyo.ac.jp/~tsunoda/dlg_lst.html.

No doubt, the major motivation for this interest is the view that study of these deviations – the very deviations that were the cause of the negligence – will provide a new insight into human language, i.e. the kind of insight that cannot be obtained from the study of “normal languages” (for want of a better term). (See Dorian 1989a: 2, 1999a: 99, 2001b: 8358, and Hill and Hill 1977: 55.) This is also one of the main motivations for interest in “non-normal” varieties of language such as first language acquisition (or child language acquisition), aphasia, second language acquisition, pidgins, and creoles. The language endangerment phenomenon will be compared with these varieties in 8.4.5.

One of the earliest scholars – and possibly the earliest scholar – to comment on deviance in an endangered language is Bloomfield (1927: 437–439). He observed this phenomenon in the speakers of Menomini of Wisconsin, the USA, in terms of phonology, morphology, and lexicon. But he did not carry out a comprehensive study of this phenomenon. As mentioned in 4.3.2, he considered it “atrocious” and “barbarous”.

It is possibly Swadesh (1948: 234–235) who first pointed out the value of research into language endangerment. He emphasized the importance of gathering systematic data, on a wide range of aspects such as the following.

(a) Regarding “social obsolescence” of a given language: (i) the number of bilingual and monolingual speakers in terms of sex and age, (ii) the social pressures and trends, (iii) the attitudes taken by different individuals and sectors of the community, (iv) current philosophies about the choice of language, (v) correlation with social and economic position, (vi) the use of the language(s) in different social settings, (vii) special symbolisms attached to the use of the language, (viii) autobiographies and individual case studies of speakers.

(b) Regarding “the effect of social obsolescence on the language system”: (ix) vocabulary, (x) morphology, and (xi) phonology.

Miller (1971: 114), who cites Swadesh (1948), provides a list of topics that need to be investigated. His list is very similar to Swadesh’, although he uses more explicit – and perhaps more modern – terms such as “language attitude” and “language loyalty”.

Swadesh’ and Miller’s lists may be paraphrased by the list proposed by Dressler and Wodak-Leodolter (1977a), Dressler (1981: 11–13), and Dressler (1982: 324): (a) historical, (b) political, (c) socioeconomic, (d) socio-cultural, (e) sociological, (f) socio-psychological, (g) sociolinguistic, (h) psycholinguistic, and (i) linguistic aspects.

Sasse (1992a: 9–10) divides the relevant aspects into three groups.

(a) External setting. This concerns extra-linguistic factors – cultural, sociological, ethnohistorical, economic, political, social, economic factors – which create, in a certain speech community, a situation of pressure which forces the community to give up its language.

(b) Speech behavior. This has to do with sociolinguistic factors, e.g. the use of different languages in a multilingual settings, the use of different styles of one language (Fishman’s [1965] famous *Who speaks what language to whom and when*), domains of languages and styles, and attitudes towards variants of languages.

(c) Structural consequences. These are changes that occur in the language itself, in its phonology, morphology, syntax and lexicon.

Brenzinger and Dimmendaal (1992) provide a list that is similar to, but simpler than, Sasse's.

The proposals cited above are all holistic, paying attention to a wide range of aspects of the language endangerment phenomenon, although the importance of a holistic approach is not always explicitly stated. Sasse (1992a: 9) explicitly advocates the need of a holistic approach. A holistic approach is necessary in order to obtain an adequate understanding of any aspect of language (cf. Dixon 1994: 229), and naturally this applies to the study of the language endangerment phenomenon as well.

The present work adopts Sasse's view, and attempts to provide a framework for a holistic account of language endangerment. In particular, the external setting of language endangerment will be examined in Chapter 6, the speech behaviour in Chapter 7, and the structural consequences in Chapter 8.

4.3.4. History of research in the language endangerment phenomenon approach

Since early 1970s there have been a growing number of works on the endangerment phenomenon. Works from this early period up to about 1980 include those listed below.

(a) Works such as the following deal with the external setting: Swadesh (1948) on various languages; and Dressler and Wodak-Leodolter (1977b) on Breton.

(b) Those listed below deal with just one or two aspects of a given endangered language: Bloomfield (1927) on Menomini; Denison (1977) on Sauris (a Germanic language of Northeast Italy); Dressler (1972, 1981) on Breton; Hill (1973) and Hill and Hill (1977) on Nahuatl of Mexico; Elmendorf (1981) on Wappo and Yuki of California; Knab (1980) on Pochutec of Mexico; and Voegelin and Voegelin (1977) on Tübatulabal of California.

(c) The following works are reasonably holistic, but they are not detailed: Austin (1986) on languages of eastern Australia; Kieffer (1977) on Örmürü and Parāči of Afghanistan; and Miller (1971) on Shoshoni of Utah and Nevada, the USA.

As seen above, there was already a fair amount of literature on the endangerment phenomenon as it occurs in individual languages. However, as Sasse (1992a: 9) emphasizes, there was not a truly holistic and detailed work. The first work of this nature is Dorian (1981) on Scottish Gaelic. (In addition, Dorian has published extensively on the language; e.g. Dorian 1973, 1977, 1978, 1980, 1986a, 1986b, 1994a.) It "is the work of Nancy Dorian on East Sutherland Gael-

ic which has contributed most to ... status and credibility [of research into language endangerment] as a separate sphere of study” (Jones 1998: 1). Dorian’s pioneering work was followed by Schmidt’s (1985b) comprehensive work on Dyrbal of Australia; this work will be presented in Chapter 8.

Coteanu (1957) is sometimes said to be the first work on language death (Dressler and Wodak-Leodolter 1977a: 6; Jones 1998: 1; Schmidt 1985b: 2) (although Swadesh 1948 had appeared earlier), and a few comments on the book are in order. The writer consulted Daniela Căluianu’s English translation (as yet unpublished), but – largely due to his lack of expertise on the relevant languages and partly due to the style in the original – it is not clear whether the book may be considered a work on language death. The relevance and value of this work for research into language death need to be examined by specialists with relevant expertise.

4.4. Models of language endangerment

There seem to be few models of language endangerment. In the following, we shall very briefly look at those proposed by Dressler (1982), Schmidt (1990), and Sasse (1992a).

[1] Dressler (1982: 324–325) states as follows.

In my opinion the basic mechanism of language decay starts with social change subordinating the respective speech community to another speech community. Speakers reflect this unfavorable change sociopsychologically by a less favorable evaluation of their language. A consequence is a sociologically restricted use of their language, which results in an impoverished linguistic structure for their language. This impoverishment has a feedback on the speaker’s sociopsychological evaluation, because the quality for guaranteeing the prestige function and the self-identification function (and hence the unifying/separating functions) of the language has diminished. Also the sociolinguistically restricted use has a parallel feedback effect. Thus a skeleton flow-chart of necessary (but not sufficient!) causes would be

as shown in Figure 4-1.

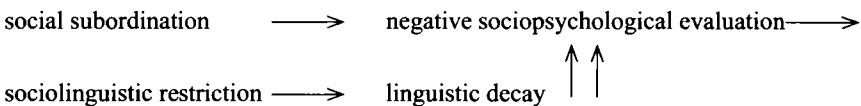


Figure 4-1. Dressler’s model

[2] Schmidt (1990: 121–122) proposes the model shown in Figure 4-2.

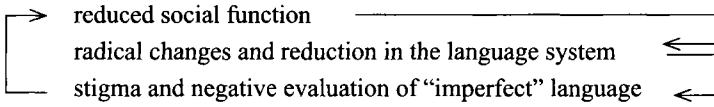


Figure 4-2. Schmidt's model

Schmidt's model is similar to Dressler's, and these two models show the following correspondences. (i) Sociopsychological aspect: negative sociopsychological evaluation in Dressler's model corresponds to stigma and negative evaluation of imperfect language in Schmidt's. (ii) Sociolinguistic aspect: sociolinguistic restriction in Dressler's model corresponds to reduced social function in Schmidt's. (iii) Structural aspect: linguistic decay in Dressler's model corresponds to radical changes and reduction in the language system in Schmidt's.

There are, however, two minor differences. One is the lack of the component of social subordination in Schmidt's model. No doubt, this component was taken for granted, and was not included in the model. The other is that, as the diagrams cited above show, Dressler's model is cyclic only partly. The component of social subordination is not included in the cycle. In contrast, Schmidt's model is entirely cyclic. (But it is not known where in the model the component of social subordination would be allocated.)

[3] Sasse (1992a) puts forward a very comprehensive model of language endangerment, a detailed account of which will be beyond the scope of the present work. In this model, very roughly speaking, the factors in the external setting bring about changes in speech behaviour, which in turn result in structural changes in the language. Specifically, Sasse (1992a: 11) argues that the causes for language endangerment are found exclusively in the external setting. Very roughly speaking, his model may be shown as follows.

external setting → speech behaviour → structural changes in the language

In essence, the three models examined are similar to one another. The only difference is that while the Sasse model is non-cyclic, the other two models are cyclic, the Dressler model being partly cyclic and the Schmidt model entirely cyclic.

Note that all the models examined above are holistic, paying attention to a wide range of aspects of the phenomenon. A holistic approach is vital for an adequate understanding of language endangerment.

4.5. Summary of Chapter 4

There are two approaches to language endangerment. One attempts to describe what a given language was like when it was healthy, while the other examines the phenomenon of language endangerment itself, including the external setting, speech behaviour, and structural changes. Traditionally, linguists used to adopt the first approach only. However, during the last three decades or so, the interest in, and the literature on, the language endangerment phenomenon are increasing. It is important to take a holistic approach, paying attention to a wide range of aspects of the phenomenon, as is shown by the three models of language endangerment examined above.

5. Definitions and types of language death

5.1. Introductory notes

As seen in Chapter 2, language endangerment constitutes a continuum, ranging from the “healthy” phase to the “extinct” phase. Various definitions of language death have been put forward, but there seems to be no consensus. A given language may be considered dead at any point on this continuum. Proposed definitions of language death are examined and a few other possible definitions are suggested in 5.2. Also, language death may be classified in terms of criteria such as cause and speed. Proposed classifications of language death are considered and modifications thereof are proposed in 5.3.

5.2. Definitions of language death

It should be noted at the outset that when we use the term “language death”, we are using it in a metaphorical sense. According to one view, “languages neither live nor die. They are used or ceased to be used” (Pande 1965: 206).

It may look obvious that “a language dies when it no longer has any speakers” (Campbell 1994: 1960; Romaine 1989: 380; cf. also Thomason 2001: 223). However, as Romaine and Thomason point out, the matter is not easy. For example, like the death of a human being, the death of a language passes through a series of phases, and it is not a straightforward matter to pinpoint the moment (or date or even year) when a given language dies (cf. Elmendorf 1981: 36; Romaine 1989: 380). There are some proposals on the definition of language death, but no consensus seems to exist as to when a particular language is to be considered dead (Brenzinger and Dimmendaal 1992: 3). Most writers do not provide an explicit definition of language death, but they generally seem to maintain the view expounded in [6] below.

Language death may be characterized by a number of factors, the most convenient of which may be the following: (i) locus of language death (Campbell 1994: 1964), such as the community, family, and individual, (ii) degree of proficiency in the language, (iii) use of the language as a vehicle of communication, and (iv) transmission of the language to children. In the following, we shall consider proposed definitions of language death and suggest a few other possible definitions.

[1] Cessation of development

According to Denison (1977: 14), J. Vachek stated that “a language must be regarded as dead as soon as it stops developing (that is, changing)”. It is not certain if there is any language that does not change. As we shall see in Chapter 8, even a dying language undergoes changes. Languages such as Latin and Sanskrit may be considered as those which do not change; they have prescriptive norms from which learners (and speakers?) are not allowed to deviate. However, if there is any new change in the Latin or the Sanskrit of learners, then the language will have to be considered alive, in Vachek’s view.

[2] Cessation of transmission of the language in the community as a whole
It is possible that a given language is still used as the vehicle of communication by certain members – most likely, elder members – of the community but that it is no longer transmitted to the children of the community as a whole. A language may be considered dead when this happens.

An example of such a definition is the case of Jaru as used in the town of Halls Creek, Western Australia. As of 2002, there are a fair number of old people who speak the language among themselves, but the language is no longer learned by children. According to the definition provided above, Jaru of Halls Creek will have to be considered dead. (But the language is still alive, say, at Ringer Soak Community, an isolated community about 160 km southeast of Halls Creek, where children speak the language.)

The above is a plausible characterization of language death, although it does not appear to have been seriously proposed before.

[3] Disuse of the language in the community as a whole

A language may be considered dead when it ceases to be used as the vehicle of communication in the community as a whole (cf. Brenzinger and Dimmendaal 1992: 3; Sasse 1992a: 18; Thomason 2001: 224). This phase will follow, rather than precede, [2]. That is, it is unlikely that, while a language is transmitted to children, it is no longer used as the vehicle of communication. (Languages like Latin are exceptions. They are taught in school, that is, they are learnt by children but they are not used as the means for communication in the community.)

If such a definition of language death is adopted, there will be many cases where it is difficult to ascertain when a given language died. One example is Warrungu of northeast Australia. When the present writer commenced work on the language in 1971, there were two fluent speakers left: Alf Palmer (Warrungu name: Jinbilnggay) and Alec Collins (Warrungu name: Wulngarra – Peter Sutton, p.c.). They did not live close to each other and had no opportunity to use the language. It appears that they had not actively spoken the language for half a century or even longer. This suggests that Warrungu ceased to be used as the

vehicle of communication in the early years of the 20th century. However, it is not possible to know exactly when this happened.

[4] Cessation of transmission of the language in all families

It is possible that a given language is no longer transmitted to children in the community as a whole, but that it is learned by children in certain – probably a very small number of – families. The language may be considered dead when it is no longer transmitted even in such families, that is, when it is not learned by any children. This definition of language death is possible, although it does not appear to have been seriously considered before.

What percentage of children of a community must learn the language for it to be considered as transmitted in the community as a whole? This is a matter of degree, and it is difficult to decide.

[5] Disuse of the language in all families

It is possible that a given language is no longer used as the vehicle of communication in the community as a whole but that it is used as such in certain – probably a very small number of – families. The language may be considered dead when it ceases to be used even in such families. Again, this is a plausible characterization of language death; this characterization also does not appear to have received serious consideration before.

Again, what percentage of families of a community must use the language for it to be considered as used in the community as a whole? This is a matter of degree, and it is difficult to decide.

[6] Death of native speakers or fluent speakers

(a) Fluent speakers. A language may be considered dead when its last fluent speaker passes away. This view is held, for instance, by Elmendorf (1981: 36) and, no doubt, by many others, although this is not always stated explicitly.

An example of language death in this definition is provided by Warrungu of northeast Australia, mentioned in [3] above. It became extinct in 1981, when the last fluent speaker (Alf Palmer) passed away.

It should be noted, however, that this definition, too, is not free from problems. It is difficult to define “fluent speaker”. As we shall see in 9.4.1.1, fluency is a matter of degree. What degree of proficiency does a speaker require in order to be considered as a fluent speaker? This is a very difficult issue. (Alf Palmer’s proficiency in Warrungu will be described in 8.3 and 9.4.1.1-(b-i).)

(b) Native speakers. A language may be considered dead when its last native speaker passes away. This view is held, for instance, by Hill (1983: 260) and by the anonymous author of the article “Man, Isle of: Language Situation” on the Manx language, in Asher (ed.) 1994, *Encyclopedia of Language and Linguistics*, Vol. 5: 2357, Oxford: Pergamon Press.

This definition, too, has its own problems. First, the concept of native speaker may appear to be a straightforward matter. However, like other concepts in linguistics, it is extremely controversial; see Davies (1994) and Mc Laughlin and Sall (2001: 202), for instance. Davies (1994: 2723) lists six ways to characterize a native speaker, and one of them concerns the first language a speaker acquires. Second, in fieldwork situations it is not always easy to find out what a given speaker's first language is.

There is a further discussion of first language speakers and native speakers in 9.4.2-[2].

[7] "Rememberers"

Knab (1980: 232) employs the term "rememberer" to refer to a person who "passively remembers fragments of the language". It is often the case that fragments of a language survive long after the death of the last fluent or native speaker of the language. See Beeler (1977: 45) on Esselen of California, and Crowley and Dixon (1981: 398) on Tasmanian languages of Australia. In 1972, Terry Crowley tape-recorded five words and one sentence from two part-Tasmanians: Mrs. Heffernan and Mrs. Mundy (Crowley and Dixon 1981: 397–398). Another example from Australia: in 1974, the present writer recorded Reggie Palm Island, who was one of the few surviving members of the original group of Palm Island, and who was probably the last speaker of the Buluguyban language of that island. The author was able to obtain only about 40 words, a dozen phrases, and one story (narrated in English), about the travel of Carpet Snake. (See Tsunoda 1996b.)

Now, another definition of language death is possible: a language becomes dead when the last rememberer passes away. Again, this definition does not appear to have been considered before.

[8] Second language speakers

Two types of second language speaker may be recognized: (i) second language speakers (in a narrow sense): those who speak a second language (in addition to their first language; see D.A. Wilkins 1994: 3715), and (ii) another-group language speakers: those who speak the language of another group (in addition to the language of their own group; see Bradley 1989: 38, Evans 2001: 256, 273, Fishman 1991: 397, and Hinton 1994: 24).

Clearly, second language speakers of the type (a) are not native speakers of the second language. Also, they are likely – though not always – not to be fluent speakers thereof. Another-group language speakers may well be fluent speakers of the language of another group. (Thus, there are Japanese people who were born in Australia and who speak English fluently.) On the whole, however, they will be unlikely to be fluent speakers of their second language.

The sense (b) “another-group language speakers” seems more useful than the sense (a) in discussions of language endangerment. An example of the sense (b) comes from Australia. In the 1960s, while working with two speakers of the Kalkatungu language of northwest Queensland, Blake found that these two speakers also knew some Yalarnnga, a language adjacent to Kalkatungu (Blake 1971: 12–33). It is possible to say – in line with [6] – that the Yalarnnga language died when the last fluent or native speaker of the Yalarnnga group passed away. But it is also possible to say that the language became extinct when its last second language speaker passed away. Again, this is a plausible characterization of language death, although it does not appear to have been seriously proposed before.

[9] Researchers

There are a large number of researchers who have worked on endangered languages and who have a varying degree of command of thereof. It is possible to say that a given language is alive while a relevant researcher is alive, and that it becomes extinct when he/she passes away.

To take another example from Australia, the last fluent speaker of Warrungu passed away in 1981 (see [6] above). According to the view put forward in (a) of [6], Warrungu became extinct in that year. However, there is still one researcher alive, viz. the present writer, who knows some Warrungu, and who is able to write technical papers on it. It is possible to say that Warrungu is still alive and not dead. On this view, the present writer is the last speaker of Warrungu.

Such a view may sound absurd and, indeed, researchers have not considered such a view seriously – except for Golla (2001: 176–177). Nonetheless, it is worth considering seriously for at least three reasons, given below.

First, it may be objected that the present writer is not of Warrungu descent. Should factors such as race (cf. Davies 1994: 2721) or descent be taken into account when considering the membership of speakers of a given language? The answer is “No”, and race or descent constitutes no ground for denying the present writer the status of a Warrungu speaker.

Second, it may be objected that the present writer learned Warrungu as an adult. However, many people learn Maaori, for example, as adults (cf. Nicholson 1990; and also 11.5.2 below). If they are considered as speakers of Maaori, then there is no reason why the present speaker should not be regarded as a speaker of Warrungu.

Third, the present writer is more proficient in Warrungu than, for example, Reggie Palm Island was in Buluguyban (mentioned in [7] above). If Reggie Palm Island is considered a speaker of Buluguyban, then again there

is no reason why the present writer should not be classified as a speaker of Warrungu.

These three arguments will show convincingly that it is not absurd to state that a language is alive as long as the relevant researcher is alive. If such a view is adopted, no doubt there will be many languages whose last speakers are researchers. For example, Gavan Breen has worked with the last speakers of dozens of Australian Aboriginal languages and he will be considered the last speaker of these numerous languages.

What can remain after the last fluent or native speaker passes away? We have seen three kinds: rememberers, second language speakers, and researchers. There are still more that may survive and a language may be said to be alive as long as any one of them is preserved.

[10] Records of the language: books, tapes, and CDs

It may be possible to say a language is alive as long as its record is preserved. Denison (1977: 13) suggests the possibility of such a view, although he does not seem to subscribe to it, while Brenzinger (1998a: 99) seems to hold this view. Types of such record will include dictionaries, grammars, texts/stories, as well as audio- and video-recorded materials, and, more recently, CDs. In passing, we note that there is a possibility (and this has been observed) that some members of the community mistakenly believe that their language is “OK” as long as their language is recorded on CDs and that consequently they do not make serious efforts to transmit the language.

[11] Substratum, e.g. vocabulary

A language may leave traces of its earlier presence in the form of a substratum, especially in the lexicon (Dimmendaal 1989: 25; Sasse 1992a: 18). Examples follow. Many place names of Ainu origin are found in the northern part of Japan (Tamura 2000a: 269). African pygmies retain a trace (and the only trace) of their language in their botanic terminology (Dimmendaal 1989: 28). In a large area of eastern Australia where no Aboriginal language is spoken any longer, there are places called *Yamba* or the like; see Tsunoda (1996b). (The word *yamba* means ‘camp, ground’ in Warrungu and many other languages.)

It is possible to say that a language is alive as long as it survives in place names or the like (Veri Farina, p.c.) As we shall see in Chapter 10, a given group’s language is considered to be a very central part of their cultural heritage and ethnic identity, and the death of their language is an irrecoverable loss to the group. To state that their language survives in, say, place names is one of the ways to maintain their heritage and identity in terms of language.

Hawaii seems to be exceptional in that perhaps all (or almost all) place names – of islands, cities, towns, and streets, e.g. Honolulu – are taken from the local aboriginal language. This is in sharp contrast with, say, Australia, where it

is very uncommon to come across place names taken from the local language, with a small number of exceptions such as *Yamba* mentioned above. If a language is considered alive as long as it survives in place names or the like, then the Hawaiian language will be regarded fully viable, and certainly far more alive than any Australian Aboriginal language.

Apart from the phenomena discussed above, a language may be said to leave residues in the form of a ritual language, a secret language, a professional jargon (Sasse 1992a: 18), a pidgin, or a creole. (Use of a language for secrecy will be exemplified in 7.2.2, while pidgins and creoles will be compared with endangered languages in 8.4.5.2.) Naturally, there must have been numerous languages that have disappeared leaving no trace behind.

We have seen various definitions of language death. As will be obvious, it is difficult to use this term in a precise sense. First, it is difficult to define it precisely. Second, often the sources consulted do not provide an explicit definition of language death.

5.3. Types of language death

5.3.1. Introduction

There have been attempts to typologize language death. Unfortunately, however, they do not always distinguish different types of criteria and, consequently, the classifications proposed are sometimes inconsistent and confusing. Thus, Campbell and Muntzel (1989: 182–186) list four types of language death, one of which is “sudden death”. They define it as the “case where a language abruptly disappears because almost all of its speakers suddenly die or are killed”. Note that this definition refers to both the speed and the cause of the language death.

In examining types of language death, we need to distinguish between (i) the cause and (ii) the speed of a given language death. Language death has also been classified in terms of (iii) the register (or style) involved in a given instance of language death. In the following we shall consider various types of language death in terms of these three criteria.

5.3.2. Classification in terms of cause

In terms of the cause, language death may be classified as follows: (i) language death due to the death of the population, and (ii) language death due to language shift (also known as language replacement and language displacement: Brenz-

inger 1997: 273; Fishman 1964: 32, 1972: 110). (For this classification, see Dorian 1981, 2001b: 8357, Elmendorf 1981: 37, Hill 1983: 260, Hoenigswald 1989: 347, and Schmidt 1985b: 3–4.)

Almost all of the proposed classifications of language death refer to causes. (Causes of language death will be further discussed in Chapter 6.) It seems that language death of type (ii) is much more common than that of type (i). We shall consider each of the two types.

[1] Language death due to death of the population

A language may become extinct due to the death of the entire population that speaks it. The causes for this type of death cited in the literature include the following: warfare, genocide, extermination, volcanic eruptions, tsunami and epidemics.

For this type of language death at least three terms have been proposed: (i) language murder, i.e. physical liquidation (genocide) of all speakers of a language (Dressler and Wodak-Leodolter 1977a: 5), (ii) biological language death, referring to language death caused by rapid population collapse (Hill 1983: 260–261), and (iii) glottocide, referring to the destruction of the language of a group due to causes such as genocide (Matisoff 1991: 201). In the following, we shall adopt the term “glottocide” to refer to the type of language death caused by the death of the population.

As noted above, glottocide seems to be much less common than language death caused by language shift (cf. Brenzinger and Dimmendaal 1992: 3; Campbell and Muntzel 1989: 184–185; Elmendorf 1981: 37; Hill 1983: 261; and Matisoff 1991: 201). Nonetheless, there have been many instances of glottocide, as mentioned in Chapter 3, e.g. 3.5 through 3.7. Additional examples follow.

Brenzinger and Dimmendaal (1992: 3) state that in Africa glottocide has been reported within the Khoisan language family. Matisoff (1991: 201) notes that the people of the once-powerful empire of the Xixia (or Tangut), on the Western fringes of China, in the Qinghai/Tibet/Sichuan region, were annihilated by Kubilai Khan’s Mongols in the closing years of the thirteenth century. Dixon (1991a: 241) reports an instance of glottocide caused by a volcanic eruption on the island of Sumbawa, Indonesia, in 1815, which resulted in the death of all speakers of the Tamboran language. This language is known only from a short word-list in Sir Thomas Stanford [sic] Raffles’ *History of Java* (1817). (Yeong Kwong Leong, p.c., has pointed out that the correct spelling is *Stamford*, with *m* rather than *n*.)

[2] Language death due to language shift

This occurs when a given language dies because its speakers shift to another language. The difference between glottocide and language shift can be shown as in Figure 5-1. The arrowed line indicates the existence of speakers.

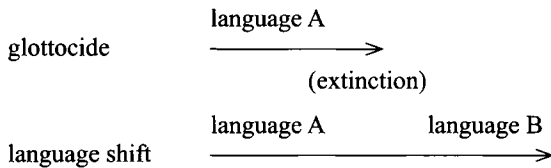


Figure 5-1. Glottocide and language shift

The language A is variously called, e.g. abandoned language (Sasse 1992a: 13; Thomason and Kaufman 1988: 100), disappearing language (Brenzinger 1997: 273), fading language (Brenzinger 1997: 283), receding language (Brenzinger 1997: 274; Dorian 1973: 413; Fishman 1991: 23), and recessive language (Dorian 1999a: 101). Similarly, the language B is termed, e.g. conquering language (Bloomfield 1927: 437; Thomason 2001: 223; Thomason and Kaufman 1988: 101), expanding language (Dorian 1999a: 99), replacing language (Brenzinger 1997: 273; Elmendorf 1981: 37), spreading language (Brenzinger 1997: 274), and target language (Dorian 1999a: 99; Sasse 1992a: 13; Thomason and Kaufman 1988: 111).

Broadly speaking, in a language contact situation, which does not necessarily involve language shift, one language is often known as minority language (Amery 2000: 217; Brenzinger 1997: 275; Dorian 1986b: 73), dominated language (Abbi 1995: 178), non-dominant language (Dorian 1986b: 80) or non-mainstream language (Dorian 1986b: 82), and the other language as majority language (Amery 2000: 217), dominant language (Abbi 1995: 178; Brenzinger 1997: 274; Dorian 1986b: 72; Fishman 1964: 44; Haugen 1972: 336; Thomason 2001: 225; Thomason and Kaufman 1988: 100) or superordinate language (Dorian 1994a: 675).

5.3.3. Classification in terms of speed

In terms of speed, language death may be classified as follows: (i) instant death, or sudden death, and (ii) gradual death, or slow death.

Various terms apparently relating to the speed have been employed, e.g. instant language death, sudden death, radical death, slow language death, gradual death (Campbell 1994: 1960–1961; Campbell and Muntzel 1989: 182–184; Dressler and Wodak-Leodolter 1977a: 5; Matisoff 1991: 201). Literally, these terms concern the speed only, but reference to the cause sneaks into their definitions. As an example, see Campbell and Muntzel's definition of sudden death, cited in 5.3.1. The present work distinguishes between the speed and the cause.

Instant or sudden death seems uncommon (Dressler and Wodak-Leodolter 1977a: 5; Matisoff 1991: 201), while gradual or slow death seems common.

To be precise, however, “sudden/instant” and “gradual/slow” constitute a continuum, and whether a given instance of language death is sudden or slow is a matter of subjective judgement. What length of time should be considered sudden/instant? One or two years? Five years? Ten years? One generation? One century? The length of ten years may be plausibly considered gradual/slow. However, five years may be considered sudden, given the length of time a child needs to acquire a language. (The writer owes this observation to Toshinari Yamashita.) Furthermore, since a language is transmitted from adults to children, one generation may be considered sudden/instant. If a language disappears within one generation, this disappearance will have to be considered sudden/instant. (Dixon 1991a: 236 adopts this view.) Even one century may be considered sudden/instant. Take, for example, the death of Tasmanian languages. It was 73 years from the first European contact in 1803 to the death of the last full-blooded Tasmanian in 1876 (Crowley and Dixon 1981: 396), and this is cited as an instance of sudden death by Campbell (1994: 1960) and by Campbell and Muntzel (1989: 182). Naturally, however, it is also possible to say that this instance, which continued for three quarters of a century, is gradual/slow.

As will be clear now, it is difficult to say what length of time should be considered sudden/instant and what length of time should be considered gradual/slow. Also, the sources consulted do not comment on this issue. The case of Xixia (or Tangut) (caused by the annihilation of the population) and that of Tamboran (due to a volcanic eruption), cited in 5.3.2, are clearly instances of sudden language death, but such unequivocal instances are hard to find.

5.3.4. Combination of cause and speed

Cause and speed are independent of each other. Combination of these two criteria yields the following classification of language death: (i) sudden glottocide, (ii) gradual glottocide, (iii) sudden language shift, and (iv) gradual language shift. We shall look at each of the four types. As noted in 5.3.2, most instances of language death seem to be caused by language shift, and glottocide appears to be uncommon. Also, as mentioned in 5.3.3, gradual or slow death seems common, while instant or sudden death seems uncommon. That is, the most common type of language death is the one caused by gradual language shift (Campbell 1994: 1960–1961; Campbell and Muntzel 1989: 184–185).

[1] Sudden glottocide happens when a population suddenly dies out. As stated above, this type does not seem common. Clear examples are the case of Xixia (or Tangut) and that of Tamboran (5.3.2). Two additional examples are given in [3] below.

[2] Gradual glottocide. In this type, the population of a group is reduced gradually, until the point where the last member of the group is also the last speaker of the language. This type seems uncommon, but depending on the definition of language death and the definition of “gradual”, the case of Tasmanian languages (5.2-[7] and 5.3.3) may be considered as an instance of this type. Also, some of the instances reported by Swadesh (1948) and by Hill (1983: 260–261) may be of this type.

[3] Sudden language shift happens when a population shifts to another language suddenly. Thus, Campbell and Muntzel (1989: 183) and Campbell (1994: 1960) report: “in El Salvador, due to a 1932 massacre in which thousands of Indians were killed, Cacaopera and Lenca soon became extinct, and Pipil became quite moribund. Many simply stopped speaking their native languages as a survival strategy”, i.e. “to avoid being identified as Indians”. The cases of Cacaopera and Lenca are instances of sudden glottocide, while that of Pipil appears to be an instance of sudden language shift. Another, possible instance is a phenomenon that Dorian termed “tip” (Colette Grinevald, p.c.). “Tip” refers to “abrupt transmission failure” (Dorian 1989a: 9): “a language which has been demographically highly stable for several centuries may experience a sudden ‘tip’, after which the demographic tide flows strongly in favor of some other language” (Dorian 1981: 51). For accounts of tips, see Dorian (1981, 1986b) on Scottish Gaelic of East Sutherland, Scotland; Mertz (1989) on Scottish Gaelic of Cape Breton, Nova Scotia, Canada; and Rouchdy (1989a) on Egyptian Nubian. In each of these three instances, a bilingual phase seems to have preceded the “tip”. It is not known if the same was true of the Pipil situation.

[4] Gradual language shift happens in a language contact situation when a group of people shift to another language slowly. It goes through an obsolescing state which has the following characteristics (Campbell 1994: 1961; Campbell and Muntzel 1989: 185; Dorian 1981: 4, 2001b: 8357; Hoenigswald 1989: 347):

- (a) intermediate stage of bilingualism, in which the language is gradually replaced by the dominant language in an increasing number of contexts, and;
- (b) proficiency continuum, in which different speakers exhibit different degrees of proficiency, determined principally by age (but also by attitude and other factors); typically older speakers are the more proficient and younger speakers are the less proficient (or not proficient at all) in the receding language.

As noted above, gradual language shift is the most common among the four types under consideration and this type has been the central concern in studies of language endangerment, as will be the case in the ensuing chapters. In particular, bilingualism in relation to language shift will be discussed in 7.3.3, and a proficiency continuum will be illustrated in Chapter 8 (Figure 8-1 and most of the ensuing figures).

Note that sudden glottocide “leaves, by definition, no obsolescing state to investigate structurally” (Campbell and Muntzel 1989: 182–183), since the population dies out suddenly.

Incidentally, Campbell (1994: 1960) and Campbell and Muntzel (1989: 182) cite Tasmanian as a case with no obsolescing state to investigate structurally. However, it seems likely that Tasmanian languages did have an obsolescing state during the 73 years of their decline to death (5.3.3). There were also “rememberers” whose language exhibited an obsolescing state, which Terry Crowley recorded (5.2-[7]).

5.3.5. Classification in terms of register involved in language death

This classification concerns registers or styles, and two types may be recognized (Campbell 1994: 1960–1961; Campbell and Muntzel 1989: 185; Hill 1983: 260): (i) the top-down pattern, and (ii) the bottom-up pattern.

The top-down pattern seems much more common than the bottom-up pattern. This is noted by Hill (1983: 260) regarding North American languages. An example from Australia is the following. Alf Palmer (mentioned in 5.2-[3]) knew that Warrungu used to have two styles: ordinary and avoidance styles. (The latter was used, for instance, between taboo relations, such as mother-in-law and son-in-law.) Although he had an excellent command of the ordinary style, he admitted that he did not know the avoidance style. That is, the avoidance style had disappeared, but the ordinary style remained. This is clearly an instance of the top-down pattern. (The case of the Warrungu avoidance style will be further discussed in 8.3.)

The opposite pattern, i.e. bottom-up (referred to as “bottom-to-top death” by Campbell and Muntzel 1989: 185), is called *Latin pattern* by Hill (1983: 260). It is “exemplified by the famous case of Latin, where the repertoire of registers suffers attrition from the bottom up, being abandoned first in the family vernacular and surviving ultimately only in the most elevated contexts” (Hill 1983: 260).

Clearly, this pattern is uncommon. Hill (1983: 260) mentions two possible instances, but does not give concrete examples. Campbell and Muntzel (1989:

185) and Campbell (1994: 1960–1961) cite three possible examples, involving prayers, songs, and chants. But Campbell and Muntzel (1989: 185) admit that they have no perfect examples of this type.

To be precise, however, the examples of the bottom-up pattern cited above are not really parallel to those of the top-down pattern. In the top-down pattern, the speakers would often have a good – or even full – command of the “low” style (cf. Alf Palmer) and they might even use it for daily communication. In contrast, in the instances of the bottom-up pattern, particularly in those cited by Campbell and Muntzel, the speakers would not have a good command of the “high” style, and surely they would not use it for daily communication. That is, the bottom-up pattern is not on a par with the top-down pattern.

5.4. Summary of Chapter 5

The viability, or conversely endangerment, of languages constitutes a continuum, and a given language may be considered dead at any point on this continuum. There are various definitions (including the ones suggested by the present work) of language death. There seems to be no clear consensus, although many linguists seem to implicitly hold the view that a language becomes extinct when its last fluent or native speakers pass away. It is useful to classify language death in terms of the cause and speed. In this classification, the most common type of language death is the one that is caused by language shift and that takes place slowly/gradually. This type of language death is the main focus of most works on language endangerment, and also of the chapters that follow.

6. External setting of language endangerment

6.1. Introductory notes

As seen in 4.3.3, Sasse (1992a) stresses that, in research on language endangerment, it is important to look at all of the following three aspects: external setting, speech behaviour, and structural consequences. The present chapter deals mainly with the external setting, while Chapter 7 examines speech behaviour, and Chapter 8 the structural consequences.

6.2 looks at factors that are relevant in examining the viability of languages, and 6.3 considers causes of language endangerment. As we briefly saw in Chapter 3, language endangerment is in the main caused by drastic social changes, such as colonization.

6.2. Ecology of language

The viability of a given language may be examined in terms of numerous factors. See, for instance, Edwards (1992), Fishman (1964, 1972: 107–154, 1991), Giles, Bourhis, and Taylor (1977), Haarmann (1986: 7–13), Haugen (1972: 336–337), Kloss (1967), Stewart (1968), and Weinreich ([1953] 1974). These factors, which concern the “ethnolinguistic vitality” (Giles, Bourhis, and Taylor 1977), are sometimes discussed under the rubric of “ecology of language” (Haugen 1972). The authors cited are not exclusively concerned with endangered languages, but writers such as the following point out those factors which are relevant to the viability of endangered languages specifically: Bradley (1998: 51, 2001), Brenzinger (1997), Brenzinger and Dimmendaal (1992: 3), Campbell (1994: 1963–1964), Crawford (1996: 57), Dorian (1981), Grenoble and Whaley (1998a), Kibrik (1991: 258–261), Krauss (2001: 23), Mesthrie (1994: 1989–1990), Pawley (1991), Schmidt (1985b, 1990), and Tsunoda (2001d: 8350).

In the following, we shall consider the whole array of these factors, without confining our attention to endangered languages. We shall adopt Edwards’ (1992: 48) typology, which sets up eleven groups according to which various factors may be classified. As will be obvious, this classification is not clear-cut, and many of the groups overlap each other. Most of the factors listed below will be self-evident, and only a selection of them will be commented on.

[1] Geography

(a) Geographical extent of the language (Edwards 1992: 50; Stewart 1968: 536; Weinreich 1974: 89–90).

(b) National territory: Do the people live in their traditional homeland or elsewhere, e.g. in a settlement (Giles, Bourhis, and Taylor 1977: 312; Kibrik 1991: 259)?

(c) Rural-urban nature of residence (Edwards 1992: 50; Fishman 1964: 52–53, 1972: 126; Haarmann 1986: 11; Weinreich 1974: 96–97).

(d) Isolation of the community (Dorian 1973: 413; Fishman 1964: 52, 1972: 126–127; Kane 1997: 241; Krauss 2001: 23; Pawley 1991: 7), and distance from urban centres. A community in a remote place, in isolation from towns and cities, will have a better chance of maintaining its language than does a community in or near an urban centre. When the community loses its isolation from the outside world, its language is likely to be influenced by the outside language.

Two examples from Australia are cited. Nowadays, the Jaru language is not spoken by children in the town of Halls Creek, Western Australia, but in 1995 the present writer heard it spoken by children at Ringer Soak Community, an isolated community about 160 km away from Halls Creek (mentioned in 5.2–[2]). At a very remote community called Mt. Mayu Community of Northern Territory, in 1995 the writer even heard a baby – about 2 or 3 years old – trying to speak the Wanyjirra language.

[2] Demography

(a) Size of the ethnic group (Haarmann 1986: 11; Kibrik 1991: 258).

(b) Birth rate of the ethnic group (Giles, Bourhis, and Taylor 1977: 313–314).

(c) Number of speakers of the language (Bergsland 1998: 45; Bradley 1998: 51; Edwards 1992: 50; Giles, Bourhis, and Taylor 1977: 313; Kibrik 1991: 258; Krauss 2001: 23, 25; Mesthrie 1994: 1989; Miyaoka 2001: 4; Stewart 1968: 536). With other things being equal, a language with a larger number of speakers will probably have a better chance of survival than one with a smaller number of speakers. However, as Bergsland (1998: 45), Brenzinger (1997: 276), Kibrik (1991: 258), Miyaoka (2001: 4), and Wurm (1998: 192) note and also as the qualification “other things being equal” indicates, the sheer number of speakers itself is not a decisive factor. For example, compare Icelandic and Quechua. Icelandic has only about 200,000 speakers, but it is in no way threatened; the country is separated from major languages. In contrast, according to Daisuke Ebina (p.c.), Quechua has more than one million speakers, but its future is not safe; most of its speakers are bilingual and the shift to Spanish is already underway (see also 3.6, and Adelaar 1991: 50 and Kendall King 2001).

(d) Density of the population (Kibrik 1991: 259), concentration/dispersion of speakers (Bradley 1998: 51, 54; Edwards 1992: 50; Fishman 1972: 126; Giles, Bourhis, and Taylor 1977: 313; Haarmann 1986: 11; Mesthrie 1994: 1990; Stewart 1968: 536), and residential segregation (Li 1982: 117). Thus, a group with a dense population will have a better chance of preserving its language than a group of the same size, spread out over different territories and without regular language contact (Kibrik 1991: 259–260). When people are scattered in many places, this reduces the opportunities to speak the language, leading to its demise. An example from Japan is cited in 6.3-[2]. Li (1982: 117) reports regarding third-generation Chinese-Americans that shift to English is slower among Chinatown residents than among non-Chinatown residents.

(e) Homogeneity/heterogeneity of speakers, i.e. monoethnic versus polyethnic nature of the community (Haarmann 1986: 11; Weinreich 1974: 91–92).

(f) Proportion of speakers of the language to those of other languages (Brenzinger 1997: 276; Giles, Bourhis, and Taylor 1977: 313; Mesthrie 1994: 1990).

(g) Age of speakers (Haarmann 1986: 11; Kibrik 1991: 258–259; Kloss 1967: 15; Weinreich 1974: 94–95). If there are speakers from every age group, then the language will not die out for another 40–50 years but, if the children and adolescents do not speak the language of their parents then the language will be unlikely to survive well beyond 40 or 50 years (Kibrik 1991: 258–259).

(h) Sex of speakers: certain differences in language style according to sex of the speaker are not uncommon (Weinreich 1974: 93). An example from Gros Ventre, USA, is given in 6.3-[9]-(b-ii).

(i) Race of speakers (Weinreich 1974: 93).

(j) Marriage patterns: endogamy versus exogamy (Dorian 1981: 56; Giles, Bourhis, and Taylor 1977: 313–314; Haarmann 1986: 11; Kibrik 1991: 259; Mesthrie 1994: 1990). Intermarriage is often listed as a cause of language endangerment. See Brenzinger (1997: 276), Campbell (1994: 1963), Crawford (1997: 57), Dixon (1991a: 245), Kane (1997: 241), Schmidt (1990: 15), Suwilai (1998: 150, 154), Wurm (1991: 6), and Zepeda and Hill (1991: 138, 141). It may be expected on a priori grounds that marriage between members of the same language group is more likely to contribute towards the preservation of the language concerned than a mixed marriage, and that the latter will induce shift to the more prestigious language. However, as Kibrik (1991: 259) and McKay (1996: 202) note, mixed marriages do not always lead to the loss of an ethnic language. For example, intermarriage has been common among Aboriginal Australians, as has been the case with bi- or multi-lingualism (cf. Dixon 1980: 32). Thus, there are many instances of intermarriage between Jaru people and Kija people of Kimberley, Western Australia. (These two languages are as different from each other as, say, English and Russian; cf. Kimber-

ley Language Resource Centre 1996a: 1.) Nonetheless, those intermarriages themselves have not endangered either of the languages. Many of Jaru people and Kija people were (and some are still) bilingual. It seems that it is not just any intermarriage but rather intermarriage with non-Aboriginal Australians, e.g. white people, that causes language endangerment (McKay 1996: 202). In general, it seems that marriage involving dominant and subordinate languages, e.g. English and Jaru, that is likely to induce language endangerment, and that marriage involving languages with equal status, e.g. Jaru and Kija, is less likely to do so.

(k) Static settlement versus migration movement (Haarmann 1986: 11).

(l) Migration patterns: in- or out-migration (Brenzinger 1997: 276; Crawford 1996: 57; Edwards 1992: 50; Giles, Bourhis, and Taylor 1977: 314; Jones 1998: 150). Emigration reduces the size of the population. Depopulation due to emigration seems uncommon, but there are reported instances, e.g. Hamp (1989: 205, 209) on Scottish Gaelic and Slovene dialects in the valley of Resia in northeast Italy, and Nagy (2000: 145) on Faetar, a Francoprovençal dialect spoken in southern Italy.

[3] Sociology

(a) Social stratification in the ethnic group (Haarmann 1986: 11).

(b) Degree of interaction with other ethnic groups (Haarmann 1986: 12).

(c) Social status of speakers, e.g. their class (Haugen 1972: 336; Weinreich 1974: 95–96), and their occupation (Weinreich 1974: 96).

(d) Cultural (dis)similarity between the groups (Brenzinger and Dimmendaal 1992: 3).

(e) Way of life. Ethnic groups who retain their traditional way of life (family structure, division of labour, dwellings and so forth) have a better chance of preserving their language, whereas adaptation to modern ways of life makes preserving the language more difficult (Bergsland 1998: 45; Kibrik 1991: 260). Thus, Bergsland (1998: 45) indicates that retention of the traditional way of life, especially reindeer breeding, was a decisive condition for the survival of the Sami language of Scandinavia.

[4] Linguistics, including sociolinguistics

(a) Genetic classification of the language (Haugen 1972: 336).

(b) History of the language (Edwards 1992: 50; Giles, Bourhis, and Taylor 1977: 312). For example: Is the language known or believed to be the result of normal development over time or of some other development, e.g. pidginization (Stewart 1968: 535–536)?

(c) Existence/absence of native speakers, as against classical and artificial languages, which lack native speakers (Haugen 1972: 334; Stewart 1968: 536).

(d) Transmission of the language to children (Edwards 1992: 50; Miyaoka 2001: 4). See [2]-(g) above.

(e) Language contact. Kibrik (1991: 260) maintains that the more contact a language has with other languages the less viable it will be. However, contact with other languages itself does not necessarily cause language endangerment. For example, Aboriginal Australians were traditionally bilingual or multilingual (Dixon 1980: 32), but their languages were not threatened. It is only when they were confronted by a dominant language (i.e. English) that they began to face extinction.

(f) Linguistic capabilities of individual speakers (Edwards 1992: 50), e.g. degree of bilingualism (Bradley 1998: 51; Haugen 1972: 337; Kloss 1967: 15) or multilingualism. Are they monolingual, bilingual, trilingual or multilingual (Kloss 1967: 9)? What other languages do the people use (Haugen 1972: 334, 336)?

(g) Type of the speech community. Is the community monolingual, bilingual, trilingual or multilingual (Kloss 1967: 7; Krauss 2001: 25)? Is the bilingualism stable or transitional (Haugen 1972: 334)?

(h) Domains of use (Haugen 1972: 336), patterns of language use (Brenzinger and Dimmendaal 1992: 3), communicational mobility (Haarmann 1986: 12), i.e. which language variety is used in what settings. See also [7]-(c) below. Domains of use will be discussed in some detail in 7.2.

(i) Autonomy of the language, i.e. the degree of linguistic distance between the languages spoken in the community (Haarmann 1986: 12; Haugen 1972: 331; Kloss 1967: 16; Stewart 1968: 535; Weinreich 1974: 1–2).

(j) Internal varieties of the language (e.g. dialects) (Bradley 2001: 153; Haugen 1972: 337; Krauss 2001: 25).

(k) Existence (/absence) and nature of the written language (Bradley 2001: 153; Haarmann 1986: 13; Haugen 1972: 337).

(l) Standardization of the language, i.e. its unification and codification (Edwards 1992: 50; Giles, Bourhis, and Taylor 1977: 312; Haugen 1972: 337; Stewart 1968: 534).

[5] Psychology

(a) The group's attitude towards other groups (Haarmann 1986: 12).

(b) Other groups' attitude towards this group (Edwards 1992: 50).

(c) The group's self-esteem (Giles, Bourhis, and Taylor 1977: 310; Mesthrie 1994: 1990) and national self-consciousness (Kibrik 1991: 260). The presence of a national self-consciousness may help to surmount difficult circumstances, while its absence will not help to increase the viability of the language (Kibrik 1991: 260).

(d) The group's attitude towards their language (Edwards 1992: 50; Haugen 1972: 337; Suwilai 1998: 150), e.g. concerning (i) the relationship between the language and their ethnic identity (Bradley 1998: 51, 2001: 152; Brenzinger and Dimmendaal 1992: 3; Edwards 1992: 50; Haarmann 1986: 12; Haugen 1972: 337), (ii) the relationship between the language and their intimacy, solidarity, etc. (Haugen 1972: 329, 337), (iii) the maintenance or shift of the language (Haarmann 1986: 12; Kloss 1967: 16), and (iv) loyalty to their language (Brenzinger 1997: 276; Fishman 1964: 51–52; Kloss 1967: 17). Language attitude will be examined in some detail in 6.3–[9].

(e) Prestige or status of the language (Fishman 1964: 53–55, 1972: 132–136; Giles, Bourhis, and Taylor 1977: 312; Haugen 1972: 329, 337; Kloss 1967: 15; Mesthrie 1994: 1990). The prestige of a language may result from rich literary heritage, high degree of language modernization, considerable international standing, and/or the prestige of its speakers (Kloss 1967: 15). However, Weinreich (1974: 79, fn. 34) argues that the term “prestige” is imprecise and he proposes to restrict its use to “a language’s value in social advance”, or to dispense with it altogether.

[6] History

(a) History of the area in which the group now lives (Edwards 1992: 50).

(b) History of the group (Edwards 1992: 50). For example: Are the people indigenous to the area or latecomers, e.g. migrants (Kloss 1967: 16; Weinreich 1974: 91)? Is ancestry (descent) a criterion of group solidarity (Haarmann 1986: 12)? Are there any historic events salient to ethnolinguistic group members, e.g. struggles for recognition? The last can be conducive to feelings of group solidarity, and as such, can contribute to the vitality of the group (Giles, Bourhis, and Taylor 1977: 310–311).

[7] Politics, law, and government

This in the main concerns the “ethnos-state relation” (Haarmann 1986: 11), the “national policies on minority status” (Bradley 1998: 51), and “legal status” (Kloss 1967: 14) of the people and their language. Its major component is the government’s language policy.

(a) Recognition of speakers’ rights and ethnic identity (Bergsland 1998: 45; Edwards 1992: 50; Kibrik 1991: 261), e.g. the degree of autonomy or “special status” of the area (Edwards 1992: 50).

(b) Degree and extent of official recognition of the language (Edwards 1992: 50; Krauss 2001: 23, 25). Is the language proscribed, tolerated, promoted or recognized (Bradley 2001: 153; Kloss 1967: 15)?

The use of a language may be proscribed. It may even lead to severe punishment (Reyhner and House 1996: 133). Thus, there are reports, in the USA, of children having been beaten for speaking their Indian languages at school

(Hinton 1994: 175–179; Thomason 2001: 240). Kendall King (2001: 74) and Dixon (1991b: 187) mention parallel cases from Ecuador and Australia, respectively. Also, “American Indian people’s mouths were washed out with harsh G.I. soap whenever they spoke their own languages” (Littlebear 1999: 3; see also Batchelder and Markel 1997: 241). On the island of Taketomi, in the Ryukyu archipelago of Japan, a child who spoke the local dialect on the school premises had to wear a “dialect tag” until he/she found another child speaking the dialect and gave the tag to the latter (an NHK TV program, 13 January 2000). Jones (1998: 10, 242, 298) reports similar cases from Wales (the “Welsh Not”) and Brittany, and Maguire (1991: 24, 63), from Ireland (“tally stick”).

A language may be at least tolerated in the private sphere, e.g. in newspapers, broadcasting, and in nonpublic (parochial or independent) schools (Kloss 1967: 15).

A language may even be promoted by the authorities in various ways (use in public schools, in public notices, in public libraries, etc.) (Kloss 1967: 15).

Finally, a language may be recognized as an official language – of the region, or even of the state (Haarmann 1986: 11; Kloss 1967: 15).

(c) Institutional support for the use of the language in various domains, e.g. parliament, government, administration, armed forces, education, religion, mass media, private organizations (Brenzinger and Dimmendaal 1992: 3; Giles, Bourhis, and Taylor 1977: 316; Haarmann 1986: 11; Haugen 1972: 337). Education will be treated separately, in [9], religion in [10], and mass media in [11].

(d) Organizations for the promotion of the community’s interests (Haarmann 1986: 12). Are there any pressure groups (Giles, Bourhis, and Taylor 1977: 315–316)? Are there any language maintenance or revival efforts (Edwards 1992: 50)? (Language maintenance and revival will be examined in Chapter 11.)

[8] Economics

(a) Economic health of the region (Edwards 1992: 50).

(b) Economic status of speakers (Bradley 1998: 51; Edwards 1992: 50; Giles, Bourhis, and Taylor 1977: 310; Mesthrie 1994: 1989), e.g. employment opportunities (Crawford 1996: 57; Suwilai 1998: 150).

[9] Education

(a) State of education in the area (Edwards 1992: 50).

(b) Literacy and writing system (Grenoble and Whaley 1998a: 32–37; Kibrick 1991: 261; Krauss 2001: 23, 25). For example, regarding vocabulary, literacy “may be expected to retard the rate of vocabulary change” (Zengel 1968: 303),

while “illiteracy might be expected to speed the rate of vocabulary change” (Dorian 1973: 437).

(c) School support for language (Edwards 1992: 50). Is the language integrated into education (Bradley 1998: 51; Mesthrie 1994: 1990)? Is it used as a medium of instruction, or taught as a subject (Giles, Bourhis, and Taylor 1977: 316; Haarmann 1986: 12; Kibrik 1991: 261)? Introduction of the language into school will certainly raise the status of the language and will also enhance the pride and self-esteem of the people.

(d) How are the people presented in education? Are the history and culture of the people not respected? For example, does the textbook ignore Aboriginal Australians’ history and teach Aboriginal children (and other children) that James Cook “discovered” Australia?

(e) Upbringing of children. Kibrik (1991: 259) notes that it is important where and by whom children are raised: in the family or outside the family. The family environment makes acquiring the ethnic language easier, especially if the children live together with their grandparents. However, if the children live away from their families, for example, in boarding school, the transmission of the ethnic language will be interrupted. The boarding school system had a deteriorating effect on the maintenance of traditional languages.

It seems often to be grandmothers, rather than grandfathers, who influence their grandchildren linguistically and transmit the language to them. This may be termed “grandmother effect”. Thus, in Kimberley, Western Australia, it is always grandmothers, rather than grandfathers, who attend language meetings and accompany the grandchildren on bush trips. Dorian (1981: 107–108) provides another example, from Scotland regarding Scottish Gaelic.

[10] Religion

(a) Importance of religion in the area (Edwards 1992: 50).

(b) Religion of speakers (Brenzinger 1998a: 89; Edwards 1992: 50; Haugen 1972: 336; Weinreich 1974: 92).

(c) Use of the language in religion (Mesthrie 1994: 1990).

(d) Type and strength of association between language and religion (Edwards 1992: 50).

[11] The media

(a) Existence/absence of modern mass media, e.g. TV, video, etc. (Crawford 1996: 57; Dixon 1991b: 193; Suwilai 1998: 150).

(b) Use of the language in the media (Edwards 1992: 50; Mesthrie 1994: 1990).

(c) Representation of the group in the media (Edwards 1992: 50).

We have seen numerous factors that are relevant to the “ecology of language”, tentatively classified into the eleven groups set up by Edwards (1992).

Grenoble and Whaley (1998a: 38–39) propose to classify such factors in terms of the following four levels: local, regional, national, and extra-national. Apart from the issue of the adequacy of the number and definitions of the levels, it is important to recognize the importance of distinction of the levels. Take, for instance, bilingualism and trilingualism (cf. [4]-(f), (g) above). “Thus, in Switzerland the Federal Government is bi- or trilingual while the component states are monolingual, Geneva using French; Zurich, German; and Ticino, Italian” (Kloss 1967: 8, cf. 13–14).

6.3. Causes of language endangerment

We saw in 5.2.2 that language death may be caused by the death of the population or by language shift. More broadly speaking, language endangerment may be induced by various kinds of factors. The literature on this issue lists factors such as the following: (i) natural, (ii) political, military, (iii) social, sociological, socio-psychological, (iv) historical, ethnohistorical, (v) economic, (vi) environmental, (vii) cultural, (viii) religious, and (ix) sociolinguistic, linguistic.

As indicated by the models of language endangerment discussed in 4.4, causes for language endangerment are largely political, social, and/or economic. They have to do with social changes (Pawley 1991: 9), disruption of the traditional way of life (Colette Grinevald, p.c.) or perhaps, more appropriately, social upheaval (Schmidt 1990: 12) that were caused by inequalities between the users of languages (Romaine 1989: 371). That is, the causes are in the main neither sociolinguistic nor linguistic (Dressler 1982: 324; Sasse 1992a: 18; Swadesh 1948: 235). Nonetheless, linguistic and sociolinguistic factors may play a role. As seen in 4.4, the sociolinguistic factor of reduced social function may lead to the decay of the language system. In return, the decay of the language system may reduce the social function of the language.

We shall now consider the various causes in some detail. Their classification given below is tentative, and no doubt there are alternative and possibly better classifications. Most of the causes will be self-evident and need no comment. Also, many examples were already mentioned in Chapters 3 and 5. Nonetheless, in a few cases we shall provide comments and/or specific examples of the cause in question. It will be noted that many (or most?) of the causes examined below are related to those relevant to the ecology of language, listed in 6.2. Almost all works on endangered languages refer to causes of language endangerment, and the sources consulted will not be cited in the following unless they are deemed especially worthy of mention.

[1] Dispossession of the land

This may be due to invasion, conquest, colonization, settlement, and/or grazing.

[2] Relocation of the people

People may be relocated to an unfamiliar – and often inhospitable – environment for resettlement. Relocation may be voluntary, as in the case of migration. But in most cases relocation seems to be imposed on the people, often executed by force, for example, as prisoners (Bergsland 1998: 34). Florey and van Engelenhoven (2001: 211) report an instance of relocation caused by volcanic activity.

An example of relocation imposed by the government comes from Japan. A village called Tokuyama-mura, in a deep valley north of Nagoya, was well-known for the unique features of its dialect. The government decided to build a dam there, in order to secure water supplies for human consumption and irrigation, and the villagers were forced to leave their home village and were dispersed, losing contact with their fellow villagers. The dialect is now on the verge of extinction.

Hamp (1989) reports an instance of relocation that was conducted at the request of the residents. The population on the island of St. Kilda, off the west coast of Scotland, dwindled from a couple of hundred two centuries ago to 36 in 1930, of which a half-dozen were still monoglot Gaelic speakers. Because the community was no longer socially viable, the islanders were removed at their own request to the main part of Scotland in August 1930, and “one sad day the St. Kilda dialect will die” (Hamp 1989: 210).

[3] Decline or loss of the population

This may be caused in a number of ways, e.g. (i) natural catastrophes or the like, e.g. volcanic eruption, earthquakes, droughts, floods, and famine, (ii) diseases, in particular, imported and epidemic diseases, such as sexually transmitted disease, smallpox, measles, influenza, common cold, leprosy (Hudson and McConvell 1984: 25), and malaria (Kinkade 1991: 157), (iii) malnutrition, (iv) violent acts by humans, such as warfare, slavery, massacres, and genocide, (v) loss of will to live; and grief (Swadesh 1948: 227), and (vi) emigration (6.2-[2]-(1)).

[4] Breakdown in isolation and proximity to towns (cf. 6.2-[1]-(d))

[5] Dispersion of the population (cf. 6.2-[2]-(d))

An example from Japan was cited in [2] above.

[6] Mixing of speakers of different languages

This may be caused by, e.g., (i) boarding schools, (ii) reservations/settlements, (iii) military service, conscription, and (iv) intermarriage. In such situations

there were cases where people could not understand one another's languages and consequently were forced to learn a common means of communication, often the dominant language, such as English. Inter-marriage was discussed in 6.2-[2]-(j).

[7] Socio-economic oppression, economic deprivation, exploitation, oppressive domination, discrimination, exclusion from political participation, social control, abuse

For example, if people recognize no economic value in their language, due to the lack of job opportunities, then they will be likely to switch to the dominant language, and not to teach their language to children (Cantoni 1996a: vii; Crawford 1996: 57; Dixon 1991b: 191; Suwilai 1998: 150).

[8] Low status/low prestige of the group and its language: denigration, shame, stigma

Due to factors such as those listed above, an ethnic group will have low status in society (Dorian 1993b: 576), and consequently their language and culture will have low prestige, and may even be ridiculed, subject to prejudice and stigmatization. (This concerns the evaluation of the language by the outsiders.) The group will have a negative view of their language and will be embarrassed or ashamed to speak their own language, and will avoid using it (Wallace 1996: 104). (This refers to community members' evaluation of their own language. It will be elaborated in [9] below.) Thus, regarding Gitksan people of British Columbia, Canada, Rigsby (1987: 368) comments: "Many Gitksan parents made a deliberate choice not to speak Gitksan to their children, but to use only English with them, so that they would grow up competent in English and could avoid the shame and embarrassment that their parents had experienced from teachers and other Whites".

[9] Language attitude

Language attitude is one of the crucial factors regarding the fate of endangered languages (Bradley 2001: 152; Sasse 1992a: 10; Swadesh 1948: 234). It can be divided into the following two types: attitude towards their own language, and attitude towards other groups' languages. Language attitude may also be classified as follows: negative attitude, positive attitude, and indifferent attitude. In the language endangerment situation, negative attitude seems by far the commonest.

As seen in 4.4, negative evaluation of a given language may lead to its demise. However, even a positive attitude towards a given language may induce its loss, as we shall observe below. Also, a few instances of positive attitude help to maintain the language. They are not causes of language endangerment. Nonetheless, they are conveniently discussed here.

(a) Negative attitude: language stigmatization

No doubt due to socioeconomic and other forms of oppression discussed above, speakers of a minority language often evaluate their own language negatively. Speakers of the dominant language, too, often have a negative view of the minority language. As seen in [8], minority languages are beset with phenomena such as low status in the community/society; lack of prestige or low prestige; prejudice; and stigmatization. Consequently, speakers themselves are often troubled by absence of self-esteem; inferiority complex; self-depreciation; and shame. Collectively, these kinds of language attitude may be referred to as language stigmatization. Due to the negative value attached to their traditional language, many parents cease to transmit the language to their children (Dorian 1986: 561). An example was given in [8] above. Tovey, Hannan, and Abramson (1989: 22, 27) describe in detail the sense of “inferiority” attached to speakers of Irish, as against English, in Ireland.

Mertz (1989: 111) reports an interesting consequence of the negative type of language attitude. This she calls “bilingual deficit folk theory”: there is a belief prevalent among the Scottish Gaelic speakers of Cape Breton, Nova Scotia, Canada, that Gaelic speaking is an obstacle to learning correct English and to the opportunity for advancement through education in general. (According to Ellis 1994: 223, the “deficit theory ... views bilingualism as a burden and as likely to result in cognitive disadvantages”.) However, the “bilingual deficit folk theory” is not supported by research into bilingualism, results of which indicate that bilinguals have certain cognitive advantages over monolinguals. See Ellis (1994: 223–224) and 11.4.4-[2].

Note that the status or prestige of a language is not absolute, but is relative (cf. Fishman 1964: 54, 1972: 134). Thus, French has a high status, as against Breton, in France (Kuter 1989), but it has a low status, as against English, in Newfoundland, Canada (Ruth King 1989: 141).

(b) Positive attitude

At least the following three subtypes may be recognized: language loyalty (Fishman 1964: 60, 1972: 140), language purism, and language optimism.

(b-i) Language loyalty is one of the crucial factors for the survival of a language. If speakers are loyal to the language (e.g. Dorian 1981: 108), then the language has a better chance of survival than otherwise. On the other hand, if speakers are not loyal to it (e.g. Miller 1971: 119), then it is unlikely to survive.

Language loyalty may be manifested in the older generation’s pressures on the younger generation to speak the receding language rather than the dominant language, and speaking the latter may even be ridiculed or accused. See, for instance, Gal (1989: 317–318) on Hungarian in Austria (cited in 7.2.2-[4]), and

Mertz (1989: 108) on Scottish Gaelic of Cape Breton, Nova Scotia, Canada (cited in 7.2.2-[5]).

(b-ii) Language purism. Some people prefer to retain their language in its “pure” form (Dalton et al. 1995: 95; Dorian 1992: 146, 1994c: 484). It is ironic – and may appear even strange – that language purism can lead to language loss (Fishman 1964: 64, 1972: 150). But there are reported instances, although their number seems to be rather small.

Example 1. The younger generation of a community often refrains from speaking their traditional language because they know or think that their language is “wrong” or “incorrect” and/or because they are criticised for speaking that way (Bradley 2001: 157; Dorian 1994a: 679; Hudson and McConvell 1984: 37; McKay 1996: 226).

Example 2. In return, the older generation may prefer not to teach the language to the younger generation at all, rather than to have it “corrupted” by the younger generation which does not speak it well or does not treasure their ancestral language. They may prefer to take the language to the grave (Schmidt 1990: 20; Wurm 1998: 209; Yamamoto 1998: 220). Schmidt (1990: 20) calls this “gemstone effect”.

Example 3. Gros Ventre of Montana, USA, exhibits differences in vocabulary and pronunciation between men’s and women’s speech (Flannery 1946; Allan R. Taylor 1982, 1989: 173). However, already in the 1940s these differences were beginning to be lost, and this appears to have been one factor that accelerated the obsolescence of the language. This is because “many of the young folks who have some speaking knowledge but not full fluent mastery of Gros Ventre refuse to attempt to speak it. They are afraid of making just this type of error, – they know they will be laughed at, and furthermore they know the connotation in the minds of the older generation” (Flannery 1946: 135).

Another example is given in 8.4.4.6-[2].

(b-iii) Language optimism. Some people simply do not want to believe that their language is going to die out (Hudson and McConvell 1984: 29). Also, the present writer has heard the following story: “I don’t speak the language. But someone else speaks the language, so the language won’t die”. Needless to say, such an optimistic attitude will not help to maintain their language.

(c) Indifferent attitude: language apathy (Fishman 1964: 60, 1972: 140), language negligence

Some people do not care (Hudson and McConvell 1984: 29). But it is too late when the language is gone. This happens all too often.

Both of language optimism and language negligence may lead to delayed recognition of the language loss threat (Bradley 2001: 157; Brenzinger 1997:

283; Dixon 1991a: 231, 253; Schmidt 1990: 90, 101). “Typically, speakers do not realise that their language is threatened with extinction until it is too late to do anything about it” (Dixon 1991a: 253).

[10] Assimilation policy and language policy

Perhaps the most effective means for assimilation is education of children. It has promoted the dominant language, at the expense of minority languages. It has had drastic negative effects on the maintenance of minority languages, at least in the following ways.

(a) Boarding system or dormitories (cf. 6.3-[6]). Children were taken away from their families and transmission of the language was severed.

(b) Imposition of the dominant language, prohibition of the use of the indigenous language in education, and punishment and humiliation for the use of the indigenous language. This was discussed in 6.2-[7]-(b).

[11] Relative lack of indigenous language literature

This is perhaps a result of the government’s language policy. Regarding Australia, Schmidt (1990: 17) notes as follows: Aboriginal language literature, if it is available at all, is usually limited to the spheres of religion (e.g. hymn books, Bible translation); linguistic work (e.g. grammars and dictionaries); or school curriculum material (e.g. basic readers, elementary story books). Moreover, the format and quality of production of Aboriginal language literature is often limited to very basic black and white photocopied materials, which compare very poorly with the glossy, colour illustrated and often elaborate presentation of English literature. This creates a relatively poor impression of the worth of the Aboriginal language as against English.

[12] Social development, civilization, modernization, industrialization, urbanization

More specific factors may be itemized as follows.

(a) Electrification.

(b) Improved communication and mass media in the dominant language, e.g. radio, TV, films, videos, CDs, and printing press, such as newspaper, magazines, and books. The most devastating of them all is TV. Krauss (1992: 6) calls TV “cultural nerve gas”. Nowadays, even Aboriginal children in remote towns in Australia are watching *Sesame Street*. Electric media have displaced traditional pastimes, such as story telling, through which elders passed down tribal history and culture (Crawford 1996: 57).

(c) Greater mobility, caused by improved roads/highways and transport, such as land vehicles, power boats, trains, buses, and aeroplanes.

(d) Tourism. This brings in speakers of other languages, including those of the dominant language.

[13] Destruction of the environment/habitat

“The world’s indigenous peoples and their languages are dying out or being assimilated into modern civilization because their habitats are being destroyed” (Nettle and Romaine 2000: 47–48). One example concerns the villagers mentioned in [2] above, who had to desert their home village because of the government’s decision to build a dam there.

[14] Spread of religion

A well-known instance concerns Arabic, which was spread by Islam from Arabia across a vast area that includes Levant, Egypt, the Fertile Crescent and North Africa, and replaced local languages such as Aramaic, Coptic, and Berber (Holes 1994: 191).

[15] Culture contact and clash

When an ethnic group encounters a culture that is more prestigious than theirs, they will often go through changes in values, shift of cultural emphasis, cultural assimilation, or the like. In a broad sense, almost all of the causes listed above have to do with cultural contact and clash. Here, we will be concerned mainly with military conquests. Generally, it is the conquered, rather than the conquerors, who adopt a new culture and eventually a new language. However, this is not always the case. There are cases where the conquerors adopted the language of the people they had conquered. Examples of such people include the Manchus (see 3.14), the Vikings in Normandy and Sicily, and the western Franks in Normandy (Dorian 1981: 106, fn. 24, 1998: 4; Wurm 1991: 14).

We have seen various causes of language endangerment, tentatively classified into fifteen groups. Finally, a couple of remarks on the causes listed above are in order.

These factors are all closely related to one another and often difficult to separate. Also, these factors may cause glottocide or language shift (cf. 5.2.2). They may cause sudden or gradual death (cf. 5.2.3). It is difficult to specify which factor will cause which type of language death, except that catastrophes tend to cause sudden glottocide (cf. 5.2.4).

It is difficult to talk about these causes in terms of sufficient or necessary causes (cf. Campbell 1994: 1963). Thus, the loss of a given population is clearly a sufficient cause of the death of their language, but it is not a necessary cause thereof. Similarly, it is difficult to establish a causal chain which will place all these causes in a linear order and no such attempt will be made here.

6.4. Summary of Chapter 6

The present chapter looked at “ecology of language”, in terms of a large number of factors that are relevant in examining the “ethnolinguistic vitality” of languages in general (including endangered languages). Most of them are extralinguistic factors such as geography, demography, and history, among others. The present chapter then examined causes of language endangerment. Most of the causes are social (or to be more precise, socio-politico-economic), and they may be summarized as “social upheaval”.

7. Speech behaviour: sociolinguistic aspects of language endangerment

7.1. Introductory notes

Chapter 6 examined one of the three aspects of language endangerment propounded by Sasse (1992a): the external setting of language endangerment. The present chapter looks at another of these three aspects: the speech behaviour in language endangerment, i.e., its sociolinguistic aspects. More specifically, it considers the following two closely related issues: functional domains (7.2) and language shift (7.3).

7.2. Functional domains

7.2.1. Preliminaries

Sasse (1992a: 10) argues that, regarding speech behaviour, it is necessary to investigate – in Fishman’s (1965) words – “Who speaks what language to whom and when”. Fishman (1964, 1965, 1972: 112–119) lists variables such as the following: (i) group membership, e.g. age, sex, race, religion, reference group, (ii) situation, e.g. intimacy and distance, formality and informality, solidarity and non-solidarity, equality and inequality, (iii) topic, (iv) domains of language behavior, e.g. the family, the school, the church, the military, the courts, the governmental administration, (v) media, e.g. writing, reading, speaking, and (vi) role, i.e. writer, reader, speaker, hearer.

Similarly, in an approach that he termed “ethnography of speaking”, Hymes (1968: 110, 113) points out that every speech event comprises the following seven components: (i) a sender (addresser), (ii) a receiver (addressee), (iii) a message form: “What words did he use?”, (iv) a channel: “Did he phone or write?”, (v) a code: “Was it in English?”, (vi) a topic, and (vii) setting (scene, situation). (See also Hymes 1967: 20–25.)

In the following, we shall look at some of these sociolinguistic aspects in the context of language endangerment.

7.2.2. Types of functional domains

If two languages are spoken in a given community, this often creates a situation where one may be termed the dominant language, the majority language or the like, and the other the minority language or the like. (See 5.3.2 for these terms.) The two languages are often used in different functional domains. This may be shown as in Table 7-1. The terms “low language” and “high language” employed by Ruth King (1989: 140) – probably adapted from Ferguson’s (1959: 327) terms “low variety” and “high variety” – succinctly summarizes this functional differentiation.

Table 7-1. Functional differentiation between subordinate and dominant languages

	Minority language	Dominant language
(a)	traditional life	modern life
(b)	regional	national
(c)	within the community	with the outside world
(d)	domestic, private	public
(e)	inside the family	outside family (inside the community)
(f)	informal	formal
(g)	intimate	not intimate
(h)	for solidarity	for power
(i)	for secrecy	for non-secrecy
(j)	religious	secular

Each pair of functional domains listed in Table 7-1 concerns one or more of the variables listed by Fishman (1964, 1965, 1972) and/or Hymes (1967, 1968). Thus, (a) “traditional life” may refer to a speaker or a hearer who pursues the traditional way of life, to a topic that involves the traditional life, or a setting where the traditional way of life is carried out.

Also, these pairs of domains cannot be clearly distinguished from one another. Thus, the pair (d) may be considered as a rubric that covers (e), (f), and (g). It is also closely related to (h) and (i). And so on.

Roughly speaking, the functional domains occupied by the minority language diminish as we move the table from top to bottom, while those of the dominant language increase conversely. Thus, the relevance of (e) seems to follow, rather than precede, that of (c). One of the last domains where the receding language is maintained seems to be the domain of religion (cf. Sasse 1992a:

18, cited in 5.1). This type of language death is perhaps of the Latinate pattern (cf. 5.3.5).

This functional differentiation is closely interrelated with language attitude (discussed in 6.3-[9]), as will be demonstrated in the examples cited below. Language attitude is referred to perhaps in all the sources consulted for functional domains.

Perhaps one of the most frequently mentioned factor is (i) “secrecy” (cf. Jones 1998: 42, fn. 16). An example from So (Thavung) of Thailand is cited in [3] below, and one from Scottish Gaelic spoken in Nova Scotia, Canada, in [5]. For additional examples, see Dalton et al. (1995: 86), Dorian (1981: 163, 168, 1986a: 563), Hill (1983: 267), Jones (1998: 224), Kieffer (1977: 97), Kendall King (2001: 84–85), Miller (1971: 119), Weinreich (1974: 95), and Wurm (1997: 45), among many others. Use of the minority language for humour or jokes – a manifestation of (g) “intimate” – is also frequently mentioned, e.g. Kendall King (2001: 83–84), and [1] below.

A few specific accounts of this functional differentiation are cited.

[1] Paraguayan Guarani

Joan Rubin (1972) provides a fascinating study of the functional splits between Spanish and Paraguayan Guarani. The differentiation is roughly as follows.

(a) If the location is rural, Guarani will be used. If the location is non-rural, then:

(b) If the situation is formal, Spanish will be used. If the situation is not formal, then:

(c) If the speakers are not intimate, Spanish will be used. If the speakers are intimate, then:

(d) If the discourse is not serious, e.g. jokes, Guarani will be used. If the discourse is serious, there are three possibilities:

(e-i) the first language that the speaker acquired;

(e-ii) the language in which the addressee is predicted to be proficient, and;

(e-iii) the speaker’s sex: men tend to use Guarani, while women tend to use Spanish.

As can be seen, Paraguayan Guarani has secured its position in this stable bilingualism. It is no doubt because of this that Paraguayan Guarani is not endangered. It is the only native language of South America that is not threatened (see 3.6).

[2] Nahuatl of Mexico

Hill (1983: 265–266) reports on the relationship between Nahuatl and Spanish in the Malinche Volcano area of Puebla and Tlaxcala, Mexico, as follows: Those two languages exhibited a functional split, Spanish used as an outside language and Nahuatl as an inside language. This split has developed into the solidarity-power split: Nahuatl functioning as a marker of ethnicity and as a lan-

guage of solidarity, as against Spanish, which is now a language of power, used to express ambition and mobility. "In general, the trend is toward the replacement of Nahuatl by Spanish in more 'public' or 'formal' contexts, such that Nahuatl retreats into the private, domestic sphere" (Hill 1983: 270). For further details, see Hill and Hill (1977, 1978, 1980). For power and solidarity in Nahuatl, see also Hill (1989: 160–162). The terms "power" and "solidarity" were possibly taken from Brown and Gilman (1960), who discuss the use of pronouns in European languages in terms of power and solidarity.

[3] So (Thavung) of Thailand

Suwilai (1998) reports on So (Thavung) of Thailand as follows: This language is a member of the Mon-Khmer subfamily of the Austro-Asiatic language family. Where it is spoken, it is placed at the bottom of the hierarchy (in the order of the highest to the lowest): standard Thai, Northeastern Thai (or Thai-Lao), and So (Thavung). (Thai is a member of Tai-Kadai language family, and is not related to So (Thavung).) The functional differentiation in So (Thavung) speakers' speech behaviour is as follows (pp.155–156).

At school, standard Thai is used in the class and with the teachers. Outside the class Thai-Lao is mainly used with peers. At home, So (Thavung) mixed with Thai-Lao is used when talking with parents and elderly people in the village. In the Buddhist temple, elderly people and middle-aged people speak So (Thavung) with the abbot. The sermon is normally given in Thai-Lao; people other than So (Thavung) speakers, too, attend the ceremony. In village meetings, Thai-Lao is generally used; people other than So (Thavung) speakers, too, live in the village. In courtship, normally Thai-Lao is used. It is considered a sweet and polite language. So (Thavung) is used for cursing and quarreling. Also, So (Thavung) is used as a secret language by some of the members. In contrast, Thai-Lao is used outside the village and when speaking with outsiders.

So far, we have cited reports on three indigenous languages. In the following, we shall consider two enclave languages: Hungarian in Austria, and Scottish Gaelic in Canada.

[4] Hungarian in Austria

Gal (1989) describes the use of Hungarian in Oberwart, Austria, as follows: Oberwart has been a Hungarian-speaking island surrounded by German-speaking villages for about four hundred years. Both German and Hungarian are in daily use in the Hungarian section of the town (p.316).

Hungarian is the language of solidarity and is identified with the past, with peasant agriculture, with town's minority population, and it is labeled economically useless. It suffers the hostility and denigration exerted by German monolinguals. This is in contrast with German, which is the language of power and

which is admired, associated with the state, with the prestige of education, and with the ability to provide material success in the form of mobility out of agriculture into wage labor and skilled occupations. That is, Hungarian is the “low, in-group” language for intimacy and trust, whereas German is the “high, out-group” language associated with authority (p.317).

However, despite these restrictions on the use of Hungarian, there are continuing pressures, exercised by the older generations on the younger, and by peasant networks on their members, to use Hungarian in the neighbourhood. As Hungarian has become a language of solidarity, failure to use it locally often leads to ridicule and accusations – an instance of language loyalty, discussed in 6.3-[9]. Such failure may also imply a failure to ensure the support of the social networks in mutual aid, labor exchange, and the like (pp.317–318).

[5] Scottish Gaelic spoken in Nova Scotia, Canada

Mertz (1989: 108) reports on the situation of Scottish Gaelic spoken in Mabou, on the island of Cape Breton of Nova Scotia: Prior to the 1930s, Gaelic was already a private language used more in homes and private conversations than in public places. Indeed, children in small schools within the Gaelic-speaking sub-areas of Mabou spoke Gaelic in the schoolyards. If adults working on farms, boats, or at mines and canneries found themselves in groups composed of bilinguals they would feel free to codeswitch. However, English predominated in the public life of the town of Mabou. Thus, many of the shopkeepers and business people of Mabou were English monolingual, and the schools were always conducted in English, including those run by the church.

Despite this, as is the case with Hungarian in Oberwart, Austria, there were pressures on the younger generations to use Gaelic – another instance of language loyalty. Although members of the grandparents’ generation were bilingual, they felt that a proper feeling of community solidarity dictated exclusive use of Gaelic at home. “If you don’t speak Gaelic to them, they’d say ‘He’s too stuck up to speak Gaelic’” (p.108). The situation changed after the 1930s; Gaelic became a language for adults and/or secret conversations.

We have looked at the functional differentiation between two languages in five selected communities. For further accounts of similar situations, see Dressler and Wodak-Leodolter (1977b), Kuter (1989: 76), and Miller (1971: 119). A detailed account of a sociolinguistic situation, including this functional differentiation, is given by Dorian (1981: 74–113) on Scottish Gaelic of East Sutherland, Scotland, and by Schmidt (1985b: 10–43) on Dyirbal of Australia.

7.3. Language shift

7.3.1. Theory of language shift

We saw in 5.3.2 that language death may be caused by the death of the population or by language shift. We now turn to the issue of theory of language shift. This is important not only for academic inquiry, but also for practical purposes. Thus, in order to carry out language maintenance successfully, it is vital to understand the causes and processes of language shift (McConvell 1991: 144). Unfortunately, however, there appears to be no adequate theory of language shift.

Thus, already in the 1960s, Fishman (1964: 49) expressed a pessimistic view on the state of research on language shift, stating that “it is currently impossible to specify in advance an invariant list of psychological, social and cultural processes or variables that might be of universal importance for an understanding of language maintenance or language shift”. The situation does not seem to have been rectified since. Thus, more than thirty years later, Crawford (1996: 53) noted: “so far, no one has developed a comprehensive theory of language shift – what causes it under widely varying conditions, what prevents it from happening, what can help to reverse it – although I believe that Joshua Fishman has gone farther than anyone else in doing so”.

McKay (1996: 191–223) provides a convenient overview of the relevant literature. We shall examine a selection of views/theories on language shift. Language shift is closely tied up with language maintenance, and most (perhaps all) views/theories of language shift are expressed/proposed in the context of language maintenance.

[1] Fishman

(a) As noted above, Fishman (1964: 49) pointed out the difficulty of constructing an adequate theory of languages shift. He added as follows: “many of the most popularly cited factors purportedly influencing maintenance and shift have actually been found to “cut both ways” in different contexts or to have no general significance when viewed in broader perspective” (Fishman 1964: 50, 1972: 122). Fishman (1964: 64, 1972: 151) concluded: “there are currently no definitive answers”.

Take, for instance, the rural-versus-urban setting (cf. 6.2-[1]-(c)). It has been argued that “urban dwellers are more inclined to shift; rural dwellers (more conservative and more isolated) are less inclined to shift” (see Fishman 1964: 52, 1972: 126). However, language revival movements, language loyalty movements, and organized language maintenance efforts have commonly originated and had their greatest impact in the cities (Fishman 1964: 53, 1972: 126). Concerning prestige (6.2-[5]-(e) and 6.3-[8]), it is not always the case that a lan-

guage with lower prestige is replaced by one with higher prestige (Fishman 1964: 54, 1972: 135). Thus, Norman French succumbed to English in England (Denison 1977: 16), and Lithuanian was displaced by a low German dialect in East Prussia before World War I (Fishman 1964: 53–55, 1972: 132–136). As another example, Kapanga (1998) provides an account of the maintenance and expansion of a less prestigious dialect (of Shaba Swahili of Zaire) at the expense of a more prestigious one.

(b) Fishman (1972) proposed a theory that was later labeled “the domain theory” by McConvell (1991: 144). Specifically, Fishman (1972: 115–116) stated as follows: “if a strict domain separation becomes institutionalized so that each language is associated with a number of important but distinct domains, bilingualism may well become both universal and stabilized even though an entire population consists of bilinguals interacting with other bilinguals”. That is, according to this theory, stable bilingualism (rather than transitional bilingualism; Fishman 1967: 31, fn. 1, 1972: 91) coupled with the separation of domains will help to maintain the language(s). See also Fishman (1967: 31–33). It seems that the inspiration for this idea derived from Joan Rubin’s study of bilingualism in Paraguay (see Fishman 1964: 43, fn. 24), where the domain theory seems to work perfectly well; see 7.2.2-[1]. However, this theory has been shown to be beset with a number of problems (Landry and Allard 1992: 226; McConvell 1991: 145–147; McKay 1996: 192–198). For example, its application to the Australian Aboriginal context has produced a detrimental result (McConvell 1992; McKay 1996: 192–200). That is, separation of the school and the home has led to withdrawing the indigenous language from the local school when the school can be (or has been in certain cases) the centre for community language activities (McConvell 1992: 217; McKay 1996: 199).

(c) Perhaps the most recent version of Fishman’s theory of language shift (and maintenance) is that expounded in Fishman (1991). It was briefly cited in 2.2-[2], and it will be elaborated on in 11.3.2.1-[4].

[2] McConvell

McConvell (1991) proposed two additional theories of language shift.

(a) One is what McConvell (1991: 151) termed “the functional choice theory of language shift”. Specifically, he (p. 150) argues that “the expression of either solidarity with or distance from certain social groups is probably the most important function of language choice in bilingual situations and probably also the factor which above all others determines whether language shift takes place”. However, the writer’s view is different from McConvell’s, although both are based on observations in Australia. As far as the situations the writer has observed are concerned, it seems that Aboriginal Australians

switch to English simply in order to survive in the society that is dominated by English-speaking Europeans. The factor of solidarity with or distance from certain social groups, say, English-speaking white people, does not seem highly relevant. For example, let us cite an old lady who lives in the old people's home in Halls Creek, Western Australia. If she spoke Wanyjirra to the staff of the old people's home, the nurse or the doctor, she would not be able to obtain the food, clothes or medicine she wants. She has no choice. She has to speak English (or perhaps Kriol) in order to survive. (Kriol is a variety of creole spoken in the northwest of Australia, including Kimberley region of Western Australia; see Sandefur 1985.) Dorian (1994d: 116–118), Mufwene (1998a, n.d.) and Nettle and Romaine (2000: 6) cite additional cases, from outside Australia, where the people shift to another language, with no choice, in order to survive.

According to McKay (1996: 205), Martin-Jones (1989) criticizes overemphasizing speakers' freedom of choice and believes that unequal relations of political and economic power should play a bigger role than they have done in understanding language shift and maintenance among minority language speakers.

(b) The other theory of language shift put forward by McConvell is what may be labeled "the linguistic complexity theory of language shift". McConvell (1991: 154) notes that it is "possible that the complexity or difficulty of learning a particular language could effects its chances of being learned under adverse circumstances and, therefore, its chances of survival". Similarly, Dixon (1997: 23) notes as follows: "If language X is more complex than language Y, then speakers of X will find it easier to learn and speak Y, as a second language, than the other way round".

Indeed, many Australian Aboriginal languages, such as Kija, which is spoken in and north of Halls Creek, Western Australia, are morphologically very complex, certainly far more complex than English. (For an outline of Kija, see Kimberley Language Resource Centre 1996a). Consequently, "Aborigines sometimes wonder whether the children use Kriol simply because it is easier" (McConvell 1991: 154). Similarly, Dorian (1992: 146) suggests that the complexity of the traditional Tiwi of Australia may be hindering its acquisition by children.

However, one crucial question remains. What will happen if the dominant language is complex and the minority language is simple? Will that prevent the speakers of the minority language from shifting to the dominant language? Almost certainly they will be likely to shift to the dominant language, whose "speakers are politically or economically dominant, regardless of how easy or how hard the language is for outsiders to learn" (Bradshaw 1995: 195–196).

The linguistic complexity theory of language shift needs to be tested against empirical data. It will be interesting to investigate regarding:

(a) shifts from a more complex language to a simpler one, and;

(b) shifts from a simpler language to a more complex one;

as to whether there is any correlation between (i) the direction of shift and (ii) the frequency and/or speed of shift.

To sum up, we conclude that there seems to be no adequate theory of language shift. Clearly, various factors interact in a complex way, and “no single factor will in itself herald” language shift (cf. Jones 1998: 348; Mesthrie 1994: 1989).

In the following, we shall look at additional issues related to language shift.

7.3.2. The third generation in language shift

It has often been stated that it takes three generations for language shift to be completed (Brenzinger 1997: 282; Edwards 1984: 278; Faise, Jaspert, and Kroon 1992a: 6). For a specific example, see Jones (1998: 151) on Welsh. However, the situation is not that straightforward. Thus, Florey and van Engelenhoven (2001: 201–202) note, regarding Indonesian migrants in The Netherlands, that the view of three-generation shift is a simplification and that the situation is very complex. Huffines (1989: 225) notes that the shift from Pennsylvania German to English “is complete across three generations, often across two”. Crawford (1996: 52, fn. 1) and Palmer (1997: 273) observe that language shift among immigrants to the USA has been speeding up and is now completed in two generations. Giles, Bourhis, and Taylor (1977: 315) report on the shift from Welsh to English among emigrants from South Wales that occurred in less than two generations. Also, there may be a variation within the third generation (Mesthrie 1994: 1990). Thus, as cited in 6.2-[2]-(d), Li (1982: 117) reports that, among third-generation Chinese-Americans, shift to English is slower among Chinatown residents than among non-Chinatown residents. All this indicates that the view of three-generation shift needs re-examination, and care should be taken to investigate the details of each instance of language shift.

7.3.3. Bilingualism and language shift

Language shift is said to presuppose the existence of a transitional stage of bilingualism, involving the receding language and the replacing one (Campbell 1994: 1961; Denison 1977: 16; Mesthrie 1994: 1990; Mougeon and Beniak 1989: 293; Sasse 1992a: 12).

It is interesting to inquire if it is possible for language shift to happen without a transitional stage of bilingualism? The authors cited above maintain that this is impossible. There appears to be no reported instance. The case of sudden language shift involving Pipil of El Salvador (cited in 5.4-[3]), who stopped speaking their native language for fear of a massacre, comes very close, but it is not clear whether or not that language shift involved a transitional stage of bilingualism.

This issue of language shift without bilingualism has been raised as a theoretical possibility, for future research.

7.3.4. Language shift: language suicide or language murder?

Linguists often use the term “language death”. In a metaphorical sense, languages die. Furthermore, we encounter terms such as “language suicide” and “language murder” (Denison 1977: 16; Brenzinger 1997: 277). They may be characterized as follows:

- (a) language suicide: the speakers abandon their language of their own accord – “a voluntary decision to abandon a language” (Brenzinger 1997: 277), and;
- (b) language murder: the speakers are forced by outsiders to abandon their language – “the result of coercion” (Brenzinger 1997: 277).

A given instance of language death may involve both language suicide and language murder (cf. Brenzinger 1997: 277).

There are researchers who seem to consider language shift – at least, most instances thereof – as manifesting language suicide, rather than language murder. Thus, Denison (1977: 22) seems to prefer the term “language suicide”, on the grounds that “parents cease transmitting the language in question to their offspring”. Edwards (1984: 292–293) cites the view “that a language cannot be murdered and that, where one seems to disappear, there are often grounds for thinking of suicide”. Regarding the decline of Irish (cf. 3.11), another – and similar – view (cited by Edwards 1984: 285) refers to “the willingness of the population to abandon Irish” and suggests that “Irish ... committed suicide rather than having been murdered”.

It is important to inquire if it is really adequate to use the label “language suicide”, rather than “language murder”. The characterization of language suicide given above entails “choice” as well as “volition” on the part of the people who abandon a given language (cf. Edwards 1984: 292). But do the people really have choices?

It is possible to answer in the affirmative to this question. However, in reality the choices are “forced upon people by circumstances” (Edwards 1984: 292).

Recall, for instance, the case of an old lady (cited in 7.3.1-[2]), who has to speak English (or Kriol) in order to survive. An extreme case concerns Pipil people (cited in 5.3.4-[3] and 7.3.3), who stopped speaking their native language for fear of a massacre. Dorian (1994d: 116–118, p.c.) argues that it is pointless to try to distinguish between language suicide and language murder, since there are ultimately no free choices in this connection.

Furthermore, Dorian (1981: 106, fn. 24) objects to the term “language suicide”, saying that it is akin to the notion of “blaming the victim”. Consider the causes of language endangerment and death discussed in 6.3, and the absence of choices noted above.

To sum up, the use of the term “language suicide” is not adequate. This term is misleading; the people in question do not really have choices in this regard. Also, this term has an unfair connotation of blaming the victims.

7.4. Summary of Chapter 7

In investigating the sociolinguistic aspects of language endangerment, it is necessary to look at the functional differentiation in terms of various domains. Five specific examples of this functional differentiation were cited.

It is also important to consider language shift, but there seems to be no adequate theory of language shift, and it is impossible to state in precise terms under what conditions and how language shift occurs. For example, it has often been said that language shift is completed in three generations. However, the situation is complex and often seems to vary from case to case. Also, a theoretical possibility of language shift without a transitional stage of bilingualism needs to be investigated on the basis of empirical data. The term “language suicide” is sometimes used to refer to language shift, but this term is best avoided; it is misleading and unfair.

8. Structural changes in language endangerment

8.1. Introductory notes

Having looked at the external setting of language endangerment (Chapter 6), and the speech behaviour therein (Chapter 7), we now turn to structural changes observed in language endangerment.

There is now a growing literature on structural changes in endangered languages (including enclave languages that are endangered), e.g. Abbi (1995), Austin (1986), Brenzinger (1997), Bunte and Kendall (1981), Campbell (1994), Campbell and Muntzel (1989), Clyne (1992), Cook (1989), Craig (1997), Dalton et al. (1995), Denison (1977), Dorian (1973, 1978, 1981), Dressler (1972, 1981), Elmendorf (1981), Hamp (1989), Hill (1973, 1978, 1983, 1989), Hill and Hill (1977, 1978, 1980), Huffines (1989), Jones (1998), Kapanga (1998), Kieffer (1977), Ruth King (1989), Maandi (1989), McGregor (2002), Miller (1971), Mithun (1989), Mougeon and Beniak (1989), Myers-Scotton (1998), Schmidt (1985a, 1985b), Suwilai (1998), Allan R. Taylor (1989), Trudgill (1978), Tsitsipis (1989), Vakhtin (1998), and Voegelin and Voegelin (1977). Some of these studies are detailed, while others are sketchy. Most of them are mainly descriptive, while the rest are more theoretically oriented. In addition, there is a debate as to whether or not there are universals in structural changes in endangered languages. Also, there are theoretical discussions of these structural changes, comparing them with pidgins, creoles, child language acquisition, second language acquisition, aphasia, and so-called normal changes in language.

The format of this chapter is as follows. It will first look at these structural changes, largely those that took place in Dyirbal of Australia, as described by Schmidt (1985a, 1985b) (8.2, 8.3). This will be followed by a survey of the theoretical discussions (8.4).

Dorian's (1981) work on Scottish Gaelic is a classic in the field. However, Schmidt's work has been chosen for this chapter, for the following two reasons. First, the writer worked on Warrungu, which is immediately southeast of Dyirbal. He is reasonably familiar with the structure of Dyirbal, but he is not familiar with any Celtic language. Second, Dyirbal exhibited a phenomenon called syntactic ergativity, a phenomenon which is rare among the world's languages. It would be fascinating to observe what would happen to this phenomenon when the language went through obsolescence, and indeed this very process is described in Schmidt's work.

It is useful here to mention two approaches to structural changes in language endangerment (Craig 1997: 266; Hill 1983: 259).

(a) Real time approach: older documentation of the language is compared longitudinally with its present stage, e.g. Hill (1973), Voegelin and Voegelin (1977).

(b) Apparent time approach: time depth is simulated by comparison of contemporary speakers on a full range of linguistic variation, e.g. Dorian (1981), Hill and Hill (1978). This approach was adopted by Schmidt (1985a, b).

8.2. Dyirbal of Australia

8.2.1. Introduction

Schmidt's account of the decline of Dyirbal is comprehensive and detailed, but due to space consideration, we shall look at it rather briefly and selectively.

Dyirbal was spoken in an area between Cairns and Townsville of Queensland, Australia. Dixon's (1972) description of this language – in particular, its syntactic ergativity – has made it world-famous in the linguistic academia, especially in the fields of language typology and syntactic theory.

In 1970, there were about thirty fluent speakers of Dyirbal (Dixon 1972: 37), but since then the number of the speakers has continued to decrease. For details, see Dixon (1991b).

Schmidt conducted fieldwork in the community of Jambun (this word means 'witchetty grub' in Dyirbal), in the traditional Dyirbal territory, in 1982. At that time, the Jambun community was undergoing language shift, from Dyirbal to English. Stages of the process were evidenced by (i) older people who spoke fluent Traditional Dyirbal (TD), (ii) younger ones who spoke "imperfect" Young Dyirbal (YD), and (iii) children in the 0-15 age group who, by their description, "couldn't talk language". By TD, Schmidt means speech consistent with traditional norms as detailed by Dixon (1972). Young Dyirbal involves departure from traditional linguistic norms (Schmidt 1985a: 379).

Schmidt was able to work with twelve YD speakers, whose age ranged from 15 to 33. Their proficiency varied. Two older YD speakers could communicate quite fluently in Dyirbal, but others were much less proficient. They could make themselves understood in Dyirbal on some topics, but they were more at home in English (Schmidt 1985a: 381).

Initially, Schmidt's impression of "imperfect" Dyirbal was very much like Dorian's (Dorian 1973: 414) early impression of "imperfect" East Sutherland Gaelic: "a dismal patchwork of inconsistencies and (from the point of view of TD) mistakes, haphazardly distributed over speakers and situations". Howev-

lish phonological system. In TD, there are no fricatives; the *h* sound does not occur.

[2] Phonic interference (Schmidt 1985b: 192–194)

While the YD speaker has two phonological systems at his/her disposal, there is some evidence of English interference in the pronunciation of Dyirbal words. This interference results from two areas of incongruity in the TD and English sound systems: the rhotic contrast, and the absence of fricatives in TD.

(a) Rhotic contrast. TD has a phonemic contrast between a semi-retroflex continuant *r* and a trill *rr*. This is shown in the minimal pair *yara* ‘man’ and *yarra* ‘fishing line’. English has no such contrast. In YD, the rhotic contrast is maintained in minimal pairs. The survival of the rhotic contrast in this context is not surprising. The *r* - *rr* distinction is the only feature that distinguishes items of the minimal set, and so it is an unlikely context for collapse.

However, regarding words not involving this rhotic contrast, there was noticeable phonetic uncertainty. For some words (both common and low-frequency terms), YD speakers were often uncertain if the rhotic sound was a trill *rr* or a retroflex *r*. For example, in her pronunciation of *ganibarra* ‘dingo’, EH used *rr* and *r* interchangeably. When asked by Schmidt which was better, she replied “both”. This “wavering” of phonemes occurred mainly in the speech of less-fluent YD speakers. Figure 8-2 shows where on the YD continuum this phonetic insecurity was detected.

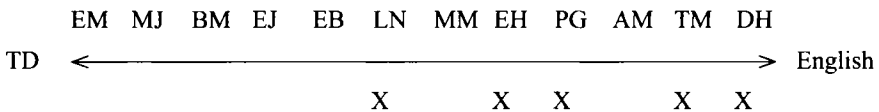


Figure 8-2. Wavering of the two rhotics

(b) Introduction of fricatives. As mentioned in [1] above, fricatives do not occur in TD. In YD, the English phone *f* (but no other fricatives) occurs in pidgin-type pronouns: *wifela* ‘we plural’, and *yufela* ‘you plural’. All YD speakers recognize these forms as Dyirbal words. This suggests that the English phone *f* has been incorporated into the YD phonological inventory.

8.2.3. Ergativity: introduction and illustration

As indicated in 8.1, perhaps the most interesting aspect of Schmidt’s work on dying Dyirbal concerns ergativity, and it will be convenient first to introduce

the concept of ergativity and illustrate it. The following exposition is largely based on Dixon (1994).

It is useful to set up three syntactic functions (Dixon 1994: 6): (i) S – intransitive subject, (ii) A – transitive subject, and (iii) O – transitive object. These three syntactic functions may be grouped in various ways, which include the following two groupings:

(a) accusativity: the A and the S are treated alike, in distinction from the O, and;

(b) ergativity: the S and the O are grouped together, separately from the A. This can be shown as in Table 8-1 (cf. Dixon 1994: 9).

Table 8-1. Accusativity and ergativity

accusativity	A	S	O
ergativity	A	S	O

Accusativity and ergativity may be manifested in various areas of grammar, such as (i) morphology, e.g. case marking, and (ii) syntax, e.g. word order, and formation of complex sentences. Realization of ergativity in formation of complex sentences is called syntactic ergativity (Comrie 1978: 343; Dixon 1994: 143). Example of manifestations of accusativity and ergativity follow.

(a) Morphology: case marking. The A and the S may be indicated by the same case (the nominative case), and the O by another case (the accusative case). This is called a nominative-accusative case pattern. Also, the S and the O may be marked by the same case (the absolutive case), and the A by another case (the ergative case). This is known as an ergative-absolutive pattern. See Table 8-2.

Table 8-2. Accusativity and ergativity in case marking

	A	S	O
nominative-accusative pattern	nominative case		accusative case
ergative-absolutive pattern	ergative case	absolutive case	

English provides examples of a nominative-accusative pattern; the pronouns *I/me*, *he/him*, *she/her*, *we/us*, and *they/them* have a nominative case (the form preceding the slash, e.g. *he*) and an accusative case (the form following the slash, e.g. *him*).

- (8-2) *He* *walked.*
 NOM (S) V
- (8-3) *He* *saw* *him.*
 NOM (A) V ACC (O)

In English, the pronouns *you*, *it* and all the nouns have just one single form for the A, S and O functions. That is, they exhibit neither a nominative-accusative pattern nor an ergative-absolutive pattern. Examples involving nouns:

- (8-4) *John* *jumped.*
 S V
- (8-5) *John* *saw* *Mary.*
 A V O

In TD, 1st and 2nd person pronouns have a nominative-accusative pattern (Schmidt 1985b: 46). (Dyirbal lacks 3rd person pronouns, but it has noun class markers, which fulfill their functions.) Two examples cited from Dixon (1994: 14):

- (8-6) *ngana* *banaga-nyu.*
 1PL.NOM (S) return-NONFUT
 ‘We (S) returned.’
- (8-7) *ngana* *nyurra-na* *bura-n.*
 1PL.NOM (A) 2PL-ACC (O) see-NONFUT
 ‘We (A) saw you all (O).’

In TD, nouns and noun class markers have an ergative-absolutive pattern. Examples cited from Dixon (1994: 10):

- (8-8) *nguma-Ø* *banaga-nyu.*
 father-ABS (S) return-NONFUT
 ‘Father (S) returned.’
- (8-9) *nguma-Ø* *yabu-nggu* *bura-n.*
 father-ABS (O) mother-ERG (A) see-NONFUT
 ‘Mother (A) saw Father (O).’

Accusativity in case marking is very common, and is found in familiar languages such as English. Ergativity in case patterns may not be familiar to some readers. Nonetheless, it, too, is common, and found in a large number of languages of Australia, India, Caucasus, North and Central Americas, and the Pacific, among others.

(b) Syntax. (b-i) Word order. Consider (8-2) through (8-5). The S and the A precede the verb, while the O follows. That is, the S and the A are treated alike, in distinction from the O. This constitutes an instance of accusativity manifested in word order. That is, (8-2) and (8-3) exhibit accusativity in terms of both case marking and word order, while (8-4) and (8-5) manifest it in terms of word order only.

If there is a language which, in terms of word order, groups the S and the O, separately from the A, then it provides an instance of ergativity realized in word order. In terms of word order, accusativity is common, but ergativity seems uncommon. (See Dixon 1994: 49–52).

(b-ii) Formation of complex sentences. This will be discussed in 8.2.5.1.

We shall spend a fair amount of space on the discussions of the decay of ergativity (8.2.4.1 on case and 8.2.5.2 on syntactic ergativity). This is because, as mentioned above, the phenomenon of ergativity may not be familiar to some readers. Furthermore, syntactic ergativity, i.e. ergativity in the formation of complex sentences, is a rare phenomenon among the world's languages. Due to this, Schmidt's account of the decay of syntactic ergativity is truly invaluable, no doubt the first and possibly the last of this kind in the world. Her fieldwork (conducted in 1982) was perfectly timely. Research of the structural decay in Dyribal would have been impossible when the language was fully thriving, and would also be impossible if the language becomes extinct.

Having introduced and illustrated the phenomenon of ergativity, we shall now return to Schmidt's discussion of Dyribal.

8.2.4. Morphology

Dyribal has the following inflectional suffixes for case: ergative (/instrumental), locative, dative-allative, ablative, and two genitives (Dixon 1972: 42). The absolutive case is phonologically zero, e.g. (8-8), (8-9). We shall look at the ergative case in some detail (8.2.4.1) and briefly at the locative case (8.2.4.2).

8.2.4.1. *Ergative case*

As seen in 8.2.3, morphologically, TD (Traditional Dyribal) is a split-ergative language. That is, nouns, adjectives, and noun class markers (which fulfil the function of 3rd person pronouns) inflect on an ergative-absolutive pattern, while 1st and 2nd person pronouns inflect on a nominative-accusative pattern (Schmidt 1985b: 46). (An NP in Dyribal may consist of a noun and a noun class marker, e.g. (8-15), but it is perfectly normal for NPs to contain, for in-

stance, only a noun, e.g., (8-8), (8-9), or only a noun class marker. An NP may also consist of a pronoun, e.g. (8-6), (8-7). See Dixon 1972: 60. See 8.2.6 below for more on noun class markers.)

In TD, word order is free, since syntactic function (i.e. A, S, O) is indicated by case affixes, attached to every word of an NP (Schmidt 1985a: 382).

Schmidt (1985a: 382) notes that the Dyrirbal ergative case provides an excellent opportunity to observe morphophonological change in the terminal phase of a language. In TD, the ergative case is marked by an inflectional suffix, which is rich in allomorphic variation; there are, in all, six phonologically conditioned allomorphs, as shown in Table 8-3, cited from Schmidt (1985a: 383).

Table 8-3. Ergative case marking. In the cases marked with an asterisk, stem-final *r*, *rr*, *l* is lost, and *-ru* is added.

TD		YD REDUCTIONS				
ENVIRONMENT	ALLOMORPHS	Stage 1	Stages 2-3	Stage 4	Stage 5	
(2 syl) V	- <i>ngu</i>	} -(<i>ŋ</i>) <i>gu</i>	} -(<i>ŋ</i>) <i>gu</i>	-(<i>ŋ</i>) <i>gu</i>	} - <i>gu</i> → ∅ (NOM/ACC)	
(3 + syl) V	- <i>gu</i>					
<i>y</i>	- <i>ju</i>	- <i>ju</i>	} - <i>du</i>	} - <i>du</i>		
<i>r</i>	- <i>ru</i> *	- <i>ru</i>				
<i>rr</i>	- <i>ru</i> *	- <i>ru</i>				
<i>l</i>	- <i>ru</i> *	- <i>ru</i>	} - <i>du</i>	} - <i>du</i>		
<i>m</i>	- <i>bu</i>	- <i>bu</i>				
<i>n</i>	- <i>du</i>	- <i>du</i>	- <i>du</i>			
<i>ny</i>	- <i>ju</i>	- <i>ju</i>	- <i>ju</i>			
YD continuum:		EM	MJ	BM EJ EB	LN MM EH PG AM TM DH	

In YD (Young Dyrirbal), ergative case-marking undergoes allomorphic reduction before the category is lost to an English-type system, where syntactic function (A, S, O) is shown by word order. This is illustrated in Table 8-3. As the table indicates, the reduction is systematic. Following changes along the YD continuum, certain allomorphs are generalized to cover a greater range of environments. The continuum shows five stages of change (Schmidt 1985a: 382-383).

[1] Stage 1. The separate TD allomorphs *-nggu* following a disyllabic stem ending in a vowel, and *-gu* following a trisyllabic or longer stem ending in a

vowel, are collapsed. YD speakers use *-gu*, *-nggu*, or both in free variation, neutralizing the TD conditioning environment. The examples below show *-nggu* ~ *-gu* in free variation following vowel-final stems in EM's speech (Schmidt 1985a: 383):

- (8-10) TD: *girimu-gu*
 YD: *girimu-nggu* *jugumbil-Ø* *baja-n.*
 snake-ERG woman-ABS bite-NONFUT
 'The snake bit the woman.'
- (8-11) TD: *guda-nggu*
 YD: *guda-gu* *nyalngga-Ø* *baja-n.*
 dog-ERG child-ABS bite-NONFUT
 'The dog bit the child.'

[2] Stage 2. The allomorph *-(ng)gu* is extended from vowel-final stems to those ending in *-y*, as exemplified in (8-12) (MJ's speech) (Schmidt 1985a: 383):

- (8-12) TD: *walguy-ju* *jugumbil-Ø* *baja-n.*
 YD: *walguy-nggu*
 taipan-ERG woman-ABS bite-NONFUT
 'The taipan [venomous snake] bit the woman.'

In this context, it is relevant to mention the situation in Gugu-Badhun, which used to be spoken about 100 km south of Dyrirbal. In the 1970s, Peter Sutton worked with five last speakers of the language. Examination of Sutton's data indicates that they were not highly fluent speakers. The allomorphs of the ergative case are as follows (Sutton 1973: 111–114).

- (8-13) *-nggu* /N____ e.g. *bama-nggu* 'man-ERG'
-nggu /y____ e.g. *banggay-nggu* 'spear-ERG'
-du /l____ e.g. *dhambal-du* 'snake-ERG'
-du /n____ e.g. *galbin-du* 'child-ERG'
-ndu /y____ e.g. *dhunhguy-ndu* 'sinew-ERG'

(/dh/and /nh/are interdental stop and nasal, respectively.) Note that this distribution of ergative allomorphs is very similar to that in Stage 2 of YD in Table 8-3. Sutton suggests that this situation is a result of "simplification of the rules" that has occurred in the post-contact days, and he states that the speakers "have moved away from Gugu-Badhun as originally spoken before white contact" (Sutton 1973: 114).

Similarly, in Yidiny, Dyirbal's northern neighbor, the ergative allomorphs are *-nggu* after a vowel, *-du* after a consonant; the *-d* of *-du* assimilates in point of articulation to a stem-final nasal or *y*, but remains *-du* after *l*, *rr*, *r*, or *n* (Dixon 1977: 126–127). This allomorphy is again very similar to that in Stage 2 in Table 8-3, as alluded to by Schmidt (1985a: 385). Although Schmidt does not state this explicitly, it is possible, though by no means certain, that the Yidiny ergative allomorphy as described by Dixon, too, is a result of changes that have taken place in the dying language. The language was clearly already moribund when Dixon worked on it. He states explicitly “The writer never heard Yidiny spoken spontaneously” (Dixon 1977: 29).

These comments on Gugu-Badhun and Yidiny show that the data obtained from the last speakers may not present the language as it was when it was fully thriving. This issue will be discussed in 13.1.7.

[3] Stage 3. The ergative allomorph attached to liquid-final stems is changed from *-ru* to *-du*. In TD, the liquid is deleted before the *-ru* addition; but in YD, ergative is marked simply by the addition of *-du* to stems ending in *-r*, *-rr*, or *-l* (Schmidt 1985a: 384). Examples: (i) TD *guga-ru*, YD *gugar-du* ‘goanna-ERG’, (ii) TD *gubu-ru*, YD *guburr-du* ‘bee-ERG’, and (iii) TD *jugumbi-ru*, YD *jugumbil-du* ‘woman-ERG’.

[4] Stage 4. In TD, the ergative allomorph for nasal-final stems is a homorganic stop followed by *-u*. In YD, this assimilation to the preceding nasal is lost, and *-du* becomes the unvarying form of the ergative suffix on nasal-final stems. There are no *ng*-final words in TD or YD (Schmidt 1985a: 384). Examples: *mugiyam-du* ‘(name)-ERG’, *midin-du* ‘possum-ERG’, and *binyjirriny-du* ‘lizard-ERG’.

[5] Stage 5. In the final stage of allomorphic reduction (short of total loss), *-gu* is the single variant for ergative case on all stems. LN's speech exemplifies this stage of the reduction process (Schmidt 1985a: 385). Examples: *girimu-gu* ‘snake-ERG’, *walguy-gu* ‘taipan-ERG’, *gugar-gu* ‘goanna-ERG’, *guburr-gu* ‘bee-ERG’, *jugumbil-gu* ‘woman-ERG’, *mugiyam-gu* ‘(name)-ERG’, and *binyjirriny-gu* ‘lizard-ERG’.

[6] Loss of ergative category and reliance on word order

This phenomenon really belongs in syntax, but it is most conveniently treated in connection with the preceding five stages of morphology. YD speakers who follow LN on the continuum lose the ergative inflection, and mark syntactic function by word order. They replace ergative/absolute marking by strict word order, as in English – accusativity in word order (Schmidt 1985a: 386). That is, while TD has free word order (as mentioned above), YD has rigid word order (SV, AVO). Examples:

- (8-14) *gugar* *buga-bi-n.*
 goanna dead-INTR.VERBALIZER-NONFUT
 S V
 ‘The goanna died.’
- (8-15) *gugar* *baja-n* *ban* *jugumbil.*
 goanna bite-NONFUT her woman
 A V O
 ‘The goanna bit the woman.’

(*ban* appears to be a noun class marker.) Schmidt (1985a: 386) points out that these examples look almost like relexified English, i.e. English sentences with the English words replaced by the Dyirbal equivalents.

8.2.4.2. *Locative case*

The pattern of allomorphic variation of the locative case is parallel to that of the ergative case. In YD, reduction in the range of locative allomorphs operates on the same principles as ergative allomorphic reduction, i.e. the five stages of ergative allomorphic reduction apply also to the locative case (Schmidt 1985b: 52). Towards the end of the proficiency continuum, suffixation is lost as a means of marking locative case, and English prepositions are used instead, e.g. *on* and *in* (Schmidt 1985b: 54):

- (8-16) *jugumbil-Ø* *nyina-nyu* on *yugu.*
 woman-ABS sit-NONFUT log
 ‘The woman sat on the log.’

There is one interesting difference between the fate of the ergative and that of the locative cases. When ergative suffixation is lost, it is replaced by word order (resulting in the English word order). In contrast, when locative suffixation is lost, it is replaced by prepositions (taken from English). The influence from English is obvious in either situation.

8.2.5. Syntax: syntactic ergativity

8.2.5.1. *Syntactic ergativity and accusativity: illustration*

It will be useful first to illustrate syntactic ergativity, comparing it with syntactic accusativity.

[1] Syntactic accusativity

This phenomenon is observed in English (Comrie 1978: 346–350; Dixon 1994: 158), in whose complex sentences the second occurrence of the same NP can be deleted if:

(a) the first occurrence is either in the A or the S function, and;

(b) the second occurrence is either in the A or the S function;

that is, if both occurrences are either in the A or the S function. Here, the A and the S are grouped together. Consider:

(8-17) *The man (S) came here.*

(8-18) *The man (A) saw the woman (O).*

These two sentences may be joined together, with the second occurrence of *the man* deleted:

(8-19) *The man (S) came here and [the man (A)] saw the woman (O).*

That is, we have:

(8-19') *The man (S) came here and saw the woman (O). (S = [A])*

(Square brackets indicate deleted words.)

Now, consider:

(8-20) *The man (S) came here.*

(8-21) *The woman (A) saw the man (O).*

These sentences cannot be joined in the way (8-17) and (8-18) can. If (8-20) and (8-21) are joined and if the second occurrence of *the man* is deleted, we will have (8-22):

(8-22) **The man (S) came here and the woman (A) saw [the man (O)].*

(8-22') **The man (S) came here and the woman (A) saw. (*S = [O])*

The example (8-22) is ungrammatical.

In order to join (8-20) and (8-21) and obtain a grammatical sentence, (8-21) has to be passivized first, with the A now in the S function:

(8-23) *The man (S) was seen by the woman.*

It now can be joined with (8-20), with the second occurrence of *the man* deleted:

(8-24) *The man (S) came here and [the man (S)] was seen by the woman.*

(8-24') *The man (S) came here and was seen by the woman. (S = [S])*

To sum up, in English for the purpose of joining two sentences and of the deleting the second occurrence of the coreferential NP, the A and the S are grouped together, separately from the O. This constitutes an instance of accusativity manifested in the formation of complex sentences. This phenomenon is known as syntactic accusativity.

[2] Syntactic ergativity

We now turn to TD, where – in contrast with English – for the purpose of joining two sentences and of the deleting the second occurrence of the coreferential NP, the S and the O are grouped together, separately from the A. Examples are cited from Dixon (1994: 160–165).

(8-25) *nguma-Ø* *banaga-nyu*.
 father-ABS (S) return-NONFUT
 ‘Father returned.’

(8-26) *nguma-Ø* *yabu-nggu* *bura-n*.
 father-ABS (O) mother-ERG (A) see-NONFUT
 ‘Mother saw father.’

These two sentences can be joined together, with the second occurrence of *nguma-Ø* ‘father-ABS’ deleted:

(8-27) *nguma-Ø* *banaga-nyu* *yabu-nggu* *bura-n*.
 father-ABS (S) return-NONFUT mother-ERG (A) see-NONFUT
 ‘Father (S) returned and mother saw [father (O)].’ (S = [O])

Note that the literal translation of (8-26) (‘*Father (S) returned and Mother (A) saw’) is ungrammatical as an English sentence; cf. (8-22’).

Now, consider:

(8-28) *nguma-Ø* *banaga-nyu*.
 father-ABS (S) return-NONFUT
 ‘Father (S) returned.’

(8-29) *yabu-Ø* *nguma-nggu* *bura-n*.
 mother-ABS (O) father-ERG (A) see-NONFUT
 ‘Father (A) saw mother (O).’

In contrast with (8-17) and (8-18) of English, the Dyrbal sentences (8-28) and (8-29) cannot be joined, with the deletion of the second occurrence of the word for ‘father’. Instead, the A of (8-29) must be put in the S function, by means of a process called antipassivization, as shown below (Dixon 1994: 163–164):

- (8-30) A-ERG O-ABS V-tense
 => S-ABS DAT V-*nga*-tense

That is, the verb is suffixed with the antipassive suffix *-nga-* (or a variant), the A (in the ergative case) is turned into the S (in the absolutive case), and the O (in the absolutive case) is changed into the dative case. The antipassivized form of (8-29) is:

- (8-31) *nguma-∅* *bural-nga-nyu* *yabu-gu*.
 father-ABS (S) see-ANTIPASS-NONFUT mother-DAT
 ‘Father (S) saw mother.’

Now, (8-31) can be joined with (8-28), with the second occurrence of *nguma-∅* ‘man-ABS’ deleted:

- (8-32) *nguma-∅* *banaga-nyu* *bural-nga-nyu*
 father-ABS (S) return-NONFUT see-ANTIPASS-NONFUT
yabu-gu.
 mother-DAT
 ‘Father (S) returned and [father (S)] saw mother.’ (S = [S])

Here, both the first occurrence and the second occurrence are in the S function.

To sum up, in Dyirbal, for the for the purpose of joining two sentences and of the deleting the second occurrence of the coreferential NP, the S and the O are grouped together, separately from the A. This phenomenon is known as syntactic ergativity. The difference between syntactic ergativity and accusativity, together with the use of antipassivization and passivization respectively, may be shown as in Figure 8-3.

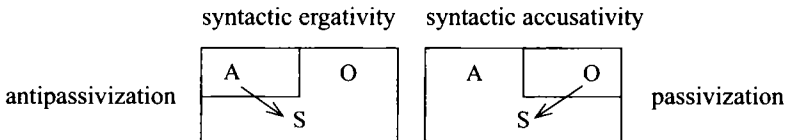


Figure 8-3. Syntactic ergativity and accusativity

8.2.5.2. Decline of syntactic ergativity in Young Dyirbal

We now look at look at Schmidt’s (1985a: 387) account of the decline of syntactic ergativity in Dyirbal – in coordination and in purposive subordination. We have already seen ergativity manifested in coordination in (8-27) and (8-32). An additional set of examples (Schmidt 1985a: 387):

(8-33) *buliman-Ø* *bani-nyu.*
 policeman-ABS (S) come-NONFUT
 ‘The policeman (S) came.’

(8-34) *buliman-du* *Lilian-nya* *budi-n.*
 policeman-ERG (A) *Lilian-nya* (O) take-NONFUT
 ‘The policeman (A) took Lilian (O).’

(Proper and some common nouns can take the suffix *-nya* when they are in the O function; see Dixon 1972: 43.)

(8-35) *buliman-Ø* *bani-nyu* *Lilian-nyan.gu*
 policeman-ABS (S) come-NONFUT Lilian-DAT
budil-nga-nyu.
 take-ANTIPASS-NONFUT
 ‘The policeman (S) came and [(S)] took Lilian.’ (S = [S])

In purposive subordination, the verb of the subordinate clause has the purposive suffix, which expresses purpose or the like (Schmidt 1985a: 387):

(8-36) *buliman-Ø* *bani-nyu* *Lilian-nyan.gu*
 policeman-ABS (S) come-NONFUT Lilian-DAT
budil-ay-gu.
 take-ANTIPASS-PURP
 ‘The policeman came in order to take Lilian.’ (S = [S])

Schmidt tested YD speakers for syntactic ergativity in 20 stimulus structures: ten in coordination, e.g. (8-35), and ten in purposive subordination (“in order to”), e.g. (8-36). The results of the tests are presented in Figure 8-4 (based on Table 4 in Schmidt 1985a, but slightly modified).

	EM	MJ	BM	EJ	EB	LN	MM	EH	PG	AM	TM	DH
Purposive subordination	100	100	100	100	100	100	100	100	100	80	90	100
Coordination	10	0	0	0	0	0	0	0	0	0	0	0

Figure 8-4. Decline of syntactic ergativity

Figure 8-4 shows the following results (Schmidt 1985a: 387–388).

(a) The antipassive affix occurs predominantly in purposive subordination (most YD speakers 100%), e.g. *-ay* in *budil-ay-gu* of (8-36).

(b) YD speakers high on the continuum have an intact antipassive derivational process in purposive subordination, but the less-fluent YD speakers have less success with antipassivization.

(c) Coordination, e.g. (8-35), rarely involves syntactic ergativity. Only once in all the responses is the antipassive affix used in coordination. EM, the most fluent speaker, gave this single occurrence. In all other instances, YD speakers link these clauses by a single conjunction word – (English) ‘*an* or *then* ~ *den*, or *bangum* ‘then’ – or by simple juxtaposition (Schmidt 1985a: 388), e.g.:

- | | | | |
|--------|-------------------|--------------------|--|
| (8-37) | <i>buliman-Ø</i> | <i>bani-nyu</i> | $\left\{ \begin{array}{l} \textit{an}' \\ \textit{then} \sim \textit{den} \\ \textit{bangum} \end{array} \right\}$ |
| | policeman-ABS | come-NONFUT | |
| |
<i>budi-n</i> |
<i>Lilian.</i> | |
| | take-NONFUT | Lilian | |
- ‘The policeman (S) came and [(the policeman) (A)] took Lilian.
(S = [A])

Note that the first occurrence of ‘policeman’ is in the S function, whereas its second (deleted) occurrence is in the A function. That is, although Schmidt does not mention this explicitly, the formation of (8-37) manifests syntactic accusativity, as is the case with English; see (8-19’).

These results show that, in YD, coordination and purposive subordination, which traditionally involved syntactic ergativity, are affected by simplification, and by the English interference process in terminal Dyirbal (Schmidt 1985a: 391).

8.2.5.3. *Ergativity in Young Dyirbal: summary*

The preceding has shown that, in YD, there is evidence of weakening of both use of the ergative suffix (i.e. morphological ergativity) and syntactic ergativity, but to different degrees along the continuum. As illustrated by Figure 8-5, ergative case-marking survives about halfway along the continuum. Syntactic ergativity in coordination is lost at a much earlier point. In contrast, purposive subordination is the favored environment for syntactic ergativity for all YD speakers, extending all the way along the continuum. The reduction of ergativity in terminal Dyirbal involves quite systematic variation along the continuum, rather than showing a disrupted stage in language decay (Schmidt 1985a: 392).

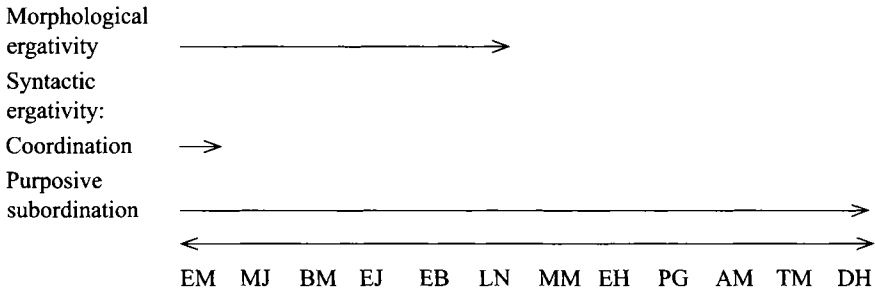


Figure 8-5. Decline of ergativity in YD: morphology and syntax

The rise and fall of ergativity is one of the most fascinating issues in historical linguistics. See, for instance, Anderson (1977), Comrie (1978: 368–379), and Dixon (1994: 182–206). Schmidt’s work on the loss of ergativity in dying Dyirbal is an invaluable contribution. This is because (i) unlike most other works, Schmidt’s works described the decay of ergativity as it was happening, and (ii) it deals with not just morphological ergativity, but also syntactic ergativity – a rare phenomenon.

8.2.6. Semantics: changes in noun classification

8.2.6.1. Noun class system of Traditional Dyirbal

Traditional Dyirbal (TD) has four noun classes, and the class of each noun is signaled by the accompanying noun class marker. The absolutive form of each class is as follows (Schmidt 1985b: 151):

CLASS I	<i>bayi yara</i>	‘man’
II	<i>balan jugumbil</i>	‘woman’
III	<i>balam wiju</i>	‘vegetable food’
IV	<i>bala yugu</i>	‘tree’

The semantic basis of TD noun classes is complex to the non-native speaker. As explained by Dixon (1972: 306–311), it depends on an intimate knowledge of the beliefs and myths associated with the cultural heritage. TD class membership involves the following two factors: (i) certain basic concepts associated with various classes, and (ii) rules for transferring class membership. The concepts associated with each class are (Schmidt 1985b: 151–152):

CLASS I	animateness, (human) masculinity
II	(human) femininity, water, fire, fighting
III	edible fruit and vegetable food
IV	residue class for everything else

The rules by which membership can be transferred are as follows (Schmidt 1985b: 152).

(a) Mythological association. Even if a noun bears some feature A (by which it would be expected to be classified), but is through belief or myth associated with feature B, then it will be assigned to a class corresponding to feature B rather than feature A. For example, birds would be expected to belong Class I, by virtue of their animateness. However, because most birds are believed to be spirits of dead human females, the majority of birds are in Class II.

(b) Concept association. If a noun is strongly linked with a term belonging to Class X, then it also will be assigned to Class X, e.g. “fishing line” and “fish spear” are placed in Class I, because of their close association with the Class I term “fish”.

(c) Marking of harmfulness and other important properties. In order to show that certain nouns have some particular property that other nouns of the group do not have, nouns are classified according to that important property. For example, fish are mostly in Class I, but two dangerous fishes (“stonefish” and “garfish”) are categorized in Class II, in order to mark their harmfulness. “Danger” is one of the features of Class II (Schmidt 1985b: 154).

Classification of certain words appears to be without explanation (Dixon 1972: 310). Thus, “dog”, “platypus”, “bandicoot”, and “echidna” are classified as Class II, and not Class I as their animateness predicts. Although the explanation is unknown today, it is possible that there was an explanation at an earlier stage, but this was lost as the language altered (Schmidt 1985b: 152).

As can be seen, the semantic basis of TD noun classification is quite complicated. Many intricacies of the system are based on knowledge of traditional cultural heritage and associated concepts. For YD speakers not familiar with relevant beliefs or myths, the TD system contains many areas of non-functional complexity (Schmidt 1985b: 152–153).

8.2.6.2. *Membership changes in Young Dyirbal noun classification*

In this respect, YD speakers can be divided into two groups. The five fluent YD speakers, from EM to EB on the continuum, exhibited only slight deviation from the TD system, while less-fluent speakers, from LN to DH on the continuum, used radically-simplified YD classification system (Schmidt 1985b: 159). In the following, we shall look at the less-fluent speakers’ noun class system, which shows a more striking departure from the traditional system than that observed in the fluent YD speakers. Their system is as follows (Schmidt 1985b: 158):

		class	noun class marker form
animate	masculine, unmarked	I	<i>bayi</i>
	feminine	II	<i>balan</i>
inanimate		IV	<i>bala</i>

Less-fluent YD speakers reorganize the system of noun classification as a clear-cut and simple system of animateness and sex, in contrast with the more complex TD system where nouns are categorized into classes according to their association with culturally-important concepts. All nouns belong to one of two groups, animate or inanimate. All inanimate nouns are grouped under the Class IV form *bala*. Animate nouns are grouped according to sex: Class I (*bayi*) – male; Class II (*balan*) – female. In YD, as in TD, humans are always specified for sex. For other animate beings, specification of sex is optional. Class I is unmarked, i.e. if the sex of the referent is unspecified, the Class I noun marker is used (Schmidt 1985b: 153, 155), e.g.:

bayi yuri ‘[male, or sex unspecified] kangaroo’ (Class I)
balan yuri ‘[female] kangaroo’ (Class II)

Specifically, the following changes occurred during this re-categorization (Schmidt 1985b: 155–158).

(a) Class III was dropped.

(b) In TD, the concepts of Class II included femininity, water, fire and fighting. In YD the concepts of water, fire and fighting are no longer associated with Class II. Only one basic concept, femininity, remains as criterion for classing nouns as Class II.

(c) TD rules for transferring class membership were dropped. They are (i) mythological association, (ii) concept association, and (iii) marking of harmfulness and other important properties.

(d) Unexplained exceptions (“dog”, “platypus”, “bandicoot”, “echidna”) are placed in Class I with other animates.

8.2.7. Lexicon

8.2.7.1. *Vocabulary test*

In order to gauge the degree to which YD vocabulary was diminished, Schmidt asked YD speakers to give Dyrbal equivalents of English words in a 498-item list (consisting of 322 nouns, 62 adjectives and 114 verbs). It included basic core vocabulary and culturally-important lexical distinctions. The results of the test are shown in Figure 8-6 (Schmidt 1985b: 169–170).

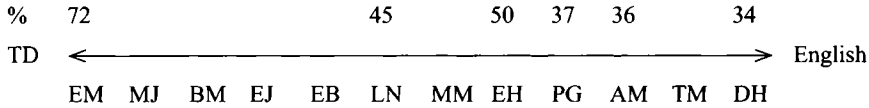


Figure 8-6. Loss of vocabulary

Figure 8-6 shows the following (Schmidt 1985b: 170).

(a) There is noticeable reduction in YD vocabulary. None of the YD speakers recalled all 498 items; scores ranged from 170–356 words.

(b) Reduction in vocabulary correlates roughly with grammatical proficiency (cf. Figure 8-5). Figure 8-6 indicates a gradual decline in the scores as the YD continuum progresses.

8.2.7.2. *Vocabulary areas resistant to loss*

While there is overall reduction in YD vocabulary, there are some zones of maximum resistance, i.e. areas of the lexicon where quite a few Dyirbal forms are retained (Schmidt 1985b: 175–178).

[1] Parts of speech

Nouns were more successfully remembered than verbs or adjectives. This suggests that in a vocabulary loss situation, it is the noun items with real-world referents that are most resistant. In contrast, YD speakers have a much smaller number of verbs and adjectives, which describe actions, states and qualities.

[2] Islands of lexemes

Within nouns, islands of lexemes are preserved. YD speakers displayed a tendency to recall items referring to the following areas of the lexicon.

(a) The human body, e.g. *murray* ‘hair’, *dirra* ‘tooth’, *rulgu* ‘heart’, *gay-ga* ‘eye’.

(b) Human classification, e.g. *yara* ‘Aboriginal man’, *jugumbil* ‘Aboriginal woman’, *nyalngga* ‘child’, *guwuy* ‘male ghost’, *guynggun* ‘female ghost’.

(c) Well-known animates, e.g. generic terms such as *jabu* ‘fish’, *girimu* ‘snake’, *dundu* ‘bird’. Names of well-known species were also commonly recalled, e.g. *walguy* ‘taipan’, *maguy* ‘carpet snake’, *bugal* ‘black bream’.

In contrast with these three areas, there are areas where informants scored poorly.

(d) Specific terms referring to types of animals and trees: in identifying pictures and live examples, YD speakers were often able to give the specific English terms, e.g. *ironbark*, *bottlebrush*, *candlenut*, *blackbean*, but not the Dyirbal equivalents.

(e) Terms referring to inanimate or culture-specific items were also prone to loss. They include artefacts (e.g. yamstick, nullanulla, spear), ceremony (e.g. fighting ground, various song styles), weather (e.g. wind, cloud, storm), and geography (e.g. plain, cave, sand).

(f) Kinship was another area affected by vocabulary loss. Many of the YD speakers appeared very uncertain of the complicated kinship system. The loss of kinship terms is associated with the disintegration of the tribal unit and upheavals in the traditional social fabric.

8.2.7.3. *Utilization of the limited vocabulary in Young Dyirbal*

The YD vocabulary has diminished drastically, as seen above, and this is compensated for by two main devices: semantic collapse and lexical substitution (Schmidt 1985b: 183–189).

[1] Semantic collapse

Semantic collapse tends to occur when the meaning of a specific Dyirbal word is totally covered by a more general Dyirbal term (Schmidt 1985b: 189). Such semantic collapse is conducive to extreme parsimony in the YD lexicon (Schmidt 1985b: 186). Examples follow.

(a) Adjectives (Schmidt 1985b: 185). In TD there are various forms which are semantically equivalent to the English adjectives ‘big’. The adjective form varies depending on the type of animal: the generic word *jugi* ‘big (generic)’, and specific words such as *wayja* ‘big (water goanna)’, *yunguy* (J)/*yirrawuru* (G) ‘big (carpet snake)’, *mangarra* (J)/*wulmbin* (G) ‘big (kangaroos and wallabies)’, *gunuji* (J)/*mubarray* (G) ‘big (eel)’, *wagala* ‘big (scrub turkey)’, and *mil-gu* ‘big (bream)’. (“J” refers to the Jirrbal dialect, and “G” to the Girramay dialect; Schmidt 1985b: xvi. Jirrbal, Girramay and Mamu are collectively called Dyirbal by Dixon 1972: 23.) In YD the animal-specific forms are lost. All YD speakers use the unmarked form *jugi* ‘big’. This form is extended to cover all nouns.

(b) Nouns (Schmidt 1985b: 186). YD speakers often collapse a range of TD nouns by extending the unmarked generic term, or a form referring to a common species, to cover other specific forms. Thus, TD has *marbu* ‘lice’ and *ni-wan* (J)/*niyan* (G) ‘nits’, but YD employs just *marbu* for ‘lice’ and ‘nits’. TD has *jaban* (J) ‘spotted eel’, *giringan* ‘black eel’, *gunyin* ‘spotted eel with white belly’, and *gurrlil* ‘old *jaban* species’, but YD has just one corresponding noun: *jaban*.

[2] Lexical substitution

Schmidt distinguishes “lexical substitution” from “loan words”. Loan words, from English, have been assimilated to the Dyirbal sound system (Schmidt

1985b: 182), whereas lexical substitution involves non-assimilated words, from English. In YD, lexical substitution is a more common device (Schmidt 1985b: 189) than semantic collapse, and the intrusion of non-assimilated English forms is common (Schmidt 1985b: 183). YD speakers frequently depend on English words to bridge gaps in their Dyirbal communicative competence (Schmidt 1985b: 183). Examples include *happen, to, and helicopter* in (8-1) in 8.2.2.2.

We have presented a very brief outline of Schmidt's description of dying Dyirbal, paying attention to phonology, morphology, syntax, semantics and lexicon of YD. It is not certain that Dyirbal is representative of dying languages. Nonetheless, the preceding account will have shown what may happen to the structure of a dying language.

There is one thing that Schmidt did not discuss, viz. the fate of the avoidance style. Schmidt (1985b: 186–187) refers to the avoidance style of TD, but she does not mention whether it was still used by YD speakers or not. In view of this, it may be inferred that the avoidance style was no longer used or remembered by YD speakers.

8.3. Loss of the avoidance style in Warrungu (Australia)

In traditional Australian Aboriginal communities certain kin members are in a taboo relationship to each other. Thus, a man and his mother-in-law should avoid close contact and may not address each other directly. In referring to each other they have to use an “avoidance speech style” (Dixon 1980: 58–59) or “a respect register” (Alpher 1993). See, for instance, Tsunoda (1981: 14–15, 215–220) on the avoidance style of Jaru (also spelt Djaru) of Western Australia.

In Dyirbal, the avoidance style is called Jalnguy. It has identical phonology, and almost exactly the same grammar, as the ordinary style. But it has an entirely different vocabulary (Dixon 1972: 32, 1980: 61–64).

Warrungu was spoken immediately southeast of Dyirbal. Although they are not very closely related, they are typologically very similar. For example, Warrungu, too, had antipassivization and syntactic ergativity (Tsunoda 1988a). The organization of the avoidance style of Warrungu would have been very similar to that of Dyirbal.

The late Alf Palmer (mentioned in 5.2-[3], [6], and 5.3.5), who was the last fluent speaker of Warrungu, was highly proficient in it. Thus, he remembered details of, and even irregularities in, morphology; see 13.1.7-[8]. He had a full command of antipassivization and syntactic ergativity. He produced about six

hours of running – smooth and not halting – texts, with just two or three English words intervening. His command of Warrungu was very close to what it would have been when the language was fully thriving. This is obvious when he is compared with the speakers of Jaru and other living languages the writer has worked with in Kimberley, Western Australia.

Alf Palmer was fully aware of the value of his language, and he used to say to the writer, “I am the last one to speak Warrungu. When I die, this language will die. I’ll teach you everything I know, so put it down properly” (Tsunoda 1991: 203, 1996a: 155, 2000b, 2004: 213-214). Indeed, he made every effort to have everything he knew recorded for the posterity. However, he used to say that there was one thing that he could not teach, and that it was Jalnguy. He knew the word ‘Jalnguy’, which he glossed ‘big word’. He said that Jalnguy had existed in Warrungu as well, but he admitted that he could not speak it.

That is, even a fluent speaker like Alf Palmer did not acquire the avoidance style. This suggests that a special speech style, or at least an avoidance style, is one of the first things that cease to be transmitted. (A similar view is put forward by Black 1993: 214 and Schmidt 1990: 123, regarding Australian Aboriginal languages.)

As noted in 5.3.5, this order of loss, i.e. a special style being lost before the ordinary style, is an instance of the top-down pattern of language death.

8.4. Discussion

8.4.1. Introduction

There is already a large literature on structural changes observed in language endangerment; see the works cited in 8.1. One obvious question to ask is “to what extent it may be possible to generalize, theorize, or establish universals concerning” these phenomena (Campbell 1994: 1964). Dressler (1981: 5) explicitly states: “The fundamental task of a linguist working on language decay and language death is to identify, to describe and to try to explain linguistic phenomena of language decay and language death”. However, some scholars take a rather cautious stance. Thus, in her survey of language death in Uto-Aztecan languages, Hill (1983: 272) states: “An examination of Uto-Aztecan contexts alone argues that there is not enough homogeneity in the process to justify the current emphasis on universals. Investigators of language death should be extremely suspicious of general claims about the presence or absence of particular linguistic processes in language death”. Despite such a warning, it is tempting to propose generalizations and put forward explanations of these phenomena, and “it is fully to be expected that theorizing about language death will con-

tinue” (Campbell 1994: 1965). We shall look at some of the generalizations that have been advanced.

8.4.2. Causes of structural changes

There are at least two factors that cause these structural changes (Dorian 1999a: 99, 2001b: 8358; Gal 1989: 313–314; Hill 1989: 163; Menn 1989: 335; Sasse 1992b: 61–63).

(a) Incomplete acquisition of the language. This may apply to many of the young Dyrbal speakers discussed above.

(b) Disuse of the language. A speaker may lose his/her command of the language after so many years of its disuse.

In connection with (b), it is commonly assumed that reduction in language use is invariably accompanied by reduction in structure (Campbell 1994: 1962; Dorian 1977: 29), and “the general expectation is that [the change] will be extensive” (Thomason 2001: 236). However, there appear to be exceptions to this generalization (Nancy Dorian, p.c.). Thus, Thomason (2001: 236–237) reports on Montana Salish of the USA as follows. This language is seriously endangered, with fewer than sixty fluent speakers remaining. But in spite of a hundred and fifty years of contact with English (which all current speakers of Montana Salish also speak fluently), it has borrowed almost nothing from the latter – only a handful of words, and no structure at all. Although it has lost certain stylistic resources, it has retained its syntax, semantics, most areas of the lexicon, elaborate phonology, and very complex morphology, despite the fact that its morphology is among the most complex in the world.

That is, reduction in use does not necessarily lead to reduction (or at least, extensive reduction) in structure. Additional (possible) examples of exceptions to the above-cited generalization are cited by Dorian (1977: 32, note 7, 1981: 115) from Jane Hill’s observation of Luiseño and Cupeño of California: “You either speak fairly well or not at all”. All these exceptions consist of groups of people. If we include individuals, such exceptions seem much more common, e.g. Alf Palmer (mentioned in 5.2, 8.3), who was a fluent speaker of Warrungu despite the fact that probably he had not spoken it for more than half a century, and Ishi, the last speaker of Yahi of California (Swadesh 1948: 227–228).

8.4.3. Occurrence/non-occurrence and types of structural changes

A dying language may undergo either structural changes or it may not. We shall look at these two possibilities.

[1] No change

In the case of sudden death, rather than gradual death (5.3.3), the language will not undergo any structural change. And it will leave “no obsolescing state to investigate structurally” (Campbell and Muntzel 1989: 183). One example is the case of the Tamboran language of Sumbawa, Indonesia, whose speakers were killed in a volcanic eruption (5.3.2).

In addition, although this is uncommon, there appear to be instances of gradual death that involve no structural change, e.g. Montana Salish cited in 8.4.2.

[2] Changes

Various terms have been employed for various types of changes. Generally, they are not defined or characterized, they are used in different senses by different authors, and sometimes two or more terms seem to be used interchangeably. In the following, we shall classify them and, for two of them, we shall cite their tentative characterizations.

General terms: language attrition, language decay, language degeneration, language erosion. These are the terms listed in 2.3, to refer to the structural aspects of language endangerment. They can be used as general terms for the phenomenon.

Structural changes that are observed in endangerment situations may be classified into the following five types: (i) loss, reduction, shrinkage, (ii) simplification, regularization, levelling, (iii) retention of complexity, (iv) innovation, elaboration, and (v) introduction. (This classification is based on Dorian 1999a, 2001b, but it differs from hers slightly.) Strictly speaking, retention is not a change, but it is conveniently treated here.

These terms are taken from previous studies, except that the term “introduction” has been adopted for the present work; it refers to “the introduction of foreign elements into” a given language (Weinreich 1974: 1). For this phenomenon the term “interference” is often used, e.g. Schmidt (1985b: 192) (8.2.2.2-[2]), Trudgill (1978: 40), and Weinreich (1974: 1). However, in the present work, the term “introduction” is preferred, for interference is a cause (and not a type of change) that may bring about any of the types of change listed in (i) to (v), and consequently it should not be included among the types of changes. (Also, Fishman 1968: 29 argues that the term “interference” is inappropriate on the ground that it has a pejorative connotation.)

The terms listed above may appear self-evident, but in fact some of them are not easily susceptible to a precise definition. For example, regarding simplification, Hoenigswald (1989: 349) notes that simplification ranks high among the putative characteristics of dying languages, but that simplicity is not simple. Similarly, the concept of reduction is resorted to in virtually all works on language decay, but, it, too, is difficult to define. Nor is it a straightforward matter

to distinguish simplification and reduction. Trudgill (1978: 36–37) adopts the following definitions.

(a) Simplification: an increase in regularity in a language.

(b) Reduction: actual loss of some part of the language – or more precisely a loss of some part of a component of the grammar without resulting complication of another component to make up for this loss.

Trudgill (1978: 48) admits, however, that this is by no means a clear-cut distinction, and that it is not easy to apply in practice.

8.4.4. Brief overview of structural changes

8.4.4.1. Introduction

We shall furnish a very brief overview of structural changes, referring to Dyrbal and Warrungu, and also citing additional instances from other sources. The following overview is inevitably very brief, and the interested reader is encouraged to consult the sources for details and for further examples.

8.4.4.2. Phonology

A speaker may have two phonological systems at his/her disposal (see 8.2.2.2 on Dyrbal, and Suwilai 1998: 166 on So (Thavung) of Thailand) and even four phonological systems (Kieffer 1977: 76 on Ōrmuri and Parāči of Afghanistan).

Most of the relevant works on phonology are concerned with segmental phonemes (or rules that apply to them), e.g. Dressler (1972) on Breton, and Schmidt on Dyrbal (8.2.2.2). There are only a very small number of works that examine suprasegmental elements or other issues in phonology. Thus, Kieffer (1977: 76–77) seems to deal with the intonation and accent of Ōrmuri and Parāči. Voegelin and Voegelin (1977: 337) touch on stress in Tübatulabal of California. Mithun (1989: 251–255) discusses stress and “metathesis” (actually, a process of feature spreading) in the variety of Cayuga spoken in Oklahoma. It is interesting to note that, contrary to what might be expected, the stress system in Tübatulabal and that in Oklahoma Cayuga do not seem to be moving towards that of the dominant language, viz. English.

Suwilai’s (1998) account of So (Thavung) of Thailand is more detailed than the above-cited works. It describes the following:

(a) regarding segmental phonemes: vowels, semi-vowels and consonants;

(b) regarding suprasegmental elements: (i) voice quality (clear voice, creaky voice, breathy voice), (ii) pitch (high, mid, low), and (iii) tension (tense, lax), among other factors, and;

(c) concerning other issues: word and syllable structures.

Most changes observed in language decay seem to involve loss or reduction. Examples include (i) the loss of the opposition between /rr/ and /r/ in Dyirbal (8.2.2.2), and (ii) the loss of the trilled *r*, (all?) consonant clusters, and certain syllables in So (Thavung) of Thailand (Suwilai 1998: 161–162). There are also instances of introduction, e.g. the introduction of fricative *f* from English into Dyirbal (8.2.2.2).

Dressler (1972: 455) suggests that phonetic [sic] free variation is one of the features that characterizes language death. It is not certain if this is applicable universally, but there are indeed examples thereof, e.g. the fate of the /rr/- /r/ opposition in Dyirbal.

8.4.4.3. *Morphology*

Loss of morphology, in the form of reduction of allomorphy and levelling of paradigms, is well-documented (Campbell 1994: 1962; Campbell and Muntzel 1989: 191; Craig 1997: 263). Thus, in Dyirbal, the ergative allomorphy was reduced, and was lost, and finally the paradigm of the nouns (which had been distinguished according to the stem-final phoneme of the nouns) was levelled (8.2.4.1). That is, this process exhibits reduction or loss of allomorphy, and levelling of paradigms. The same applies to the locative case (8.2.4.2). Note, however, that these two processes did not lead to simplification (in Trudgill's sense, i.e. "an increase in regularity in a language"). This is because the loss was compensated for by a rigid word order (in the case of the ergative) and by the use of prepositions (in the case of the locative).

Loss of morphology is frequent (Campbell 1994: 1962; Campbell and Muntzel 1989: 191). However, retention of morphological complexity, too, is clearly attested (Dorian 1999a: 101–102, 2001b: 8359). Examples include Scottish Gaelic (Dorian 1978: 608), Arvanitika (a variety of Albanian spoken in Greece) (Trudgill 1978: 47), Cayuga of Oklahoma (Mithun 1989: 257), Montana Salish (Thomason 2001: 236–237, cited in 8.4.2), and Dyirbal. (Dorian 1978: 608 says that East Sutherland Gaelic is dying "with its morphological boots on".) In Dyirbal, as seen above for the ergative and the locative case, the noun morphology was reduced. However, a fair portion of the verb morphology – both inflectional and derivational – was retained (Schmidt 1985a: 394, 1985b: 216–217, 231). For example (Schmidt 1985b: 75):

- (8-38) They bin *nyinan-gani-nyu* back there.
 PAST sit-ASP-NONFUT
 'They sat for a long time back there.'

(*bin* ‘PAST’ is a creole word.) The verb contains the derivational suffix *-gani* ‘do repeatedly’ and the inflectional suffix *-nyu* ‘nonfuture’. This speaker mixes English words, a creole word, and a Dyirbal word. Note that even such a non-fluent speaker uses derivational and inflectional suffixes. Needless to say, the more fluent speakers have a good command of the verb morphology (as well as the noun morphology). Another example, cited from Schmidt (1985a: 394).

- (8-39) she lilbit *wuygi-bi-n*, *ban*
 ill-INTR.VERBALIZER-NONFUT she
bun.gi-gani-nyu *waymban-gani-nyu*,
 lie.down-ASP-NONFUT walkabout-ASP-NONFUT
 oh she *baji-baji-yarra-nyu* down.
 fall-fall-ASP-NONFUT
 ‘She was a little bit sick; she lay down, (then) got up; oh, she started to fall down!’

These sentences involve the following suffixes: *-bi-* ‘intransitive verbalizer’, *-n* ‘nonfuture’, *-gani* ‘do repeatedly’, *-nyu* ‘nonfuture’, *-yarra* ‘do a bit more, start to do’ (cf. Schmidt 1985b: 75). Note also that *baji-baji-yarra-nyu* involves reduplication. Examples such as this show that morphological complexity is retained in dying Dyirbal.

Regarding morphology, we have seen instances of (i) reduction, loss, (ii) simplification, levelling, and (iii) retention of complexity. In addition, instances of innovation (Dorian 1999a: 105) have been reported, although this may be unexpected for languages in their terminal stage. Thus, Gal (1989: 320, 327–328) reports: Young speakers of Hungarian in the Austrian town of Oberwart (7.2.2-[4]), which is surrounded by German-speaking areas, have a reduced lexicon. Nonetheless, their speech exhibits innovations, compensating for the reduction of their lexicon. Thus, they coin numerous new compounds. Some of them are based on German, but others are not. Examples of the latter are shown in Table 8-4. They involve verbal prefixes of Hungarian, rather than those of German. This shows that linguistic creativity is witnessed even in obsolescent languages (Dorian 1999a: 103, 2001b: 8359).

Table 8-4. Neologisms in Young Oberwart Hungarian

neologism	conventional form	gloss
<i>lemond</i>	<i>lehord</i>	
down + say	down + carry, drag	'bawl out'
<i>lehoz</i>	<i>kihoz</i>	
down + bring	out + bring	'find out'
<i>megolvas</i>	<i>elolvas</i>	
PERF + read	away + read	'read over [a book]'
<i>elvesz</i>	<i>felvesz</i>	
away + take	up + take	'hire'

For additional examples of creativity and innovations in morphology, see Dalton et al. (1995: 88–92), Elmendorf (1981: 43), and Miller (1971: 118).

Further comments on the fate of morphology follow.

(a) Although this does not seem to be mentioned in the literature, among inflected forms of verbs, imperative forms appear to be the most resistant to loss. Thus, the late Reggie Palm Island, the last speaker of the Buluguyban language of Palm Island, Queensland, Australia (mentioned in 5.2-[7]) yielded about 50 words, but apparently he was not able to form a sentence. He only remembered what appear to be frozen expressions such as “You man”, “I to the camp”, “You stand up”, and “Lie down”. (See Tsunoda 1996b.) All of the two or three verbs that Reggie Palm Island remembered seem to be in the imperative form. This suggests that, if verbs survive at all, they are most likely to survive in the imperative form.

(b) Mayumi Kudo (p.c.) reports on the verb morphology in the dying dialects of Japanese she has been studying: polite forms disappear before ordinary forms do. Note that this is parallel to the top-down pattern of language death (5.3.5, 8.3).

8.4.4.4. *Syntax*

For syntax, four tendencies have been noted: (i) replacement of synthetic forms (of morphology) by analytic forms (of syntax) (Campbell and Muntzel 1989: 192; Trudgill 1978: 42), (ii) loss of case systems (of morphology) and concomitant rigidification of word order (of syntax) (Campbell 1994: 1962), (iii) loss or reduced use of subordination (Campbell 1994: 1962; Craig 1997: 264), and (iv) innovation.

[1] Replacement of synthetic forms by analytic forms

Examples include the loss of the locative suffix and the subsequent use of a preposition in its place in Dyrbal (8.2.4.2), and the replacement of the ablative case suffix with a preposition in Arvanitika (Trudgill 1978: 44). Another example is provided by Pipil of El Salvador (Campbell and Muntzel 1989: 192), which formerly had future suffixes, e.g. (8-40). In modern Pipil, future suffixes have been replaced by analytic forms, e.g. (8-41).

(8-40) *ni-panu-s.*
I-pass-FUT
'I will pass.'

(8-41) *ni-yu ni-k-chiwa.*
I-go I-it-do
'I'm going to do it.'

[2] Loss of case systems and rigidification of word order

In Dyrbal, loss of the ergative case suffix was compensated for by a rigid word order (8.2.4.1, 8.4.4.3). Similarly, in a variety of Estonian spoken in Sweden, reduction of the case-marking of the object is leading to fixed word order, viz. AVO of Swedish (Maandi 1989: 231).

[3] Loss or reduced use of subordination

An example of loss of subordination is reported by Schmidt (1985b: 119) regarding relative clauses in Young Dyrbal. (This was not cited above.) For additional examples of loss of subordination, see Elmendorf (1981: 44), Sasse (1992b: 70), and Voegelin and Voegelin (1977: 338).

What appear to be instances of reduced use, but not loss, of subordination are provided by Hill (1973, 1983, 1989) from Cupeño of Southern California and Nahuatl of central Mexico. Thus, regarding two Cupeño speakers, Hill (1983: 270–271) states: "They were able to use and understand complex sentences. However, in speech actually recorded, they use these at an extraordinary low rate when compared with speakers of the same age, recorded reciting the same texts, fifty years before". See also Hill (1973: 34).

[4] Innovation

Hill (1989: 154) reports that Modern Nahuatl has innovated a set of relative pronouns (based on its own materials) and uses relative clauses of the Spanish type alongside relative clauses of Nahuatl type (which simply adjoins two clauses, without any morphological change in the relative clause verb).

8.4.4.5. Discourse

Pensalfini (1999) reports an interesting – and perhaps unusual – instance of re-analysis or reinterpretation (a type of innovation) at the discourse level, from the Jingulu language of Barkly Tableland in Northern Territory, Australia. This language has an ergative-absolutive case system (cf. Table 8-2), e.g. (Pensalfini 1999: 226):

- (8-42) *dimana-rni darra-ardi.*
 horse-ERG eat-HAB
 ‘Horses eat [it].’

Recently, the “Ergative, and to a lesser extent, the Dative, case suffixes have come to be used as optional indicators of discourse prominence in addition to maintaining their original case-marking uses” (Pensalfini 1999: 225). An example of the (former) ergative suffix that marks discourse prominence (glossed ‘FOC’) (Pensalfini 1999: 228):

- (8-43) *jama-rni karriba maya-nga-yi mulyumulyubi.*
 that-FOC white person hit-1sg-FUT crippled
 ‘I’m going to smash up that white person there.’

Doubling of the ergative case function and the discourse prominence function is possible, e.g. (Pensalfini 1999: 233):

- (8-44) *jama-rni warlaku-rni-ni nganya ngaba-ju ngamurlu.*
 that-FOC dog-ERG-FOC fur have-do big
 ‘That dog has long fur.’

(*-rni* and *-ni* are allomorphs of this suffix; Pensalfini 1999: 228.) Examples such as this “show that there really are separate use of */rni/* as a marker of discourse prominence and as a marker of Ergative arguments” (Pensalfini 1999: 232).

Pensalfini (1999: 225) states that this use of the ergative and the dative case suffixes as discourse prominence markers “appears to be extremely recent (30-40 years)”. This use is not observed in Ken Hale’s data of Jingulu collected in 1960 (Pensalfini 1999: 237).

Pensalfini (1999: 236) hypothesizes that “focus marking has arisen in the speech of the last few generations of Jingulu speakers as a result of the increasing functional load of English and concomitant decrease in Jingulu’s functional load among Jingulu speakers”. That is, “it is conceivable that some learners mistakenly analysed Jingulu as an entirely Accusative language, based on English” and “re-analysed the core case markers (ERG and DAT) ... as indicating discourse prominence” (Pensalfini 1999: 238).

As Dorian (1999a: 105) comments, developments such as that reported from Jingulu show “a remarkable potential for linguistic elaboration even at a very late stage in” language endangerment.

8.4.4.6. *Lexicon and semantics*

Two tendencies have been noted: (i) loss, and (ii) relexification (Craig 1997: 262).

[1] Loss

“Lexical attrition” (Craig 1997: 262) was exemplified for Dyirbal by Schmidt (8.2.7). As a general tendency, some lexical items appear to be more susceptible to loss than others. Obviously, they include those for concepts or objects that are no longer familiar or culturally irrelevant to the speakers, due to a change in life style, e.g. terms for aspects of the traditional life (Craig 1997: 262; Miller 1971: 118); see 8.2.7.2. Also, specific items are likely to disappear before generic items do (8.2.7.2; Campbell 1994: 1963; Mithun 1989: 248). Thus, Mithun reports: A Cayuga speaker in Oklahoma, the USA, knew “foot”, but she could not come up with “ankle” or “toes”. She knew “face”, but not “cheeks”. In contrast, those items which seem to be resistant to loss include those for human body parts (but obviously not specific ones), and those for close kin (8.2.7.2; Kieffer 1977: 78; Suwilai 1998: 158).

[2] Relexification, or replacement of the native lexicon with that of the dominant language (Craig 1997: 262)

This is an instance of introduction. It is illustrated for Dyirbal by Schmidt (8.2.7.3-[2]). Hill and Hill (1977) provide an account of massive relexification from Spanish into Nahuatl of central Mexico. Examples are given in 8.4.4.8. Hill and Hill (p.67) note that since the speakers feel that Nahuatl is “spoiled” by the high proportion of Spanish lexical items, the relexification contributes to its death. This is an instance of the type of language purism which contributes to language death (6.3-[9]-(b-ii)).

There does not seem to be much work on the semantics in dying languages. Nonetheless, following two tendencies would be expected to obtain. (i) Semantic oppositions that concern concepts or objects that are no longer familiar or culturally irrelevant to the speakers will be lost early. (ii) Those which have to do with specific concepts (as against generic ones) will be lost early.

8.4.4.7. *Registers/speech styles*

Another common phenomenon in language endangerment is “stylistic shrinkage”, resulting in “monostylism” (Dressler 1972: 454–455, 1982: 326; Dressler and Wodak-Leodolter 1977b: 36–37). Generally a higher or formal style seems

to be lost earlier than the ordinary style (Campbell 1994: 1963). See Campbell and Muntzel (1989: 195), Elmendorf (1981: 38, 40, 44), and Hill and Hill (1978, 1980: 332–336) for examples. More specifically, a higher or formal speech seems the first to be lost among all the components of a language (Craig 1997: 261). An example concerns the loss of the avoidance style (Jalnguy) of Alf Palmer's Warrungu (8.3). Recall also that, in the verb morphology of certain dying dialects of Japanese, polite forms disappear before ordinary forms do (8.4.4.3).

The above-cited instances of the loss of a higher or formal style are of the top-down type. It has been argued that there are instances of the bottom-up type in the loss of speech styles. However, as noted in 5.3.5, no “true” instance of the bottom-up type appears to have been reported.

8.4.4.8. *Are there universals?*

The preceding survey of the types of structural change observed in endangered languages shows that there are a number of recurrent tendencies, and this naturally tempts one to advance generalizations or even universals. However, there are also exceptions to these tendencies, and they render such an attempt difficult. We shall cite another set of examples to show this difficulty. This is in no way intended as a disapproval of the pursuit of generalizations or universals. It is merely offered as a caution to be taken into account in such an endeavour.

We shall provide a very simple and straightforward example, taken from morphology. It seems that, in a language contact situation, generally the affixes (whether inflectional or derivational) are taken from the minority language and the roots from the dominant language (Pattern A in Table 8-5), rather than the other way round (Pattern B). Two examples from Dyrirbal (Dixon 1972: 326): *wagi-bi-n* ‘work’ (*wagi* is from the English *work*, *-bi-* is the Dyrirbal suffix used for deriving intransitive verbs, and *-n* the Dyrirbal inflectional suffix for the non-future tense), and *majirim-ba-n* ‘muster’ (*majirim* is from the English *muster*, and *-ba-* is the Dyrirbal suffix used for deriving transitive verbs).

Table 8-5. Root and affix

	Root	Affix
Pattern A	from the dominant language	from the minority language
Pattern B	from the minority language	from the dominant language

However, there are exceptions to this general tendency. We shall cite examples from Nahuatl and Aleut.

[1] Nahuatl of Mexico

The following is the writer's own analysis of the materials provided by Hill and Hill (1977); it is not mentioned in the source. As expected, there are a fair number of examples of Pattern A, i.e. the root from Spanish and the affix from Nahuatl. Most of them are nouns and verbs. Examples of nouns include the following: *mizahtzin* 'mass' (Spanish *misa*, Nahuatl *-tzin*, 'respect or diminutive suffix'), *movisat* 'your vision' (Nahuatl *mo-* 'your'). Nonetheless, Pattern B is attested, although there is only one example: *hueyote* 'large one' (Nahuatl *huey* 'big', Spanish *-ote* 'augmentative').

[2] Aleut

This language is spoken on the Aleutian Islands of the USA, and Bering and Copper Islands of Russia (Comrie 1981: 252). The variety of Aleut spoken on Copper Island (about 90 km from the east coast of Kamchatka, east Siberia) exhibits unusual deviations from the other varieties of Aleut. The situation seems to be roughly as follows (Comrie 1981: 253; Thomason and Kaufman 1988: 234; Vakhtin 1998: 321). With nouns, many noun roots and the derivational morphology are of the Aleut origin. With verbs, the majority of verb roots are Aleut, but the morphology is Russian (i.e. Pattern B of Table 8-5). Vakhtin (1998: 319) provides a contrasting pair of examples, one from the speech of a young Aleut speaker of Atka, and the other from the Copper Island Aleut. (i) Young Atkan Aleut: *fish-i-za-xx* 'He usually fishes', and (ii) Copper Island Aleut: *chali-y-it* 'He usually fishes'. Example (i) conforms to Pattern A; the root is from English and the suffixes are from Aleut. In contrast, in (ii), the root is Aleut, but suffixes are Russian, i.e. Pattern B.

To sum up, while the general tendency seems to be for the affixes to be adopted from the minority language and the roots from the dominant language, there are also instances of the opposite pattern, and it seems impossible to put forward any universal on this issue. That is, in general, while there are recurrent tendencies, it is extremely difficult to set up a universal.

8.4.5. Comparison with other phenomena

8.4.5.1. Introduction

Structural changes in language endangerment (often simply "language decay") have been compared with phenomena such as the following (Campbell 1994: 1965; Craig 1997: 260; Dorian 1999a: 99, 2001b: 8358; Hill 1983: 259; Jones 1998: 40–43): (i) pidgins, creoles, (ii) creolization in reverse, (iii) changes in other contact situations, (iv) "normal" changes, (v) language acqui-

sition: first language (or child language) and second language, and, (vi) aphasia. As noted in 4.3.3, interest in language decay and the other phenomena listed above has been prompted by the conviction that study thereof will provide different insights from those obtained from the study of so-called “normal” languages.

We shall consider pidgins and creoles in some detail (8.4.5.2), and provide brief comments on the other phenomena (8.4.5.3).

8.4.5.2. *Pidgins and creoles*

It will be useful to provide the definitions or characterizations of relevant terms.

(a) Pidgin: “A pidgin is a contact vernacular, normally not the native language of any of its speakers. It is used in trading or in any situation requiring communication between persons who do not speak each other’s native languages. It is characterized by a limited vocabulary, an elimination of many grammatical devices such as number and gender, and a drastic reduction of redundant features” (Decamp 1971: 15).

(b) Pidginization: “how a pidgin develops” (Aitchison 1994: 3182).

(c) Creole: “a pidgin which has become someone’s first language” (Aitchison 1994: 3182). A “creole is the native language of most of its speakers. Therefore its vocabulary and syntactic devices are, like those of any native language, large enough to meet all the communication needs of its speakers” (Decamp 1971: 16).

(d) Creolization: “how a creole develops” (Aitchison 1994: 3182).

Examples of Kriol – a variety of creole spoken in northern Australia; cf. 7.3.1-[2] – follow. (The English orthography is used, in order to facilitate reading of these sentences.)

(8-45) *Yeah, when I bin little girl.*

(8-46) *I bin have-im.*
‘I had [two babies].’

(8-47) *Like you have-im smoko belonga to you.*
‘Just as you have your smoko.’

Language death has been likened to pidginization (Campbell 1994: 1965). Thus, Dressler and Wodak-Leodolter (1977b: 37) state that language death can be looked at as a sort of pidginization. Indeed, as Schmidt (1985a: 393–394, 1985b: 216) points out, sentences such as (8-48) “would probably be classified as a ‘pidgin’”:

- (8-48) *dubala bin* see lion, *dubala bin minba-n.*
 3DU PAST 3DU PAST shoot-NONFUT
 ‘They two of them saw the lion; they shot it.’ (Schmidt 1985a: 393)

Compare (8-48) with pidgin/creole sentences (8-45) through (8-47). Similarly, (8-1) and (8-39) closely resemble pidgin/creole sentences.

However, some other scholars, including Schmidt herself, are opposed to this view. They argue that, while there are indeed similarities, there are significant differences as well, between dying languages and pidgins. (These arguments seem to focus on pidgins, and to exclude creoles.)

[1] Similarities between them include the following.

(a) Regarding the structure and the like

(a-i) Both are simplified and in some sense “inadequate”; they do not provide all the features which native speakers seem to demand of a language (Campbell 1994: 1965).

(a-ii) Both exhibit limited vocabulary, little clause subordination, morphological simplicity, and more regular surface forms (Campbell 1994: 1965; Dressler and Wodak-Leodolter 1977b: 37; Romaine 1989: 375; Schmidt 1985a: 393–394, 1985b: 216). See 8.4.4.3, 8.4.4.4, and 8.4.4.6.

(a-iii) Both are unstable and show considerable flux (Campbell 1994: 1965). See 8.2.2.2 (on phonology) and 8.2.4.1 (on the ergative case) of Dyirbal.

(a-iv) Both involve the loss of grammatical redundancy; alternative structures are reduced to a single one (Campbell 1994: 1965). See 8.2.4.1.

(a-v) Both tend to replace synthetic forms by analytic ones (Campbell 1994: 1965; Romaine 1989: 376). See 8.4.4.4.

(a-vi) In both, obligatory rules change to variable ones (Campbell 1994: 1965; Dressler and Wodak-Leodolter 1977b: 37). See 8.2.4.1.

(a-vii) In both, the polystylism of normal languages moves to monostylism (Campbell 1994: 1965; Craig 1997: 260; Dressler and Wodak-Leodolter 1977b: 37). See 8.3 and 8.4.4.7.

(a-viii) Schmidt (1985a: 393–394, 1985b: 216) points out another similarity between dying Dyirbal and a pidgin: similar word forms are shared, e.g. *bin* as past tense indicator, e.g. (8-38), *nomo* as negative, and pidgin pronoun forms: *mindubala* ‘1du’, *yundubala* ‘2du’, *wifela* ‘1pl’, *yufela* ‘2pl’, and also presumably *dubala* ‘3du’ in (8-48).

(b) Regarding sociolinguistic factors

(b-i) Both are used in contact situations (Campbell 1994: 1965).

(b-ii) Both are of reduced use (Campbell 1994: 1965).

(b-iii) Both typically lack prestige (Campbell 1994: 1965).

(c) Regarding acquisition

(c-i) Both provide inadequate models of native-speaker performance for language acquisition (Campbell 1994: 1965).

[2] Differences

Some scholars argue that there are significant differences between them, such as the following.

(d) Structure

(d-i) In contrast with pidgins, dying languages often retain morphological complexity in certain areas of their grammar; see 8.4.4.3.

(d-ii) Dying languages can undergo elaboration (Nancy Dorian, p.c.), e.g. (i) borrowing of prepositions, e.g. (8-16), (ii) innovative use of pre-existent affixes (Table 8-4), and (iii) creation of a new type of relative clauses (8.4.4.4-[4]).

(e) Manner of acquisition (Campbell 1994: 1965; Craig 1997: 260)

(e-i) Most speakers of an endangered language acquire their knowledge of the receding language in childhood, while most pidgin learners are adults (Campbell 1994: 1965).

(e-ii) Younger speakers of a dying language, even though they may learn the language “imperfectly”, remain in full contact with more fluent speakers (Trudgill 1978: 48), while this does not seem to be the case with pidgin learners.

(e-iii) A dying language may – and often does – have native speakers (cf. Trudgill 1978: 49), while on the other hand, by definition a pidgin lacks native speakers (cf. Campbell 1994: 1965).

(f) Proficiency. Although this does not seem mentioned in the works consulted, there is a difference regarding proficiency. A dying language may have a fluent speaker (or fluent speakers) until its demise. Such a situation seems to be fairly common. Examples include Alf Palmer (mentioned in 5.2-[3], [6], 8.3), the last fluent speaker of Warrungu of Australia, and Ishi (mentioned in 8.4.2), the last speaker of Yahi of California. In contrast, such a situation is highly unlikely to obtain in pidgins. A pidgin speaker is unlikely to have the kind of proficiency that Alf Palmer did, including knowledge of irregularities in morphology and use of subordination. Indeed, by definition, such a language would not be classed as a pidgin.

(g) Changes and the like

(g-i) Life cycle of languages. A pidgin is the embryonic stage of language evolution. In contrast, language death involves an extinction process (Schmidt 1985a: 394, 1985b: 217).

(g-ii) Speed of changes. Generally, language endangerment is “relatively protracted” (Dorian 1978: 608). (Recall that gradual language death is far more

common than sudden language death; see 5.3.3.) Pidgins, by contrast, tend to spring into being rather quickly (Dorian 1978: 608).

(h) Social and sociolinguistic factors

(h-i) Domains of use (Campbell 1994: 1965; Craig 1997: 260). Pidgins typically begin in formal situations between strangers, for purposes that often relate to commerce and trade. In contrast, endangered languages are spoken in informal situations, between people sharing close personal ties (Schmidt 1985a: 394, 1985b: 217).

(h-ii) Speakers' attitudes (Campbell 1994: 1965; Craig 1997: 260). It is likely that few speakers feel a sense of loyalty to an emerging pidgin; but certain speakers have such feelings for dying languages which are associated with pride in cultural heritage and with nostalgia for a pre-contact way of life (Schmidt 1985a: 394, 1985b: 218).

(h-iii) Function (Campbell 1994: 1965). The main utility of a pidgin is its communicative function. In contrast, speakers of a dying language use it for its identity function (Schmidt 1985a: 394–395, 1985b: 218); that is, its function is integrative rather than instrumental (cf. Dorian 1978: 608).

It is interesting to mention in this connection that creoles may symbolize solidarity, in contrast with pidgins. Thus, Romaine (1989: 374) notes: "In many creole-speaking communities, like Haiti, the creole is the language of truth and solidarity. To speak French is synonymous with duplicity and falsehood". This suggests that there is possibly a difference between pidgins and creoles in terms of loyalty and solidarity.

(h-iv) The restriction in use of a dying language is not so severe (Trudgill 1978: 49) as that of a pidgin.

To sum up, some scholars maintain that, although there do exist certain similarities between dying languages and pidgins, there are also significant differences, and that it is erroneous to equate dying languages with pidgins. See Dorian (1978: 608, 1999a: 102) and Schmidt (1985a: 393, 395, 1985b: 218), in particular. See also Campbell (1994: 1965), Craig (1997: 260), Romaine (1989: 377, 379), and Tsitsipis (1989: 117).

8.4.5.3. *The other phenomena*

We have seen, in some detail, similarities and differences between dying languages and pidgins. In the following, we shall very briefly consider some of the observations that have been made on the other phenomena.

[1] Creolization in reverse

Trudgill (1978: 35) suggests that language decay may be considered "creolization in reverse". However, on p.49, he concludes with a caution stance: "the par-

allels are by no means complete". That is, there are differences as well; see also Campbell (1994: 1965) and Schmidt (1985a: 395, 1985b: 215–218).

[2] Changes in other contact situations

Sasse (1992b) maintains that "language decay" and "heavy contact-induced change" need to be distinguished and he proposes a number of criteria for this distinction. However, Campbell and Muntzel (1989: 195) show that in practice such a distinction may be difficult to make. Thomason (2001: 230) argues that attrition (or decay) is the only type of change that is exclusive to language death.

[3] "Normal" changes

It is argued that changes in language endangerment are different from "normal changes" (see Menn 1989: 335 for the term "normal"). For example, Campbell (1994: 1965) reports the claim that the regularity of sound change typical of viable languages may be suspended in dying languages. However, this view is opposed by the claim that they are "just ordinary changes speeded up" (Romaine 1989: 380); see also Campbell (1994: 1962), Cook (1989: 252), Dimmendaal (1992: 132), Dorian (1981: 151, 154, 1999a: 106), Hill (1989: 149), Hoenigswald (1989: 349), Jones (1998: 248, 257), Schmidt (1985b: 212–214), and Tsitsipis (1989: 117). It is relevant to recall that the ergative allomorphy in Gugu-Badhun and that in Yidiny are similar to Stage 2 of Young Dyirbal (8.2.4.1). The ergative allomorphy in Gugu-Badhun appears to be a result of language decay, while the ergative allomorphy in Yidiny may be due to either language decay or "normal" changes.

[4] Language acquisition: first language (child language) and second language, and;

[5] Aphasia

A claim involving [4], [5] and language decay is that "the process of language loss is a mirror image of that of language acquisition, i.e., that what is lost first is what is learned last". Such a claim is reported by Craig (1997: 260, from whom the quotation is cited), Campbell (1994: 1965), Dorian (1999a: 99), Hill (1983: 259) and Schmidt (1985b: 220). Voegelin and Voegelin (1977), who use the term "de-acquisition" to refer to language decay, seem to be among the first to make such a claim. Also, Andersen (1989: 385) states that languages being partially acquired, e.g. a second language, and dying languages seem very similar.

For example, Schmidt (1985b: 220) notes: "Both low-proficiency speakers of a dying language and children in less-advanced stages of language acquisition tend not to use complex linguistic devices". She (1985b: 220) points out the similarities between Young Dyirbal and child language (in general, not of

Dyirbal): a low frequency of clause subordination, absence of inflections, absence of irregularities, and reduced vocabulary. Another – possible – similarity concerns the imperative forms of verbs. If verbs survive at all, they are most likely to survive in the imperative forms (8.4.4.3). The reverse situation seems to obtain in child language. Menn (1989: 342) states regarding child language that imperatives – to be more precise, 2nd person singular imperatives – tend to be learned early. Schieffelin (1985: 536) reports that, in the acquisition of the Kaluli language, which is spoken in the Southern Highland Province of Papua New Guinea, the verbs acquired first include a limited numbers of imperatives.

However, the claim that the process of language loss is a mirror image of that of language acquisition, has been criticized (Craig 1997: 260; Dorian 1999a: 102–103, 2001b: 8359; Mithun 1989: 255–256; Schmidt 1985b: 220–222). Craig (1997: 260) argues that this claim “has not been upheld in recent research on language acquisition and aphasia”, and that “it has not been adequately tested yet for the case of language loss”. In addition, Schmidt (1985b: 218–222) argues that there are essential differences between child language and a dying language. Young Dyirbal speakers have already experienced cognitive and social development, and they are able to supplement gaps in their Dyirbal competence with English linguistic resources. That is, their imperfect command of Dyirbal does not reflect lack of cognitive development or inability at verbal communication, in contrast with early stages of child language acquisition.

There is another difference: while fluent speakers may remain until the death of the language (cf. Alf Palmer and Ishi, mentioned in 8.4.2), the reverse is not true with child language; no child is a fluent speaker when he/she is beginning to acquire the language.

It is interesting to note in this connection that there are reports on structural changes that occur in the process of language revival – a phenomenon that, in a sense, proceeds in the opposite direction from language decay and that is analogous to language acquisition: Bar-Adon (1978) on Hebrew, and Maguire (1991) on Irish. Structural changes in language maintenance (rather than revival) are described by Jones (1998) on Welsh. Similar changes are observed across these three cases. They include the following.

(a) Innovation (Bar-Adon 1978: 546).

(a-i) Creation of neologisms through morphological derivation, semantic extension or the like (Bar-Adon 1978: 546).

(b) Borrowing (Bar-Adon 1978: 546).

(b-i) Borrowing of lexical items (Bar-Adon 1978: 546; Maguire 1991: 221).

(b-ii) Loan translation, calque or semantic transfer (Bar-Adon 1978: 546; Jones 1998: 148, Maguire 1991: 220).

(b-iii) Syntactic transfer (Maguire 1991: 218).

(c) Reduction, e.g. loss of phonemes (Bar-Adon 1978: 547).

(d) Simplification, overgeneralization, analogy or the like in phonology, morphophonology and morphology (Bar-Adon 1978: 547–548; Jones 1998: 148; Maguire 1991: 198, 203, 206).

Most of these changes are attested in dying languages as well (cf. 8.4.4.2 through 8.4.4.4, and 8.4.4.6). Maguire (1991: 201, 228) notes that “in a language revival situation, the rate of change is greatly accelerated”. In this respect again, these changes are similar to those observed in language endangerment, which are “just ordinary changes speeded up” ([3] above).

8.5. Summary of Chapter 8

We first looked at the structural changes that were taking place in the terminal phase of Dyirbal, in terms of phonology, morphology, syntax, semantics and lexicon, paying special attention to syntactic ergativity. The speakers exhibit a proficiency continuum, which roughly correlates with their age. In Warrungu, and probably in Dyirbal as well, the avoidance style was lost before the ordinary style was.

We then turned to general discussions of structural changes in language endangerment. We noted that there are recurrent patterns, but we also pointed out the difficulty of setting up universals. Most of the changes are in the nature of simplification and reduction. However, there are a few striking facts about dying languages. Thus, they may retain their morphological complexity, and they may exhibit innovations. Dying languages are similar to pidgins in terms of structure, but there are differences as well. Dying languages and child language are sometimes said to be mirror images, but again there are differences. Structural changes observed in language endangerment do not seem to differ from “normal” changes. They appear to be “just ordinary changes speeded up”.

Language death is no doubt one of the saddest and most painful aspects of human history, as seen in Chapter 3. Ironically, however, it provides excellent opportunities for research on the kind of issues that cannot be investigated in “normal” languages.

9. Typology of speakers

9.1. Introductory notes

When working on endangered languages, a fieldworker is likely to encounter variations among speakers, regarding proficiency, in particular. As we shall see in Chapter 13, recognition of the diversity of speakers is crucial when carrying out fieldwork in a language endangerment situation.

After presenting preliminaries (9.2), the present chapter surveys previously proposed classifications of speakers encountered in language endangerment situations, and labels for various types of speakers. The best-known classification is that proposed by Dorian, and there are also proposed modifications of Dorian's classification, e.g. Grinevald's. These classifications are mainly concerned with the proficiency of speakers (9.3).

The present chapter then puts forward finer grids for speaker typology. It first presents a finer classification in terms of proficiency, followed by classifications that concern use of the language, age of speakers, and so on, respectively (9.4).

Dorian's classification includes a type of speakers labeled "semi-speakers". Their characteristics will be further discussed in 9.5. Finally, 9.6 looks more closely at issues that concern proficiency.

Dorian (1999a: 107) notes: "There is as yet no universally agreed-upon speaker typology", and Grinevald (2001: 302) admits that it is difficult to establish a workable typology of speakers. The present chapter is another attempt at this difficult typology.

9.2. Preliminaries

Before considering previous proposals of speaker typology, it is useful to look at a classification of people (not just speakers) of a given community (9.2.1), and "dominance configuration" in bilingualism (9.2.2).

9.2.1. Classification of community members

Members of a community that faces language endangerment may be classified as follows, in terms of their knowledge and use of the language in question.

- (a) Non-knowers: they do not know the language.
- (a-i) Non-acquirers: they never acquired the language.
- (a-ii) Forgetters: they acquired the language once, but have forgotten it.
- (b) Knowers: they know the language.
- (b-i) Passive users: they understand the language, but cannot speak it.
- (b-ii) Latent speakers: they can speak the language, but do not speak it.
- (b-iii) Speakers: they know the language, and speak it.

Knowers have acquired the language, and still retain and remember it. Therefore, they may be labeled “retainers” or “rememberers”. Passive users have passive competence only. It is well-known that, in a language endangerment situation, many speakers exhibit a lower degree of productive ability, but a higher degree of receptive ability. In short, they cannot speak the language, but they understand it; for examples, see Dorian (1978: 606) and 9.4.1.1-[1]-(c). In contrast with passive users, latent speakers and speakers have active competence, although latent speakers do not exhibit it.

Latent speakers can be further classified. Thus, there are people who do not speak the language because they do not expect to be understood, and this appears to be a common case. (This observation is due to an anonymous reviewer.) There are also those who deny their knowledge of the language and sometimes even their ethnic identity. For examples, see Dorian (1982: 26) and 9.4.1.2. Often, the reasons for this non-use of the language have to do with self-defense, e.g. in order to avoid discrimination, ridicule, punishment or the like (Chapter 3, and 6.3-[8], [9]), or persecution, e.g. the case of Pipil people who stopped speaking their language for fear of a massacre (5.3.4-[3]).

There is possibly a further category not mentioned above: people who can speak the language but do not understand it as much. There appears to be no reported instance of this category in language endangerment situations, but such speakers may be found among people who have consciously attempted to learn the language, e.g. language learners in language revival situations. (This observation is due to an anonymous reviewer.) Language revival will be discussed in Chapter 11.

The classification proposed above is probably irrelevant to so-called normal speech communities, where it is taken for granted that everyone knows and speaks the language in question.

A few of the labels listed above are used in previous studies, e.g. (i) forgetters in Campbell (1994: 1960) (cited in 9.4.1.2), Sasse (1992b: 61), (ii) latent speakers in Kirikae (1977: 173), and (iii) rememberers in Campbell (1994: 1962), Campbell and Muntzel (1989: 181), Craig (1997: 259) (cited in 9.3-[3]-(c)), and Knab (1980: 232) (cited in 5.2-[7]). But these authors' uses are not always adopted in the present work.

The above classification of community members is put forward as a theoretical possibility. In practice, it is difficult to apply to non-knowers, passive users, and latent speakers. For example, in an actual fieldwork situation it is often impossible for a researcher to determine whether a given person does not know the language or he/she knows it, but does not speak it. The following discussion will be mainly concerned with (b-iii) speakers, as is the case with previous studies.

9.2.2. Dominance configuration in bilingualism

In a bilingual individual, one language may be said to be dominant. (This use of the term “dominant” in relation to individual bilingualism differs from that of this term applied to societal bilingualism, discussed in 5.3.2-[2].) Weinreich (1974: 75–80) lists seven factors to investigate the “dominance configuration” in an individual’s bilingualism, i.e. which one of a bilingual’s two languages may be termed dominant. Two of them are highly relevant to a classification of speakers: (i) relative proficiency in two languages, and (ii) order of learning and age. Relative proficiency will be discussed below in 9.2.2 and also in 9.3, while age will be considered in 9.3 and 9.4.4, and order of learning in 9.4.2.

A language shift situation may be shown as in Figure 9-1. That is, we have Language-A monolinguals at one end and Language-B monolinguals at the other end. There are bilinguals in between, with a decreasing degree of proficiency in Language A and an increasing degree of proficiency in Language B.

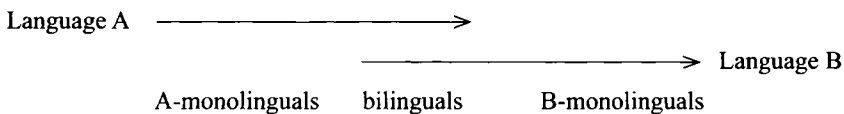


Figure 9-1. Language shift

In evaluation of speakers’ proficiency, we need to examine both of the following (Nancy Dorian, p.c.):

- (a) their relative proficiency in Language A, and;
- (b) their relative abilities in Languages A and B.

9.3. Previous classifications

There have been many attempts to classify speakers of endangered languages, e.g. Campbell (1994: 1960–1961), Campbell and Muntzel (1989: 181), Craig (1997: 259–260), Dorian (1977, 1981, 1986a, 1994a, 1999a: 107), Dressler (1981: 6–7), Grinevald (2001: 302–306), Hallamaa (1997: 189), Mesthrie (1994: 1990–1991), Rouchdy (1989b), Sasse (1992a: 18), and Voegelin and Voegelin (1977). All of the proposed classifications are primarily concerned with proficiency of speakers. In addition, they often refer to some other factor(s) such as age, sex, or domicile of speakers. We shall look at three selected proposals.

[1] Dorian's (1977, 1981, 1986a, 1994a) is perhaps the best-known of all speaker typologies. She sets up the following classification for Scottish Gaelic of East Sutherland – to be more precise, for that of the village of Embo. This classification refers to age in addition to proficiency.

(a) Oldest (or older) fluent speakers: they are in general more conservative in their usage than other speakers (Dorian 1994a: 640). They show deviations from the conservative norm, but at a lower frequency than other speakers (Dorian 1981: 116).

(b) Youngest (or younger) fluent speakers: they show certain departures from the most conservative norms while still speaking a fluent, expressive, and versatile Gaelic. Their departures from the conservative norm pass largely unnoticed in the speech community (Dorian 1981: 116).

(c) Semi-speakers: they can make themselves understood in imperfect Gaelic but are very much more at home in English (Dorian 1977: 24). They are not fully proficient in Gaelic. They speak it with varying degrees of less than full fluency, and their grammar (and usually also their phonology) is markedly aberrant in terms of the fluent speaker norm. The deviations in their Gaelic are explicitly labeled “mistakes” by fully fluent speakers (Dorian 1981: 107). (“Fully fluent speakers” include “younger fluent speakers”; Dorian, p.c.) That is, the category of semi-speakers is recognized by fluent speakers (Dorian 1994a: 640). (Semi-speakers are also called imperfect speakers by Dorian 1981: 115, 1985: 163, 1986b: 76, 1999a: 107.)

Furthermore, Dorian classifies semi-speakers into three groups: high-proficiency semi-speakers, mid-proficiency semi-speakers, and low-proficiency semi-speakers (Dorian 1999a: 114), or strong semi-speakers, intermediate-level semi-speakers, and weak semi-speakers (Dorian, p.c.).

Dorian (1981: 117) comments on the age of the three groups of speakers of the village of Embo: older fluent speakers are older than younger fluent speakers, who are in turn older than semi-speakers. That is, there is a clear correla-

tion between the age and proficiency of the Scottish Gaelic speakers of Embo. A similar situation obtains among the semi-speakers of Dyrbal; see Figure 8-1 above.

It should be added, however, that Dorian (1986a: 558) takes a cautious stance and states that generally “age and proficiency need not correlate”. For example, among the semi-speakers she interviewed greater proficiency does not always correlate with greater age.

[2] Rouchdy (1989b: 260–261) discusses the shift from Egyptian Nubian to Arabic, and proposes the following classification.

(a) Monolinguals in Nubian: they are non-urban and older women.

(b) Adult bilinguals: they are non-urban, 40 years old and above, and speak Nubian fluently and Arabic with a “foreign accent”.

(c) Fully competent bilinguals: they are urban, but they keep close contact with non-urban Nubians.

(d) Young speakers: they are urban, and they mostly speak Arabic and understand Nubian.

(e) Monolinguals in Arabic: they are urban.

This classification refers to not only proficiency, but also the bilingual aspect of the endangerment situation, and the age, domicile (cf. “non-urban” and “urban”) and sex (cf. “women”) of speakers.

[3] Grinevald (2001: 303–304) summarizes most of previous proposals and presents a three-level classification of competence. (See also Craig 1997: 258–260.)

(a) Fluent speakers.

(a-i) Old fluent speakers, who are the traditional speakers raised in that language alone, and most secure in it.

(a-ii) Young fluent speakers: those bilinguals who are still fluent in the endangered language but speak it in a somewhat changed form.

(b) Semi-speakers. This is a large category which includes all members of the community with appropriate receptive skills, but varying levels of productive skills. The category includes those semi-speakers who can be fluent but whose changed forms of the language are considered mistakes, and weak semi-speakers, who have a limited ability to produce speech and whose speech tends to be made of mostly frozen expressions.

(c) Terminal speakers and rememberers. They have very limited productive skills, but some passive knowledge.

Grinevald (2001: 303–304) adds that labels such as “old fluent speakers” and “young fluent speakers” are confusing and misleading, since they do not appeal directly to the age of speakers. Recall also that, as Dorian (1986a: 558)

points out (cited in [1] above), “age and proficiency do not need to correlate”. Despite this, there is a clear correlation between the age and proficiency, e.g. among Scottish Gaelic speakers of Embo, and Young Dyrbal speakers. Both Dorian’s and Grinevald’s classifications seem useful for practical purposes, as does Rouchdy’s.

Nonetheless, it may be sometimes useful to have finer grids for a speaker typology, and such a framework is offered in what follows.

9.4. Proposed classifications

Speakers may be classified in terms of various criteria, such as acquisition of the language, use of the language (Grinevald 2001: 303), linguistic competence (Grinevald 2001: 303) or proficiency in the language, and age, sex and domicile of speakers. These criteria are logically independent of one another, and they shall be examined separately. Nonetheless, they are not entirely unrelated. Thus, we have seen instances of correlation between proficiency and age. Also, with other things being equal, frequency of use of the language will be expected to correlate with proficiency in it. Indeed, one of the main causes for structural changes in endangered languages is disuse of the language (8.4.2).

9.4.1. Classification in terms of proficiency

Proficiency seems to be the most useful criterion in speaker typology, as seen above. It can be examined in terms of (i) degree of proficiency (9.4.1.1), (ii) type of proficiency: productive or active competence and receptive or passive competence (9.4.1.1), and (iii) period of proficiency (9.4.1.2).

9.4.1.1. Degree and type of proficiency

The typologies of speakers cited above concern the overall proficiency of individual speakers. But it may be sometimes useful to specify the degree of proficiency in terms of each of the components of language, such as phonology, morphology, syntax, lexicon, and register/style.

[1] Classification in terms of register, grammar, lexicon, and receptive skills Voegelin and Voegelin (1977) proposed a speaker typology in terms of syntax, vocabulary, and receptive ability. Speakers may be classified as follows, exhibiting a continuum of proficiency.

(a) Special style speakers.

(b) Ordinary style speakers: (b-i) running text speakers, (b-ii) complex sentence speakers, (b-iii) simple sentence speakers, (b-iv) phrase speakers, (b-v) word speakers.

(c) Passive users.

We shall look at each of these categories.

(a) Special style speakers

As seen in 8.3 and 8.4.4.7, one of the first things that ceases to be transmitted in language endangerment seems to be a/the special style(s) of speech, such as Jalnguy (the avoidance style) of Warrungu. In the classification proposed here, the most fluent speakers are special style speakers, who have a command of a/the special style(s) as well as the ordinary style. Special style speakers will no doubt have a full command of the ordinary style as well, as is seen among many of the speakers the writer has interviewed in Kimberley, Western Australia.

(b) Ordinary style speakers

Ordinary style speakers do not know a/the special style(s) and speak the ordinary style only. They may be termed monostyle speakers (cf. Dressler's 1972: 454–455 term "monostylism"), while special style speakers may be labeled bistyle speakers (if there is one special style) or multistyle speakers (if there are two or more special styles).

A division of special style speakers and ordinary style speakers within a community is reported by Hill (1983: 266), and Hill and Hill (1980: 336) regarding the use of honorifics in Nahuatl of Mexico: when speaking of the dead, among others, broad honorific users (i.e. special style speakers) use honorific markers, while narrow honorific users (i.e. ordinary style speakers) employ forms unmarked for honorifics.

Ordinary style speakers may be classified in terms of their production of texts, syntax, and vocabulary of the ordinary style.

(b-i) Running text speakers are able to produce running texts. An example is Alf Palmer, a Warrungu speaker (cf. 8.3, 8.4.4.7). He did not know Jalnguy (the avoidance style), but he was highly proficient in the ordinary style, and he produced about six hours of running texts.

(b-ii) Complex sentence speakers are unable to produce connected speech, but can form complex sentences. This category seems possible, but the writer has not come across any such speaker as yet. Schmidt (1985a, 1985b) provides an account of Dyirbal speakers who can produce complex sentences (8.2.5.2), but it is not clear whether they can produce running texts. If they cannot, they will be classified as complex sentence speakers.

As noted in 8.4.4.4, Hill (1973, 1983, 1989) reports the presence of speakers who understand complex sentences, but who use them at an extremely low rate. In our classification, they may be termed “latent speakers” (9.2.1) of complex sentences.

(b-iii) Simple sentence speakers are unable to produce complex sentences, but can form simple sentences. (The late) Eddie Barker, a speaker of Biri of Queensland, Australia, probably belongs to this category. He produced simple sentences, most of them short, but he did not yield complex sentences.

(b-iv) Phrase speakers are unable to form sentences, but can utter phrases, often clichés or frozen expressions. (The late) Reggie Palm Island (mentioned in 5.1-[7], 8.4.4.3), a speaker of Buluguyban of Queensland, may be assigned to this category. Thus, he produced about 50 words, but apparently he was not able to form a sentence. He only remembered what appear to be frozen expressions such as “You man”, “I to the camp”, “You stand up”, and “Lie down”.

It is possible to set up a category between (b-iii) simple sentence speakers and (b-iv) phrase speakers. One possible example is (the late) Harry Bunn, who was probably a speaker of Warrungu of Queensland. He was able to construct simple sentences that appear to be almost grammatical, but often he was not certain of the correct verbal suffix, and a given verbal suffix exhibited a fluctuation between what appear to be correct and incorrect forms. That is, he was able to produce simple sentences, but with a low degree of grammaticality.

(b-v) Word speakers are unable to form phrases, but they know and use some vocabulary. This category of speakers survive long after the language ceases to be actively spoken. Thus, (as of 2002), many descendants of the people mentioned in (b-i) through (b-iv) belong to this category. They occasionally include isolated words in their English.

(c) Passive users cannot speak the language, but they have its passive knowledge. (Voegelin and Voegelin 1977: 333 use the terms “comprehenders, understanders” for this category.) An example from Western Australia is provided below. One day in 1998, Maggie Scott, a Wanyjirra speaker (Wanyjirra names: Dalyngarri, Dangayi), and the writer were listening to the tape of a story narrated by the late Nyun.gaja Paddy in Wanyjirra. Kathleen Cox (Maggie Scott’s daughter) was sitting nearby and listening to the tape. The writer had never seen or heard Kathleen Cox speak Wanyjirra, so he had assumed that she did not know the language. Now, the story was truly amusing and humorous, and Maggie Scott and the writer burst into laughter, which Kathleen Cox joined immediately. A discussion afterwards showed that Kathleen Cox understands Wanyjirra, although she cannot speak it.

Thus far, we have proposed a classification that concerns register, grammar, lexicon, and receptive skills. In addition, other criteria, too, are possible, and they may be sometimes useful.

[2] Other criteria: phonology, morphology, and lexicon

(a) Phonology. For instance, some of the young Dyirbal speakers retain the opposition of /rr/ and /r/, while others have merged them (8.2.2.2). The former may be termed “phonemic opposition retainers”, and the latter “phonemic opposition losers”.

(b) Morphology. Speakers may be divided into those who have a command of allomorphic alternations and those who do not (cf. 8.2.4.1). Also, they may be divided between those who have retained word-formation rules and those who have lost them (cf. 8.4.4.3, Dressler 1982: 325).

Hill (1983: 267) classifies Nahuatl speakers in terms of their use of morphology. In Classical Nahuatl, nouns in noun-number constructions such as *two dogs*, *three hats* were usually not pluralized, while, in Spanish, nouns must be pluralized with numbers. Now, Spanish numbers have entered Nahuatl, and this has created three groups of Nahuatl speakers. The most conservative speakers use some Spanish numbers, but they pluralize only a few market words (*peso*, *kilo*, etc.) and learned words (*oraciones*). “Splitters” always pluralize nouns with Spanish numbers, but only allow singular nouns with Nahuatl numbers. “Mixers” allow almost any combination of Spanish and Nahuatl numbers with either singular or plural Spanish and Nahuatl nouns.

(c) Lexicon. As seen in 8.2.7.2 and 8.4.4.6, some speakers may retain a good knowledge of the lexicon, while other may have lost a fair portion of it. Some retain the knowledge of specific terms, while others only retain generic terms. The former may be termed “generic lexicon users”, and the latter “specific lexicon users”.

9.4.1.2. Period of proficiency

Speakers may be classified according to the period during which they were/are proficient in the language. Proposed terms include the following. Most of them additionally refer to the degree of proficiency that is retained.

Campbell’s (1994: 1960) term “forgetters”; Elmendorf’s (1981: 36) and Swadesh’s (1948: 231) “former speakers”; and Dorian’s (1994a: 639, fn. 11, 1999a: 108) and Menn’s (1989: 342) “formerly fluent speakers” appear to refer to much the same category of speakers: those who were proficient in the language formerly, but who are now not fully competent (Dorian 1994a: 639, fn. 11).

Menn (1989: 345) coined the term “rusty speakers” to refer to speakers who have to expend a great deal of energy on retrieving words and putting sentences together.

A possible example of a former speaker, of a formerly fluent speaker, and also of a rusty speaker, is sketched by Haas (1968: 77). This concerns Mrs. Emma Jackson, a speaker of the southern US language Biloxi. Haas writes: “she had not spoken the language for 21 years”, but “We succeeded in eliciting 54 words from her”. “It seems clear that she had once known the language quite well”.

A category similar to “forgetters” and “former speakers” is what may be termed “recollectors” or “recallers”. Thus, Kirikae (1997: 173) provides an example from Japan: “The present author has had many chances to meet Ainu individuals who at first denied their Ainu language ability, but who nevertheless recalled many words and phrases when submitted to patient and persistent questioning. After several sessions of work, some of these persons have even begun to speak Ainu”. Dorian (1982: 26–27) reports a similar instance concerning a Scottish Gaelic speaker.

9.4.2. Classification in terms of acquisition of the language

There are two relevant criteria: (i) age of acquisition, and (ii) order of acquisition.

[1] Age of acquisition

Speakers may be classified in terms of the age at which they acquired the language, e.g. childhood learners, adolescence learners, and adulthood learners. Instances of childhood learners and of adolescence learners are no doubt common and familiar. The cases of adulthood learners may appear uncommon, but they do exist, e.g. adult learners of Maaori (5.2-[9], 11.5.2) and adult learners of Irish (11.5.3). Both are instances of learning of a second language.

Nancy Dorian (p.c.) points out, however, that learning of a second language may proceed intermittently in childhood, adolescence and/or adulthood, and that it is not always justifiable to place acquisition in just one of the three phases.

[2] Order of acquisition

Speakers may be classified as to whether the language in question is the first language acquired or the second acquired (or any other additional language acquired): first language speakers, second language speakers, and so on.

Naturally, people acquire their first language in childhood (under normal circumstances). They are native speakers of the first language (5.2-[6]).

In many parts of the world, monolingualism is the exception, and a person may have more than one first language (Dimmendaal 2001: 61). Thus, around the border between Jaru and Kija in Kimberley, Western Australia, many people speak both languages fluently, although these two languages are as different from each other as English and Russian are (as noted in 6.2-[2]-(j)). It seems that the people around the border grew up hearing and speaking both Jaru and Kija. It then seems possible to say that they have two first languages and that they are native speakers of both. In such a case it is difficult to determine which language is a given person's first language.

Note that a person's first language is not necessarily the one in which he/she is most proficient later in his/her life (referred to as "primary language" by Miller 1971: 116), as can be seen from Figure 9-1. Miller (1971: 116) provides an example from Shoshoni of the USA.

The distinction between first language speakers and other speakers (such as second language speakers) is relevant in defining language death, as seen in 5.2-[6], [8].

9.4.3. Classification in terms of use of the language

There are variables, such as (i) period and length of use, (ii) frequency, and (iii) functional domains.

[1] Period and length of use

It is relevant to enquire when a speaker started using the language, when he/she stopped using it, and during what period of life he/she uses/used it. For example, it appears that Alf Palmer acquired Warrungu as a child (probably late in the 19th century and early in the 20th century), that he used it actively until about 1920, but that he did not use it actively for about 50 years (cf. 5.2-[3]), from about 1920 to 1971, when he started participating in the writer's fieldwork.

There are terms that ostensibly refer to the period of use of the language, e.g. Elmendorf's (1981: 36) and Swadesh's (1948: 231) "former speakers". However, as seen in 9.4.1.2, on a close inspection they turn out to concern the period of proficiency (rather than period of use) and also the degree of proficiency that is retained.

[2] Frequency of use

People vary according to the frequency with which they speak the language in question (cf. Grinevald 2001: 303). There are people who speak the language everyday. They may be called daily speakers. Also, there are people who speak the language less frequently. If there are people who speak their language on

their weekly visit, monthly visit, or yearly visit to their family or friends, they may be labeled weekly speakers, monthly speakers, and yearly speakers, respectively. Actual situations are not really neat and clear-cut, but there are situations that approximate this classification. Thus, Maggie Scott, a Wanyjirra speaker who lives in Halls Creek of Western Australia, may be termed a yearly speaker. It seems that she does not speak Wanyjirra often, and that the only time she speaks it frequently is the period when the writer works with her on his annual visit.

[3] Functional domains

Speakers may be classified according to the range of functional domains (7.2.2) in which they use the language in question. Thus, those who speak it inside the family, but not outside it, may be termed family speakers; those who speak it for secrecy only are secrecy speakers; and so on.

9.4.4. Classification in terms of the age of speakers

It is possible to classify speakers in terms of age, e.g. (i) child speakers, adult speakers, and so on, (ii) young speakers, old speakers, and so on, and (iii) speakers under 10, those under 20, those under 30, and so on. A classification that refers to the age of speakers is necessary when examining the degree of endangerment (or conversely viability) of the language, as seen in 2.2 and 6.2-[2]-(g).

As seen in 9.3, most of the previously proposed speaker typologies refer to the age in addition to the proficiency of speakers. This is no doubt because these two factors often correlate with each other.

We have seen classifications that concern proficiency, acquisition of the language, use of the language, and age of speakers. There are still other possibilities.

Thus, speakers may be classified in terms of sex. Rouchdy's classification, cited in 9.3-[2], employs this as one of the criteria. This classification in terms of sex is also relevant to languages such as Gros Ventre of Montana, which exhibit a difference between men's and women's speech (6.3-[9]-(b-ii)).

Also, speakers may be classified in terms of domicile, e.g. rural speakers and urban speakers. Again, this is employed in Rouchdy's classification.

Domicile and sex, too, are relevant when considering the degree of endangerment (or conversely viability) of the language, as seen in 6.2-[1]-(c) and 6.2-[2]-(h).

9.5. Semi-speakers

As seen in 9.3, Dorian's speaker typology includes the category of semi-speakers. Possibly the first reference to the type of speakers who were later called semi-speakers is Bloomfield (1927: 436–439) (4.3.2, 4.3.3). The first explicit reference to, and, detailed discussion of, semi-speakers is in Dorian (1977). Dorian's term "semi-speaker" (first used by Dorian 1973: 417) has since been adopted by other researchers and is now an established technical term, and used in Grinevald (2001) (cited in 9.3-[3]), for instance. Detailed accounts of semi-speakers are provided by Dorian (1981: 107–110) for Scottish Gaelic, and by Schmidt (1985a, b) for Dyrbal (Chapter 8 above). In addition, Schmidt (1990: 118–121) outlines the semi-speaker phenomenon in Australian Aboriginal languages.

Now, what causes the emergence of semi-speakers? As Dorian (1981: 107) notes, it may seem strange that some people retain a knowledge – though to a limited degree – of Scottish Gaelic when most of their agetmates have opted for English only. Dorian (1981: 107–109) lists four factors that operate to produce semi-speakers of Scottish Gaelic.

(a) Late birth-order in a large, relatively language-loyal family. Quite often the last two or three children among a large group of children will emerge as semi-speakers. Older siblings who may have become fluent speakers of Gaelic, but who have received English-language schooling, reduce the amount of Gaelic spoken in the home, especially among the children themselves.

(b) A strong attachment to some kinsperson other than the parents, often, a grandmother. (See "grandmother effect" mentioned in 6.2-[9].)

(c) Exile, temporary or even permanent. It seems that a period away from the home community, in the company of fellow exiles, can produce an allegiance to one's own community which takes the form of language loyalty.

(d) The inordinately inquisitive and gregarious personality. As an example, Dorian (1981: 109) talks of one semi-speaker: "Outgoing and curious as a child, she insisted on being part of all linguistic interaction in her environment".

The presence of semi-speakers is most emblematic of language endangerment situations (Grinevald 2001: 303), to be more precise, of gradual language shifts (Campbell 1994: 1961). Their presence seems to depend on the speed – i.e. gradual as against sudden – of a given language shift (Dorian 1977: 32, note 7; Mesthrie 1994: 1991). That is, if a given language shift is gradual, it will produce semi-speakers, but if it is sudden, it will not. However, there appear to be at least two exceptions to this general tendency; two instances of gradual language shift in which no semi-speakers are found: Montana Salish and Luiseño

and Cupeño of California (cited in 8.4.2). Thus, Thomason (2001: 237) states: “The Montana Salish situation suggests that there are no semi-speakers in the community”, and for Luiseño and Cupeño, Dorian (1981: 115) cites Jane Hill’s observation: “Jane Hill found no semi-speakers”. (See also Dorian 1977: 32, note 7.)

The existence of variation in terms of proficiency needs to be borne in mind when working on an endangered language. This issue will be discussed in 13.1.7.

9.6. Proficiency: discussion

In 9.4.1.1, we looked at types of speakers classified in terms of register, texts, complex sentences, simple sentences, phrases, words, and receptive ability. No doubt these categories constitute a continuum. We also saw the possibilities of classifying speakers in terms of their proficiency in phonology, morphology, and lexicon. Now, there are a few important questions to ask in this context.

The first question to ask is: Does a given speaker have proficiency to the same degree across the components of the language? The answer is that this is not the case, and that a given speaker has proficiency to different degrees in different components of the language. Examples follow.

As noted in 8.3 and 8.4.4.7, one of the first – and possibly the very first – to disappear seems to be a special style of speech. Thus, Alf Palmer did not know Jalnguy (the avoidance style) of Warrungu, although he had a full command of all the components of the ordinary style.

In contrast, phonology appears to be conservative, and it is possibly one of the most conservative among the components of a language. For instance, in Dyirbal, even non-fluent speakers command the Dyirbal phonological system (as well as the English system) (8.2.2.2). That is, we are unlikely to come across a speaker who has an impoverished phonology, but an excellent syntax, for instance (although such speakers may be found among adulthood learners of the language; this observation is due to an anonymous reviewer).

Although this does not concern endangered languages, it is relevant to mention the following facts. Those Japanese people who moved to Tokyo and acquired the Tokyo dialect (i.e. the so-called standard Japanese) may become fully proficient in its grammar and lexicon, but their pronunciation often reveals their original, non-Tokyo dialect. Also, Tomoko Takahashi (p.c.) points out that in the Chinese language spoken by those Japanese “war orphans” who had been

deserted in China after the World War II and later returned to Japan, the tone system is clearly preserved, although their overall proficiency in Chinese may have been lost to a considerable extent.

Morphology, too, can be conservative. As seen in 8.4.4.3, morphological complexity may be retained to the very last stage of language endangerment. An additional example is provided by Maggie Scott, a Wanyjirra speaker (mentioned in 9.4.1.1-[1]-(c)). Wanyjirra and Jaru, immediately west of Wanyjirra, have clitic pronouns, in addition to free pronouns, like other languages of the region. Unlike free pronouns, clitic pronouns are morphologically fairly irregular and complex. One example of these irregularities and complexities in Jaru is that two dual clitic pronouns cannot co-occur and that one of them has to be replaced with the corresponding plural form, a phenomenon called “dual replacement” (Tsunoda 1981: 133–135). Now, the writer started working with Maggie Scott on Wanyjirra in 1995. It was clear that she had forgotten a fair portion of the lexicon. The writer was certain that Wanyjirra, like Jaru, would exhibit the phenomenon of dual replacement. However, on the basis of Maggie Scott’s knowledge of the lexicon, he suspected that she would not know a complex and irregular phenomenon such as dual replacement. But everything is worth a try, so he decided to check this phenomenon with her. To his surprise, she did know dual replacement. Thus, when asked to translate ‘We-two are looking at you-two’, she gave:

- (9-1) *nga=liyarra=nyurra* *nyang-ana.*
 C=1DU.EXC.NOM=2PL.ACC see,look-PRES
 ‘We-two are looking at you-two.’

(*nga* is a carrier morpheme, to which clitic pronouns are attached.) In (9-1), the plural form =*nyurra* ‘2PL.ACC’ has a dual reading. (Needless to say, =*nyurra* can have a plural reading, that is, (9-1) can also mean ‘We-two are looking at you (plural)’.) The underlying form, to which dual replacement has not applied and which, consequently, is ungrammatical, is:

- (9-2) **nga=liyarra=ngguwula* *nyang-ana.*
 C=1DU.EXC.NOM=2DU.ACC see,look-PRES
 Intended meaning: ‘We-two are looking at you-two.’

Examination of other combinations of duals confirmed that Maggie Scott does use the dual replacement rule. This shows that, a speaker who has lost a fair portion of the lexicon, may retain knowledge of such irregular and complex details of morphology.

We have thus far seen that a given speaker may have proficiency to different degrees in different components of the language. Then, naturally the next question to ask is: Can the classifications listed in 9.4.1.1, which look at different components of the language, be accommodated in one single scale of proficiency? It is clear that the types of speakers listed in [1] – they are classified in terms of registers, complex sentences, simple sentences, phrases, and words – constitute one single continuum. However, it is not clear where scales of phonology, morphology, and lexicon may be placed on this continuum. That is, it is not clear if all these may be combined in one single scale. Tentatively, they will have to be regarded as independent of one another and as constituting separate scales.

A third question to ask is: Is there any correlation among the degrees of proficiency in these components of language? More specifically: Can speakers be allocated consistently in the same position relative to one another on one single proficiency continuum in terms of all of the criteria? For example, if Speaker A is more proficient than Speaker B in phonology, then is Speaker A more proficient than Speaker B in all the other components of the language as well? Schmidt (1985b) demonstrates that this is generally the case with Young Dyrirbal speakers. Thus, Speaker EM is consistently more proficient than Speaker LN in terms of phonology (Figure 8-2), morphology (Table 8-3, Figure 8-5), syntax (Figures 8-4, 8-5), and lexicon (Figure 8-6). That is, it is unlikely that Speaker A is more proficient than Speaker B in phonology, but that the reverse is true in, say, syntax.

Thus far, we have looked at the degree of proficiency (or, alternatively decline) as observed by researchers. Finally we briefly consider the degree of proficiency as perceived by the members of a community. It may differ from that perceived by researchers. Thus, Dorian (1977: 25) cites an instance from for Scottish Gaelic of East Sutherland in which the community's assessment of a given speaker's fluency seems to be based more on his/her language loyalty than on his/her proficiency. Regarding proficiency itself, Dorian (1973: 414) reports: Speakers of Scottish Gaelic are most conscious of decline in the lexicon, less aware of that in morphology, and still less aware of that in phonology.

Dorian's observation accords well with the writer's. Thus, in community members' perception, lexicon seems to be the criterion for judging a person's fluency. If a person uses some vocabulary – even isolated words in English sentences – the community members say that he/she can speak the language. They do not seem to be concerned with what linguists call phonology, morphology, or syntax.

9.7. Summary of Chapter 9

The present chapter surveyed previously proposed speaker typologies for endangered languages. They are primarily concerned with proficiency, although they may often refer to some other factor(s), such as age. The classifications by Dorian, by Rouchdy, and by Grinevald, each of which consists of three to about five levels of proficiency, seem useful for practical purposes.

Chapter 9 then proposed a framework for finer classifications. They involve factors such as proficiency (e.g. ranging from special style speakers to passive users), acquisition of the language, use of the language, and so on. Some criteria, such as age, sex, and domicile of speakers, are useful for the purpose of examining the degree of endangerment (or conversely viability) of the language.

Chapter 9 also considered the issue of semi-speakers, and looked at the factors that induce their existence. It finally saw that a given speaker may have different degrees of proficiency in various components of the language. And that a given speaker's proficiency as a whole tends to exceed another speaker's. This suggests the possibility of a holistic typology of speakers – a topic for future research.

10. Value of linguistic heritage

10.1. Introductory notes

As we shall see in Chapter 11, devoted efforts are being carried out, in many parts of the world, by community members to revitalize (i.e. maintain or revive) their traditional language. Furthermore, a large number of linguists are actively documenting endangered languages and/or assisting language revitalization activities. What makes them so devoted to these efforts? Are such attempts really important? The answer to these questions lies in the value of linguistic heritage, and this is the theme of the present chapter.

The views of people who believe that these efforts are important, are discussed in 10.2. Most of the relevant previous studies only look at the views of “enthusiasts”. However, their views are not shared by everyone. Also, there are factors that may hinder their activities. These issues are dealt with in 10.3. Finally, 10.4 considers an issue that often emerges in the discussion of the value of linguistic heritage, viz. the link among language, culture, and identity. Specifically, it addresses itself to the question as to whether a given language is necessary for maintaining the ethnic identity in question.

10.2. Concern for language endangerment

10.2.1. Introduction

The views of people who are concerned with the current crisis of language endangerment may be classified as follows, depending on the type of advocates (Tsunoda 2001d: 8352):

- (a) Community’s views or local views (10.2.2);
- (b) Outsiders’ views or global views;
 - (b-i) Language activists’ views (10.2.3), and;
 - (b-ii) Linguists’ views (10.2.4).

In this context, “community” refers to one whose traditional language is endangered or extinct.

Strictly speaking, this classification is not clear-cut. Thus, there are people who are at the same time a member of such a community, a language activist, and a linguist. Also, the classification of views presented below is not clear-cut. A given view may be shared by community members, language activists, and linguists, e.g. the view concerning linguistic rights (see 10.2.3). Obviously, the

three groups of views do not contradict one another. Rather, they complement one another and bring the value of linguistic heritage into relief.

Perhaps the majority, if not most, of works on language endangerment and revitalization are written by linguists who, like the writer, are not members of the community concerned. It is, however, encouraging to see that this unbalanced presentation of views is gradually beginning to be recognized, and that an increasing number of community members publish their works, as shown in 10.2.2.

10.2.2. Community's views

10.2.2.1. *Overview*

Many community members wish to keep their language (Pawley 1991: 10). Thus, Veronica Dobson (1994: iii), an Arrernte person of Central Australia, says, "I want to make sure that my language doesn't die out". Why do community members want to keep their language? In general, retention of their language – and culture – does not help them, for instance, in the way of economic prosperity (although it may create employment, say, in tourism and education, e.g. as language teachers – where such opportunities exist). The answer is spiritual rather material. Thus, Littlebear (1999: 1) (a Cheyenne person, the USA) states:

But why save our languages since they now seem to have no political, economic, or global relevance? That they seem not to have this relevance is exactly the reason why we should save our languages because it is the spiritual relevance that is deeply embedded in our own languages that is important. The embeddedness of this spirituality is what makes them relevant to us American Indians.

Likewise, Maguire (1991: 94) suggests that the main motivation for the revival of Irish in Belfast (11.5.3) is non-material, not having to do with economic utility.

Also, the value of traditional languages is in their integrative, rather than instrumental or pragmatic, function (cf. Dorian 1978: 608; Rouchdy 1989a: 96; Spolsky 1995: 179). Traditional languages have an integrative function in that they play an important role in maintaining the groups' identity; see 10.2.2.6. In contrast, they have an instrumental function only to the extent that they are useful for purposes such as employment, say, as language teachers. (It should be added, however, that such opportunities are scarce, as far as Australia is concerned.) Similarly, traditional languages may have a symbolic value, as an "ethnic marker", even if they can no longer have a communicative value (cf. Edwards 1984: 289). In the words of Velma Hale, a Navajo person (?) of the

USA, “English is a tool for survival, not a way of life” (Reyhner and House 1996: 137).

The importance of language to community members is expressed in the following poem (cited from Thieberger 1995: v) by Mary Duroux, a Yuin person of New South Wales, Australia. This poem eloquently describes the sorrow that has been caused by the loss of her ancestral language.

“Lament for a dialect”

Dyirringan is lost to the tribes of the Yuin
 I am filled with remorse and I weep at the ruin
 Of beautiful words that were softly spoken
 Now lay in the past all shattered and broken
 We forgot it somehow when English began
 The sweet-sounding dialect of Dyirringan
 If we’re to be civilised whom can we blame
 To have lost you my language is my greatest shame

Having looked at a view on linguistic heritage expressed poetically, we shall turn to more concrete and specific arguments on the value of linguistic heritage, expressed by community members. In the following, these arguments are cited verbatim, for this will portray them vividly. A citation of a community member’s view is accompanied, where possible, by his/her language group affiliation. It is relevant to mention here that some people in Australia avoid the term “tribe” and use the term “language group” instead (cf. Sutton 1991: 50), in contrast, for example, with New Zealand, where Maaori people themselves use the term “tribe”.

10.2.2.2. *Language as a gift from the ancestral beings*

According to the belief of Aboriginal Australians, people, language, and land are closely connected. Thus, Sutton (1991: 50) states: “It is a general rule in Aboriginal Australia that languages are held to have originated when Dreamings (Ancestral Beings, totemic heroes) invested the land with meaning and human beings”. Rumsey (1993: 200) provides a specific example concerning the Jawoyn language of Northern Territory: “language was directly installed or ‘planted’ in the landscape by Nabilil ‘Crocodile’, a Dreamtime creator figure who moved up the Katherine River, establishing sites and leaving names for them in the Jawoyn language”. See also Dalton et al. (1995: 84), Evans (2001: 253), Hudson and McConvell (1984: 37), McKay (1996: 226–227), Nathan (1996: 26), and Rumsey (1993: 201–204). According to this belief, people “own” their language (Evans 2001: 253; Nathan 1996: 26). As a consequence, to keep the traditional language “is a sacred duty given to each group by the Creator Dreamings” (Hudson and McConvell 1984: 37).

Stories of how North American languages were given by Creators are found in Hinton (1994). Native Americans (cited by Yamamoto 2001: 339), too, consider it their duty to keep their languages: “If we don’t use it, we are not fulfilling our responsibility. If we don’t give life to it, we are neglecting to perform our duties. Our Creator has created for us the world through language. So, if we don’t speak it, there is no world”.

The belief that people own their language, points to the need to distinguish between “language owners” and “language speakers” (Evans 2001: 251). Thus, many Aboriginal Australians consider they own their ancestral language even if they do not speak it (Amery 1994: 140, 2000: 44; McKay 1996: 101; Nathan 1996: 26, 1999: 1). They are owners, but not users, of their language. In contrast, “another-group language speakers”, who speak the language of another group (5.2-[8]), are users, but not owners, of that language. See 11.5.15 for examples of language owners and language users.

The conviction of language ownership constitutes a strong motivation for language revival. Language revival will be discussed in Chapter 11. Also, language ownership needs to be taken into account when choosing a language to revive, as seen in 11.5.15.

10.2.2.3. *Language as a connection to the ancestors and land*

Based on the view expounded above is the view that the language connects the people with their ancestors and land. Thus, Bonnie Deegan, a Jaru person and the former chairperson of Kimberley Language Resource Centre, Western Australia, states (*Keeping Language Strong KLRC Newsletter* 1996: 1): “Language is a very big part of the culture of Aboriginal people in the Kimberley. We know who we are by the language we speak. It joins us to our past and our old people, right back to the dreamtime. It ties us to our land, and it makes us proud and strong”. Similar views are expressed by Velma Hale (a Navajo person (?), the USA) (Reyhner and House 1996: 134) and by Simon Ortiz, an Acoma person of the USA (Wallace 1996: 105).

Hudson and McConvell (1984: 37–38) report a specific manifestation of the connection of language to the land, from Kimberley, Western Australia: “Language expresses a strong link to the land. People should talk to the spirits in certain places in their own country in the old language shared by the [traditional, i.e. Aboriginal] owner and the spirit, to make sure he does them no harm. Young people who lose this ability could be in danger”. Thus, in 1999, the writer recorded a brief speech (consisting of just three or four sentences) in the Jaru language that was uttered by Ruby (Aboriginal names: Janyjiwug and Yurun), a traditional owner of a sacred place called Nanggurru Lake, near Kimberley. The

speech was addressed to the spirit of the lake. Such a message is believed to ensure the safety of visitors to the lake.

What will happen to the land if the language is lost? Littlebear (1999: 2) states: “Our land base and sacred practices are passed on through our languages, not by English, the language spoken by people who killed our people and oppressed our language”. Therefore, “once our language disappears, . . . , land ceases to be sacred and becomes looked on as only a commodity to be bought and sold”.

In view of the strong link among people, land, and language (in Australia and elsewhere), place names will embody immeasurable significance for the people concerned, and they will play an important role in language revitalization activities (see 11.5.13, Place name method). Naturally, their study should not be neglected in fieldwork (13.1.3).

Views similar to “language as a connection to the ancestors and land” are held by scholars as well. See Tovey, Hannan, and Abramson (1989: iv, 28) regarding Irish.

10.2.2.4. Language as irreplaceable cultural knowledge, and as a conveyor of culture

The two views discussed above naturally lead to the view: language constitutes “irreplaceable cultural knowledge” (Needs and Rationale Group 1996: 2), for it encodes “Indigenous knowledge, perceptions, and strategies” (Jocks 1998: 230). That is, it is “a conveyor of culture and ceremonies” (Theresa Yazzie, a Navajo person, cited by Reyhner and House 1996: 134). Thus, Lorraine Dalton, Sandra Edwards, Rosaleen Farquarson, and Sarah Oscar, who are members of the Gurindji group of Australia state: “We want to keep our language because we want to pass on the Law (*Yumi*) to our grandchildren. The Law includes all our ceremonies and the stories of the Dreamings (creator beings), as well as the rules of how people should behave toward each other, and toward land” (Dalton et al. 1995: 83). Note again that here the people are stressing the link of people, land, and language.

As Hudson and McConvell (1984: 38) point out, the meaning of words and the way of expressing things in Aboriginal languages are very different from English, and there is a deep and wide vocabulary to do with ceremony, stages of knowledge and such things which is almost impossible to translate. Likewise, Jocks (1998: 224–226), a Mohawk person of the USA, points out the limitations of English translations, giving three specific examples. One of them is the noun *onhwentisa*. It is usually translated ‘nation’. However, it “is rooted in ideas of land, earth, or ground. The noun root, *-onhwentsi-*, is used in many words in-

volving land, topography, and cultivation, conveying the unmistakable impression that in Iroquois tradition, nationhood is an inalienable component of a people's relationship with the land they live upon" (Jocks 1998: 225).

What will happen to the culture if the language is lost? Greymorning (1999: 6), an Arapaho person of the USA, states: "I believe if Indians lose their language it will be bad for all people. I am really worried if we lose our language we won't be able to think in the Arapaho way. If we lose our language we will lose our ceremonies and ourselves because our life is our language, and it is our language that makes us strong". A similar view is expressed by Damon Clarke (1996: 93), a Hualapai person of the USA, and by Nisga'a people of Canada (cited by Daniel Rubin 1999: 18).

The importance of language for ceremonies is elaborated on by Jocks (1998: 231, see also 219): "the ceremonial life of a traditional people is threatened by language erosion ... when the most deep- and far-reaching forms of expression the people possess – and the critical relationship they enliven, especially with Other-than-human beings – grow pale, lose significance and coherence, and begin to die". This phenomenon Jock calls "cartooning". That is, Jocks argues that without their language, they and their culture become cartoons.

The strongest view expressed by community members, on language and culture, is: "If you don't speak the language, ..., you can't understand the culture" (Oneida elders of the USA, cited by Jocks 1998: 219, 233). This belief in effect maintains that language and culture are inseparable. There is, however, an opposed view – observed among some community members as well as scholars – that language and culture are independent from each other. This controversy will be examined in 10.4.2 and 10.4.3.

The view of "language as irreplaceable cultural knowledge, and as a conveyor of culture" is shared by linguists as well, e.g. Dorian (1993b: 578, 1999b: 31–33), Fishman (1991: 20), Miyaoka (2001: 7–10), Rigsby (1987: 371), Tsunoda (1997: 12, 1998a, 1999b), and not to speak of Sapir (1951: 219–220). Fishman (1996a: 81) says that "most of the culture is in the language and is expressed in the language".

10.2.2.5. *Language as ethnolinguistic skills*

This is closely related to the issue of language as a conveyor of culture, in particular, to the near impossibility of translation. Jocks (1998: 219) emphasizes the value of what he calls language skills, which include "stories and jokes and all the richness of human experience they carry", such as humorous devices (Jocks 1998: 231). Hinton (1994: 45–47) describes a humorous – but impossible to translate – aspect of the phonology of Yahi of the USA.

A similar example of (near?) impossibility of translation is given below. It also exemplifies humorous effects that are (almost) impossible to translate.

The pattern of behaviour of Jaru people of Western Australia is determined by kin relationship. For example, a man (EGO) and his mother's brother (MB) are in the so-called joking relationship, which is no doubt based on the fact that the MB is a guardian of the EGO. They often joke at each other, but they do not just use any words or phrases. Specifically, a man would say to his MB as follows (Tsunoda 1988b: 32–33, 1999a: 46–47):

- (10-1) *gurnrdu-Ø* *yambi-Ø*.
 penis-ABS big-ABS
 '[You have a] big penis.'

And the MB would say to the man as follows:

- (10-2) *gura-Ø* *yambi-Ø*.
 anus-ABS big-ABS
 '[You have a] big anus.'

For example, the late Jack Jugayarri was the writer's classificatory MB. When he walked by where the writer was interviewing someone, he would say (10-1) to the writer (his classificatory sister's son), and the writer would say (10-2) back to him. These joking expressions can be translated into English, as shown above. But the English translations in no way express their implications and connotations embedded in the kin-related patterns of behaviour. Nor do they fully convey the humorous tone of these expressions.

10.2.2.6. *Language as a determiner of identity*

Another, related view places emphasis on identity: a "language is inseparable from cultural identity and spirituality" (Family and Community Group 1996b: 76). Thus, Schmidt (1990: 27) reports on a Ngarinyin man of Kimberley, Western Australia, who said, "Them young fella, he dry, spilt. He empty. Without identity, without language, he got nothing left". Rachel Cummins, a Warrungu person of Australia, said to the writer: "Language is important for identity, to know who I am". Similar views are held by Sylvia Wadsworth and by Theresa Yazzie, both Navajo persons (Reyhner and House 1996: 133–134), by Selena Ditmar (1999: 65), a Nakoda person of the USA, and by Nisga'a people of Canada (Daniel Rubin 1999: 18). Maguire (1991: 94, 98) on the revival of Irish in Belfast (cf. 11.5.3), and Jones (1998: 128) on the revitalization of Welsh, report that one of the motivations of these movements concerns identity.

Sawai (1998: 185), an Ainu person of Japan, reports that the sense of ethnic identity is rising among Ainu people, accompanied by an increasing motivation to reactivate the language. It is relevant to mention in this connection that Mather (1995: 91) notes that an ambivalent attitude regarding their ethnolinguistic identity is apparent among Ainu people. Thus, a young Ainu person said, "I'm both. I'm Ainu-Japanese". Krauss (2001: 32) argues that ambivalent ethnolinguistic identity should be respected and fostered. Specifically, he says:

there is no real or justifiable reason to sacrifice Navajo in order to add English, or ... Ainu for Japanese, or Basque for French and/or Spanish. ... it will have to become possible for one to be linguistically and competently both ... an Ainu *and* Japanese, a Basque *and* Spanish or French, Navajo *and* American, and a loyal one too, if things are done right. [italics in the original]

The view of language as an identity marker is shared by researchers, e.g. Bradley (2001: 152), Crowley (1993: 67), Dixon (1980: 79, 476), Dorian (1999a: 31), Edwards (1984: 289), Giles, Bourhis, and Taylor (1977: 22), Rouchdy (1989a: 95–96), Thieberger (1990: 337–341), and Tovey, Hannan, and Abramson (1989).

10.2.2.7. *Language as a source of pride and self-esteem*

Minority languages have been denigrated and stigmatized (6.3-[8], [9]). However, the tide is beginning to turn (Giles, Bourhis, and Taylor 1977: 338). Hudson and McConvell (1984: 38) report from Kimberley, Western Australia: "The speakers of the languages are proud of their languages". Similarly, Jocks (1998: 222–223) reports the view of Mohawk people of the USA: "the mere fact of speaking [Mohawk] even in rudimentary form is a potential source of pride and identity". Also, see Jones (1998: 328) on Welsh. People may be proud of not just their language in general, but a specific aspect thereof. Thus, as we shall see in 11.5.14-[2], some Warrungu people's pride of their linguistic heritage has been enhanced by the knowledge that their ancestral language had a phenomenon that linguists call syntactic ergativity – a phenomenon that is rare among the world's languages.

Views similar to "language as a source of pride and self-esteem" are held by scholars as well. See Tovey, Hannan, and Abramson (1989: 33) regarding Irish.

10.2.2.8. *Language as a source of solidarity*

An example of language as a factor enhancing solidarity is reported by Suwilai (1998: 155), regarding So (Thavung) of Thailand: "One woman said that she

will teach her children to speak So (Thavung) so that when they grow up and have some problems in their lives they will be able to come back and with the parents and other elderly people”.

10.2.2.9. Language as a source of sovereignty

Littlebear (1999: 2), a Cheyenne person of the USA, states: “language is basis of sovereignty”, and “Our land base and sacred practices are passed on through our languages, not by English, the language spoken by people who killed our people and oppressed our languages”. Note Littlebear’s wish to avoid the use of English. Rachel Cummins, a Warrungu person of Australia, clearly states that one of the reasons why she wishes to revive her ancestors’ language is because “English is invaders’ language”.

10.2.2.10. Beauty of the language

Hudson and McConvell (1984: 38) report from Kimberley, Western Australia: “To each group their language is beautiful to speak and listen to, versatile and expressive. Many are proud of the complexity of their languages, although this is not so appealing to learners!”. Recall also that, as noted in 10.2.2.7, some Warrungu people are proud of the rare phenomenon that was observed in their ancestral language.

10.2.2.11. For future generations

For the reasons listed above, many people consider it important to transmit their language for posterity. Thus, Topsy Chestnut, of Kimberley, Western Australia, states: “Young people don’t care about their language, but when they get older they feel sorry about it. That’s why we want to keep it” (cited by Hudson and McConvell 1984: 37; see also p.38, and McConvell 1991: 155). The writer met a fair number of people, during his fieldwork in North Queensland in the early 1970s, who said that, as children, they used to hear old people speaking their language around the camp but that they did not try to learn it. They now regretted this irrecoverable loss (Tsunoda 1997: 13–14).

In the case of languages that seem to have no chance of survival, the last speakers often wish, and indeed make every effort, to have their language recorded. This heartfelt desire and commitment were best expressed by the late Alf Palmer, the last fluent speaker of Warrungu of North Queensland, Australia. His statement, cited in 8.3, is worth reiterating: “I’m the last one to speak Warrungu. When I die, this language will die. I’ll teach you everything I know, so put it down properly”. Indeed, Alf Palmer made admirable efforts to teach

the writer everything he knew. More than a quarter century later a group of Warrungu people, including Rachel Cummins (cited in 10.2.2.6 and 10.2.2.9), who is Alf Palmer's granddaughter, started the revival activities of their ancestral language and culture (11.5.14-[2]), and the results of Alf Palmer's devoted efforts have proven to be an invaluable asset to his people.

Thus far we have seen community members' views on the importance of their linguistic heritage. Also, we have seen instances of their lament over its loss – particularly, the poem, cited in 10.2.2. This is the grief felt by people who have been prevented from acquiring their ancestral language and also the grief of people who have not been able to transmit their ancestral language to their children (Hale 1993: 25, 1998: 213). It is the very existence of this grief that is one of the most important reasons why languages should be kept alive.

In order to avoid the recurrence of such a grief, there are important roles to be played by the older members of the community and by linguists.

(a) Role of the older members of the community: “So it is up to the middle aged and older people to put them [i.e. young people] on the right track now so that they can get the benefit later” (Topsy Chestnut, cited by Hudson and McConvell 1984: 38).

(b) Linguists need to inform the community people (if they have not lost their language yet) of the grief felt by those people who have already lost their language. The role of linguists will be further discussed in 10.3.2-[2], and 12.3.2 through 12.3.4.

10.2.3. Language activist's view: Universal Declaration of Linguistic Rights

Indigenous communities are becoming conscious of linguistic rights (or language rights), and they are beginning to assert them. Thus, Hudson and McConvell (1984: 39) state: “Aboriginal people throughout Australia ... believe the indigenous people should have language rights including above all the right to maintain their language in addition to English”. See Maher (1995: 80, 90) for Ainu people, and Craig (1993: 35, 38–39) and Yamamoto (2001: 337) for the Americas.

On the whole, linguistic rights seem to be most vocally advocated by language activists. But they are supported by linguists as well, e.g. Krauss (1993: 46, 1996: 20, 2001: 29), Pawley (1991: 11), Tsunoda (1998a, 1999b), and Yamamoto (2001: 337).

The concept of linguistic rights is often put forward for protection of minority languages against the spread of so-called English language imperialism. As Trudgill (1991: 64) puts it, “English is an obvious ‘killer language’”.

Perhaps the most important result of activities regarding linguistic rights is the proclamation of the Universal Declaration of Linguistic Rights, at the World Conference on Linguistic Rights, in Barcelona, in June 1996. The book entitled *Universal Declaration of Linguistic Rights* was prepared by the Universal Declaration of Linguistic Rights Follow-up Committee in April 1998. (The book is not for sale, but it is available at <http://www.linguistic-declaration.org/index-gb.htm>.) The main points of the Declaration may be summarized as follows.

The Declaration is based on “the basic principle of the equality of all peoples and languages. Neither economic, social, religious, cultural, demographic, etc. features nor linguistic features justify any sort of discrimination; therefore, all linguistic communities are entitled to the same rights” (pp. 12–13).

“This Declaration takes language communities and not states as its point of departure...”. It then “takes as its point of departure the principle that linguistic rights are individual and collective at one and the same time” (p. 23).

At the level of individuals, Article 3 states (p. 24):

This Declaration considers the following to be inalienable personal rights which may be exercised in any situation:

- the right to be recognized as a member of a language community;
- the right to the use of one’s own language both in private and in public;
- the right to the use of one’s own name;
- the right to interrelate and associate with other members of one’s language community of origin;
- the right to maintain and develop one’s own culture; ...

Article 3 continues (p. 24):

the collective rights of language groups may include the following, in addition to the rights attributed to the members of language groups in the foregoing paragraph,

...

- the right for their own language and culture to be taught;
- the right of access to cultural services;
- the right to an equitable presence of their language and culture in the communication media;
- the right to receive attention in their own language from government bodies and in socioeconomic relations.

As a specific elaboration of the basic principles cited above, Article 15 states: “All language communities are entitled to the official use of their language within their territory” (p. 26).

The Declaration includes rights that concern education, regarding which specific rights are detailed in Articles 23 to 30. For example (pp. 27–28):

Article 23

1. Education must help to foster the capacity for linguistic and cultural self-expression of the language community of the territory where it is provided.
2. Education must help to maintain and develop the language spoken by the language community of the territory where it is provided.

...

Article 24

All language communities have the right to decide to what extent their language is to be present, as a vehicular language and as an object of study, at all levels of education within their territory: preschool, primary, secondary, technical and vocational, university and adult education.

Article 25

All language communities are entitled to have at their disposal all the human and material resources necessary to ensure that their language is present to the extent they desire at all levels of education within their territory: properly trained teachers, appropriate teaching methods, text books, finance, buildings and equipment, traditional and innovative technology.

Article 26

All language communities are entitled to an education which will enable their members to acquire a full command of their own language, including the different abilities relating to all the usual spheres of use,...

...

Article 28

All language communities are entitled to an education which will enable their members to acquire a thorough knowledge of their cultural heritage (history, geography, literature, and other manifestations of their own culture), ...

...

In order to ensure the implementation of these proposed rights, the Declaration contains the following clause on sanctions: "The public authorities must establish, in the light of existing legislation, the sanctions to be applied in case of violation of the linguistic rights laid down in this Declaration" (p.31).

The situation in Kimberley and North Queensland, of which the writer has first-hand information, and that regarding the Ainu language in Japan, are indeed short of the goals of the Declaration. The situation seems to be much the same elsewhere in Australia. For example, not one of Australian Aboriginal languages is recognized by the Australian government as an official language. Nor has the Ainu language an official language status. See von Gleich (1998) for a survey of the situation in Central and South America.

No government seems likely to officially endorse the Declaration. The reasons include the following. First, many governments do not seem to be concerned with minority peoples' rights. This is in fact an understatement. In many regions of the world, the government denies minority peoples human rights and

subject them to – often genocidal – oppression. That is, in these cases there is a much more serious and pressing issue than the recognition of linguistic rights, namely, physical survival (Nancy Dorian, p.c.). Second, execution of the Declaration will be extremely costly. Note, however, these costs are insignificant compared with the cost of certain military hardware, such as a jet fighter; see Krauss (2001: 37). This is a matter of priority.

We have looked at the rights to maintain one’s traditional language. Then, a question may be asked: Is it also a human right to abandon one’s traditional language? This will be dealt with in 10.3.3.

There is one comment that needs to be made on the Declaration. This has to do with extinct languages. The Declaration seems to be exclusively concerned with languages that are still spoken, and it does not seem to address itself to extinct ones. However, if it is a right to maintain a language that is still spoken, then it should also be a right to revive a language that has become extinct. Therefore, the Declaration needs to be expanded so as to protect the rights of people who are trying to revive their ancestral language. Language maintenance and language revival will be discussed in Chapter 11.

Closely related to the issue of linguistic rights is that of intellectual property rights. It will be discussed in 12.2.2 through 12.2.4.

10.2.4. Linguists’ view

10.2.4.1. *Introduction*

Like the Universal Declaration of Linguistic Rights, the arguments presented below are based on the belief that “all known human languages are at an equal human, intellectual, spiritual, logical, aesthetic, linguistic level. There is no such thing as a ‘primitive’ language, or inferior or superior language, any more than there is such a race” (Krauss 2001: 28). That is, “all human languages can be said to have inherent value” (Dorian 1993a: 5).

Different scholars have put forward different answers to the questions of “Why is it important to keep languages alive?”, and “Why is it important to document endangered languages?” The views advocated by linguists were already cited in 10.2.2-[2] through [6], and 10.2.3. In the following, other views entertained by linguists will be mainly examined. Most of them will be likely to be welcomed and shared by community members and language activists alike, with the possible exception of the linguistic diversity argument; see 10.2.4.6.

10.2.4.2. *The community's wish*

As we saw in 10.2.2, many community members wish to keep their language alive. In the writer's view, this is the most important and compelling reason for keeping languages alive, although this view does not seem to be expressed by other linguists, except for Hale (1993: 25, 1998: 213), who states that the grief over the loss of traditional languages "is good enough reason to resist language loss".

10.2.4.3. *For better understanding*

Again, this does not seem to be explicitly stated by other linguists, but one of the most important purposes of documenting endangered languages is for better understanding of the language, and the culture, and ultimately the people concerned:

- (a) by the members of the community, and;
- (b) by the outsiders to the community: (i) non-indigenous people who live in the community concerned, e.g. teachers, nurses, government officers, and (ii) the general public, outside the community.

The effort for better understanding may be paraphrased by Hinton's (1994: 254) words as an effort "to change our nation's viewpoint toward an acceptance of cultural and linguistic pluralism".

An example of the writer's efforts for better understanding by the outsiders who live in the community is given in the following (repeated from Tsunoda 1996a: 155). In 1975 and again in 1976, while he was conducting fieldwork in Halls Creek, Western Australia, he gave a series of lectures to teachers, nurses, government officer, the manager of the hostel for Aboriginal children, and others. The lectures looked at the differences between English and its culture on the one hand and Aboriginal languages and their cultures on the other. Perhaps all the people in the audience had had no training in Aboriginal languages and cultures.

In the Jaru language, the seat of emotion is the belly (and that of intelligence is the ears; Tsunoda 1981: 7). Consider:

(10-3)	<i>ngaju-Ø</i>	<i>nga=rna</i>	<i>munda-Ø</i>	<i>marnanyguliny-Ø.</i>
	1SG-ABS	C=1SG.NOM	belly-ABS	bad-ABS

Literally this sentence means 'I belly bad'. Possibly it may mean 'I have a stomach problem', 'I have diarrhoea' or the like. But it generally means 'I am upset', 'I am sad', 'I am angry' or the like. Also, consider:

(10-4)	<i>ngaju-Ø</i>	<i>nga=rna</i>	<i>munda-Ø</i>	<i>gida-Ø</i> .
	1SG-ABS	C=1SG.NOM	belly-ABS	good-ABS

Literally this sentence means ‘I belly good’. Possibly it may mean ‘I have recovered from diarrhoea’ or the like, but generally it means ‘I am happy’ or ‘I am glad’. Literal equivalents are used in Aboriginal people’s English (or perhaps Kriol – a variety of creole spoken in the northwest of Australia): *Me belly good* for ‘I am happy or glad’, and *Me belly no good* for ‘I am upset, sad, or angry’. Upon hearing this, a young woman teacher said, “Oh, I didn’t know that”. She continued, “One day at the school an Aboriginal boy kept saying to me ‘Me belly no good. Me belly no good’. I thought he was having diarrhoea, so I took him to the toilet”.

Linguistic research can be used in this way for better understanding of the languages and cultures of minority peoples.

10.2.4.4. *Language as irreplaceable cultural knowledge and as a conveyor of culture*

As noted in 10.2.2.4, this view is entertained by linguists as well. It has been argued that a given language:

- (a) contains the people’s knowledge (i.e. information and wisdom) of the world;
- (b) represents the people’s beliefs, values, world-view, and ways of comprehending, understanding or perceiving the world;
- (c) is a window into the human mind and the human spirit, that is;
- (d) provides an important clue for understanding the culture.

See Bradley (2001: 152), Dixon (1997: 144), Fishman (1997: 331, 333), Hinton (1994: 69), Krauss (2001: 31), Miyaoka (2001: 8–10), Nettle and Romaine (2000: 166), Pawley (1991: 3, 10, 11), Reyhner (1996: 4), Thieberger (1990: 335), Thomason (2001: 223), Trudgill (1991: 66–67), and Wurm (1991: 17, 1997: 38).

For example, (10-3) and (10-4) demonstrate how the Jaru language expresses the people’s perception. Perhaps the best example for illustrating the points (a) through (d) is the noun class system of Traditional Dyirbal of Australia (8.2.6.1). Recall how closely the system is based on Dyirbal people’s traditional culture, knowledge, and beliefs, without which an adequate understanding of the system is simply impossible.

An additional example concerns a group of archaeologists who visited Halls Creek, Western Australia in 1998, and who studied the production of stone tools. They carried out their research with the help of Joseph Blythe, a linguist from

the Kimberley Language Resource Centre, asking the Jaru teachers for Jaru words to refer to the materials, to the various stages of the production, to particular techniques, even to the flakes that came off and were discarded. After the research was completed, the anthropologists remarked that, by recording these Jaru terms, they obtained (i) far more information than could be obtained by means of English and (ii) the kind of information that could not have been obtained through English. This demonstrates again how indispensable a language is for an adequate understanding of the culture in question.

In view of considerations such as the above, languages are considered irreplaceable intellectual assets (Miyaoaka 2001: 8–10), and intellectual wealth (Hale 1993: 20, 1998: 204; Krauss 1993: 45).

The examples given above, from Dyrbal and Jaru, all concern the lexicon, and also sentences in the case of (10-3) and (10-4). Indeed, Pawley (1991: 14) emphasizes the value of the lexicon as a system which encodes “the product of generations of experience, of countless intelligences applied to problems of human condition”.

As noted above, it has been argued that a given language represents the people’s beliefs, values, world-view, and ways of comprehending, understanding or perceiving the world. It is relevant in this connection to consider the principle of linguistic relativity. (See Foley 1997: 192–245 for a recent survey of the relevant literature on this issue.) This principle is closely associated with Edward Sapir and Benjamin Lee Whorf, and it is often called “the Sapir-Whorf hypothesis” (Hoiyer 1974). We shall first look at selected statements of the principle by Sapir and by Whorf. Sapir (1951: 162) states:

Language ... powerfully conditions all our thinking ... Human beings do not live in the objective world alone, ..., but are very much at the mercy of the particular language which has become the medium of expression for their society. ... We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretation.

Whorf ([1956] 1976: 221) states:

the “linguistic relativity principle” ... means ... that users of markedly different grammars are pointed by the grammars towards different types of observations and different evaluations of externally similar acts of observation, and hence are not equivalent as observers but must arrive at somewhat different views of the world.

Intuitively, the principle of linguistic relativity may seem to be a straightforward matter. Indeed, it is easy to cite isolated, anecdotal evidence in support of it. However, there do not seem to be many studies which provide empirical evidence, based on controlled experiments (see Foley 1997: 192–245).

Perhaps the most famous example of this anecdotal evidence is that provided by Whorf (1976: 135) concerning “empty gasoline drums”. An additional example is cited from the writer’s own experience in Australia. In the English language kin term system, siblings are divided in terms of sex into brothers and sisters, and (at least in Australia) specification in terms of relative age, i.e. *elder brother*, *elder sister*, *younger brother*, and *younger sister*, is not required in daily conversations. In contrast, Japanese requires specifications in terms of sex and relative age, e.g. *ani* ‘elder brother’, *ane* ‘elder sister’, *otooto* ‘younger brother’, and *imooto* ‘younger sister’. (Synchronically, these words are unanalyzable, although etymologically they may be segmentable.) There is no equivalent generic word for ‘brother’ or ‘sister’. Now, when the writer was in Australia, introductions such as “This is my brother”, or “This is my sister”, made his mind felt unsettled and uncomfortable (!) until he received a reply to a question such as “Is he your elder brother or younger brother?” or “Is she your elder sister or younger sister?” Furthermore, English speakers looked puzzled when asked such a question. The relative-age distinction is ingrained in the writer’s mind, while this is not the case with English speakers. (This is no doubt due to the seniority system that has been deeply rooted in Japanese society.)

Among those studies which provide empirical evidence, based on controlled experiments, in support of the principle of linguistic relativity, possibly the clearest example is provided by Lucy’s (1992) comparison of Yucatec Maya, a language of southeastern Mexico, and English. One of the experiments Lucy conducted concerns plural marking in noun phrases. This phenomenon occurs in both languages, but the details differ between the two languages. See Table 10-1 (based on Table 21 of Lucy 1992: 61).

Table 10-1. Plural marking in Yucatec Maya and English

	Noun phrase type		
	A	B	C
	[+ animate]	[- animate]	[- animate]
		[+ discrete]	[- discrete]
Plural marking			
Yucatec	yes (optional)	no	no
English	yes	yes	no

That is, with noun phrases of Type A (e.g. dogs), plural marking is obligatory in English, but it is optional in Yucatec Maya. With those of Type B (e.g. shovels), it is obligatory in English, but it is non-applicable in Yucatec Maya. With

those of Type C (e.g. mud), it is non-applicable in both languages. The crucial difference between the two languages lies in Type B.

Lucy conducted a series of cognitive experiments with a group of Yucatec Maya speakers and a group of US English speakers. In one test, the subjects were shown three pictures (of a Yucatecan village life) and were asked to say afterwards what they had seen in the pictures. Regarding the number of the objects shown in the pictures, the English speakers were consistently attentive regarding the objects of Type A and B Types, but much less so concerning Type C. The Yucatec Mayan speakers did attend to the number of those of Type A, but much less frequently than the English speakers. They were even less sensitive to the number of the objects of Type B and Type C. This result is exactly as predicted on the basis of the linguistic facts presented in Table 10-1 (Lucy 1992: 105–106).

This and other experiments conducted by Lucy lend support to the principle of linguistic relativity.

Other works that furnish, or that purport to furnish, evidence in support of this principle include Levinson's (1992) study of spatial expressions ("north", "south", "east", "west") of the Guugu Yimithirr language of North Queensland, Australia (and Dutch), and Brown and Levinson (1992)'s work on spatial expressions ("uphill", "downhill") of the Tzeltal language of Chiapas Mexico.

As noted above, the works that provide empirical evidence in support of the principle of linguistic relativity do not seem abundant. Many (if not most) of them concern lexicon, e.g. Levinson's work on Gugu Yimithirr (and Dutch), and Brown and Levinson's work on Tzeltal. But Lucy's work on the plural marking in Yucatec Maya (and English) deals with morphology. No evidence seems to have been advanced from phonology or syntax.

For example, most of Australian Aboriginal languages have a three-vowel system (Dixon 1980: 129), like Philippine languages, while Japanese and Italian have a five-vowel system. Then, would do the speakers of the former languages and those of the latter languages exhibit different modes of perception? If so, how? As another example, languages of Middle America can be divided into four groups depending on whether their basic word order is AOV, AVO, VOA or VAO (Yasugi 1995: 120–122). ("A": transitive subject, "O": transitive object; cf. 8.2.3.) Would the speakers of these languages reveal different modes of perception – despite the fact that they share similar cultural backgrounds? Also, would speakers of a language with syntactic ergativity and those of one with syntactic accusativity (8.2.5.2) perceive the world differently? These issues seem to be entirely unexplored in research into the principle of linguistic relativity.

It is unlikely that every aspect of language will yield supporting evidence, and we need to investigate what aspects of language will and to what extent (Foley 1997: 244–245; Hoijer 1974: 126).

10.2.4.5. *Language products as invaluable cultural heritage*

In 10.2.4.4 “Language as irreplaceable cultural knowledge, and as a conveyor of culture”, we looked mainly at the value of language as a “cultural repository” (Dorian 1994d: 115). In contrast, we shall now be concerned with what may be termed products of language. At least two kinds of language products can be recognized: (i) aesthetic expressions by means of a given language, and (ii) what might be termed linguistic artifacts, in the absence of a better term.

[1] Aesthetic expressions by means of a language

They are an invaluable heritage in themselves. They include oral literature, songs, prayers, and so on. As Hale (1992b: 36) says, “Some forms of verbal art – verse, song, or chant – depend crucially on morphological and phonological, even syntactic properties, of the language in which it is formed. In such cases the art could not exist without the language, quite literally”. As seen in 10.2.2.5, certain aspects of linguistic expressions of a given culture are very difficult, if not impossible, to translate into another language, and, when translated into another language, important aspects thereof may be lost; see also Dorian (1994d: 115), and Pawley (1991: 11). Woodbury (1993: 115–125, 1998: 239) provides such examples from Central Alaskan Yup’ik Eskimo.

[2] Linguistic artifacts

One example will be cited from Australia. Australian Aboriginal languages are often divided into Pama-Nyungan and non-Pama-Nyungan languages (Blake 1994a: 266–267; McGregor 1994: xi–xii). The physical border between them is invisible, but it may be considered the linguistic “Great Wall of Australia”, a great wall that is a result of tens of thousands of years’ human migration and linguistic diffusion. The evidence the writer obtained indicates that this “Great Wall of Australia” passes immediately south of Halls Creek, Kimberley, Western Australia (Tsunoda 1981: xv). Unfortunately, however, the two languages that sandwich the border there, i.e. Jaru and Kija, are endangered, and the Great Wall may cease to exist in less than a half century.

Thus far in 10.2.4.2 through 10.2.4.5, we have looked at those linguists’ views which are, or will be likely to be, shared by community members and language activists. In contrast, the view expounded in 10.2.4.6 may not be accepted by them as it stands.

10.2.4.6. *Linguistic diversity*

The value of linguistic – and also cultural – diversity has been argued for by linguists, e.g. by Whorf (1976: 84–85, 244) a half-century ago, and recently by Bradley (2001: 152), Dorian (1993a: 5–6), Hale (1992b, 1993: 17, 1998),

Krauss (1992: 8, 1996: 20, 2001: 31), Mithun (1998), Miyaoka (2001: 10), Pawley (1991: 10–11), Thieberger (1990: 341), Trudgill (1991: 66), Tsunoda (1997: 12–13), Woodbury (1998: 234), Wurm (1997: 38), and Yamamoto (2001: 335). This view can be classified into three types:

- (a) linguistic diversity for human survival;
- (b) linguistic diversity for the science of linguistics, and;
- (c) aesthetic arguments.

Indeed, the value of linguistic diversity appears to be the linguists' favourite reason for their concern with language endangerment, and the writer used to firmly take this view. However, the value of linguistic diversity has turned out to be a tricky issue, and it needs to be considered carefully. The linguistic diversity argument as it was initially formulated (see Hale 1992b, for example) was in the main concerned with (b), and it could have been interpreted as only self-serving, i.e. serving linguists' interests only, i.e. for the "survival" of linguistics and linguists (although, no doubt, that was not Hale's intention; see Hale 1993: 25). Consequently, as it stands this argument is unlikely to be supported by community members or language activists. Nonetheless, it will potentially provide a strong basis for the value of linguistic heritage. It will be made more convincing if it can be shown that linguistic diversity is of significant value not only for linguists, but also for the language communities and the entire human-kind. These issues will be explored below.

[1] Linguistic diversity for human survival

The argument goes as follows: Just as genetic diversity (Miyaoka 2001: 9; Pawley 1991: 10), biological diversity (Krauss 2001: 31), or biodiversity (Miyaoka 2001: 4) is essential for the adaptation or survival of a species (Pawley 1991: 10; see also Reyhner 1996: 4), linguistic (and cultural) diversity is essential for "our survival as human beings" (Krauss 1996: 20). See also Hale (1993: 17).

Indeed, as biologists point out, "Homogeneous populations are liable to be wiped out by disease or changing environmental conditions" (Pawley 1991: 10). The writer (Tsunoda 1997: 13) recalls that in the introductory anthropology class he attended in the 1970s, the lecturer was comparing (i) corn (or wheat?) fields of the middle west USA, in which one single disease may terminate miles and miles of corn (or wheat), and (ii) the rain forest jungle in Papua New Guinea, which consists of variety of trees, creepers, grass and so on and which is consequently less likely to be wholly affected by just one single disease. The linguists cited above – except for Pawley – agree that linguistic (and cultural) diversity is essential for the survival of humans for the same reason.

This "biological argument" (Krauss 2001: 30) is a favourite one among linguists. However, Pawley (1991: 10–11) expresses his misgivings, saying that

the argument is less forceful in the case of linguistic and cultural diversity for human survival in that people can quickly acquire a new language and/or a new culture. This suggests that the biological argument is not totally convincing. We shall look at this issue in some detail.

Is linguistic diversity necessary for the survival of humans? This question may be rephrased as follows: Will the knowledge that is necessary for the survival of humans be lost if linguistic diversity is lost? It is tempting to answer “Yes”, but this is extremely difficult to prove.

Indeed, as seen in 10.2.4.4, language is a conveyor of culture. It “does represent the main tools for humans to elaborate, maintain, develop, and transmit knowledge”. “Furthermore, local knowledge does not ‘translate’ easily into the majority languages to which minority language speakers switch. Generally, the replacing language does not represent an equivalent vehicle for linguistic expression and cultural maintenance” (Maffi 2001a: 6; cf. also Thieberger 1990: 341). That is, when a language is lost, a vast amount of knowledge may be lost. Thus, Padoch and Pinedo-Vasquez (2001: 366) report on Amazonia of Brazil: “the loss of knowledge about Amazonian forests, waters, plants, and animals ... is accompanying the loss of Amazonian languages and traditions”. No doubt, maintenance of traditional languages facilitates retention of traditional knowledge (cf. Trudgill 1991: 67) and in turn this will assist the survival of humans. However, this does not necessarily mean that humans cannot survive without linguistic diversity.

First, there are peoples all over the world who have lost their traditional language and yet who have survived. This shows that, as far as these peoples are concerned, linguistic diversity was not necessary for their survival.

Second, as noted above, maintenance of the traditional language will no doubt facilitate retention of the traditional knowledge. This will apply, for example, to the knowledge about plants used for traditional medicine. However, this knowledge may not be vital for the survival of humans, for speakers of many other languages (and possibly those of the language in question) have survived despite the loss of this knowledge.

To sum up, maintenance of the traditional language facilitates retention of the traditional knowledge, but linguistic diversity itself does not seem necessary for the survival of humans, and the biological argument as it stands does not seem tenable.

[2] Linguistic diversity for the science of linguistics

This has been argued for perhaps most forcibly by Hale (1992a, 1992b, 1993, 1998). See also Bradley (2001: 151), Dorian (1993a: 5), Krauss (1996: 20, 2001: 29), Miyaoka (2001: 10), and Woodbury (1998: 234).

Hale (1992a: 1) states that “language loss is a serious matter”, for it is “loss of cultural and intellectual diversity”. More specifically, “linguistic diversity is important to human intellectual life – not only in the context of scientific linguistic inquiry, but also in relation to the class of human activities belonging to the realms of culture and art” (Hale 1992b: 35), and “without linguistic diversity it will be impossible for us to perform the central task of linguistic science, i.e. the task of developing a realistic theory of human linguistic competence” (Hale 1998: 193). Thus, Hale (1992b: 35) says that, if “English were the only language available as a basis for the study of general human grammatical competence”, “we would miss an enormous amount”. Hale (1992b, 1993, 1998) provides illuminating examples to illustrate his point. One set of his examples is taken from his own field data of an endangered language of Australia, and this concerns a special style called Damin of the Lardil language of Mornington Island, North Queensland. Damin “was used in place of Lardil when this was necessary for ritual purposes” (Hale 1992b: 37). Hale notes that Damin appears to have been invented, and says: “If it was invented, then it is a very clever invention” (Hale 1992b: 37). Hale gives examples from the phonology and the lexicon.

The Damin phonology “departs drastically from the phonology of Lardil, and it has sounds in it which do not exist in any other Australian language. For example, it has click consonants, otherwise found only in Africa – in the Khoisan languages, for example, and in the Nguni languages of the Bantu family, languages with no historical connection to Lardil”. Furthermore, “it not only has sounds absent elsewhere in Australia, but it also has sounds found nowhere else in the world – as true phonological segments, that is. These include an ingressive voiceless lateral and a labio-velar lingual ejective” (Hale 1992b: 36–37).

The lexicon of Damin, too, is fascinating. In short, the Damin lexicon is small, but it can express everything that can be expressed in Lardil.

Damin is a truly remarkable phenomenon. Its organization is extremely clever and unique. Unfortunately, however, Damin is no longer transmitted to the younger generation. Initiation ceremonies, in the context of which Damin was learned, were forbidden by the mission of Mornington Island during the early decades of the 20th century, and only men initiated before the mission was established had the opportunity to learn Damin (Hale 1992b: 36). “The last fluent user of Damin passed away several years ago” (Hale 1992b: 40).

Hale’s account of the structure of Damin and its loss convincingly shows “what can be lost if linguistic and cultural diversity disappears” (Hale 1992b: 41).

As alluded to by Hale and other linguists listed above, minority languages sometimes exhibit phenomena that are not observed, or that are not readily observable, in major languages such as English, and their study has made important contributions to general linguistics and linguistic theory. Examples of such contributions based on research into Australian Aboriginal languages include the following (Tsunoda 1998b: 22):

(a) ergativity, particularly, syntactic ergativity: Dixon (1972, 1979, 1994) and Silverstein (1976);

(b) Silverstein's NP hierarchy: Silverstein (1976), and cf. also Dixon (1994: 83–94);

(c) clause linkage: Dixon (1972, 1994), Silverstein (1976: 162–164), and cf. also Foley and Van Valin (1984), and;

(d) configurationality: Hale (1983).

Virtually all the languages – except for Warlpiri – that formed the basis of these contributions are endangered or extinct. This again underscores the importance of documenting endangered languages. Recall also that study of endangered languages has improved our understanding of language change, in particular, in relation to pidgins and creoles (8.4.5.2). (See 13.3.2.2 on general linguistics, and 13.3.2.3 on linguistic theory, each in relation to fieldwork.)

[3] Aesthetic argument

As noted in 10.2.2.10, there are community members who are proud of the beauty of their language. Similar arguments have been put forward by two linguists: Trudgill and Krauss. Trudgill (1991: 68) states: “a world where everyone spoke the same language would not only be a very boring place; there is a very good chance that it would also be a very stagnant place”. Krauss (1996: 20, 2001: 31) argues: the world would be a less beautiful and less interesting place if the only flowers were tulips (or here, say, chrysanthemums), or the only languages were English or Japanese. This could seem like a trivial issue; beauty is in the eye of the beholder. Yet man does not live by bread alone (Krauss 2001: 31). Trudgill's and Krauss' argument may strike some people as more convincing if it is paraphrased as follows: What would you think if, wherever in the world you go, all you could eat were a Macdonald's hamburger, and there were no sushi or tempura in Japan, no Peking duck in China, no borsch in Russia, no ham in Germany, no truffles in France, and so on. The same applies to linguistic diversity.

As mentioned above, the argument in support of linguistic diversity – particularly [2] “Linguistic diversity for the science of linguistics” – may be considered self-serving, i.e. serving linguists' interests only (cf. Hale 1993: 25; also Krauss 1993: 45, 2001: 29, and Trudgill 1991: 66), although this is not what is intended by this argument. A likely response to the linguistic diversi-

ty argument will be: “Ah, so you linguists want to keep people speaking their own languages just so you can study them” (Krauss 2001: 8). Indeed, Mufwene (1998b: 1) considers this argument to be simply self-serving and “very much in the interest of their profession”. It is, however, possible to argue that research into linguistic diversity benefits non-linguists as well, and humankind in general.

First, the existence of linguistic diversity “testifies to the human capacity for diverse intellectual organization” (Dorian 1992: 143), and this in itself is an important asset of humankind – although it may not benefit communities directly.

Second, Patricia Shaw (p.c.) stated that the argument in support of linguistic diversity will be more convincing if linguistic diversity can be shown to be of significance not only for linguists, but also for communities. One such example concerns syntactic ergativity. The existence of a rare phenomenon called syntactic ergativity in their ancestral language – a striking example of linguistic diversity – has enhanced some Warrungu people’s sense of pride and self-esteem. It has proved to be an invaluable cultural heritage to them (10.2.2.7, 11.5.14-[2]).

The value of theoretical works such as those listed above, e.g. Dixon’s work on syntactic ergativity, should also be mentioned. Such theoretical work may appear to be irrelevant to the benefits of the community. However, it does benefit them, albeit indirectly. Such theoretical work broadens fieldworkers’ perspectives, and helps to improve the quality of the documentation of languages. This in turn will contribute towards the improvement of language revitalization activities.

To sum up, research into linguistic diversity is likely to be of value to humankind in general, and to communities in particular – although it may not benefit them immediately or directly.

10.3. The other side of the concern for language endangerment

10.3.1. Introduction

There are people who are seriously concerned with language endangerment: community members (10.2.2), language activists (10.2.3), and linguists (10.2.4). There are, however, people who are not concerned with it, and people who even welcome it. There are also people who are opposed to language revitalization activities. This issue is discussed in 10.3.2. There are also criticisms of some of the views cited above in 10.2.2 through 10.2.4. Furthermore, there are factors that may inhibit the execution of these views. They are looked at in 10.3.3.

10.3.2. Lack of concern for language endangerment

Probably the majority of people in the world are not concerned with language endangerment, and there appear to be people who even welcome the current language crisis, as seen below.

[1] Linguists

Surprisingly, linguists in general do not seem to be concerned with language endangerment. This is pointed out by Dixon (1994: 136–137), Dorian (1994b: 799), Krauss (1992: 8, 1993: 45), and Miyaoka (2001: 6–7). For example, Dixon (1994: 137) states: “Indeed, if every linguistics student (and faculty member) in the world today worked on just one language that is in need of study, the prospects for full documentation of endangered languages (before they fade away) would be rosy. I doubt if one linguist in twenty is doing this”. Dorian (1994b: 799) has strong words to say: “Arguably the single most fundamental obstacle, ..., is an absence of mobilizing will on the part of the profession”.

[2] Mass media and general public

It is often the case that the general public is not concerned with language endangerment. This is reflected in, or possibly caused by, the relatively little attention, or no attention at all, that is paid to endangered languages, in comparison with the attention paid to (i) endangered natural species (cf. Krauss 1992: 7–8; Miyaoka 2001: 6; Pawley 1991: 3; Tsunoda 1997: 14; 1998a, Wurm 1997: 38) and (ii) the destruction or decay of the products of architecture and civil engineering (cf. Miyaoka 2001: 9).

An example of (i) is the heated media reports in 1999 in Japan on the hatching of a chick of an endangered bird species called *toki* (‘Japanese ibis’). No doubt such a phenomenon in mass media is a commonplace in other countries as well. In contrast, when Alf Palmer (Warrungu name: Jinbilnggay) passed away in 1981 (5.2-[6]-(b), 8.3), there was not one single newspaper – even in Australia – that reported the death of the last speaker of the Warrungu language (Tsunoda 1997: 14, 1998a).

An Australian known as “the Media King” was reported to have said that things would be improved (for his business?) if everyone in the world spoke just one language. No doubt, he meant English, which happens to be his mother tongue. It seems likely that his view is shared by other people. For them, language endangerment will be a welcome phenomenon, and it constitutes no cause for concern. But what would the Media King say if his language, i.e. English, faced extinction? Would he welcome its extinction? (See Tsunoda 1997: 14.)

Despite what has been said above, at least in Japan the situation has been slowly changing, and there is now an encouraging sign. The mass media is beginning to show interest in language endangerment. It is not uncommon to encounter, for example, newspaper and magazine articles that deal with endangered languages or minority languages, e.g. Tsunoda (1997, 1998a, 1999b, 2000b).

[3] Governments

The attitude of governments seems generally no better than that of the media and general public. There are governments which do not seem to be concerned with minority peoples' rights (as noted in 10.2.3), and which regard these peoples as a "nuisance". It is vital that the government recognizes minority peoples' rights (11.4.2-[7]-(a)).

Perhaps, with very few exceptions (such as the New Zealand government; see 11.5.2), governments do not seem to be committed to the documentation and revitalization of endangered languages. Language revitalization activities in Australia (and no doubt elsewhere) are continuously beset with financial problems (11.4.2-[7]-(c)).

It may be argued that one possible cause for these problems is the cost involved. Thus, "linguistic diversity creates extra costs in translation, duplication of materials, etc." (Pawley 1991: 10). The same may be said to apply to the cost of the execution of the Universal Declaration of Linguistic Rights (cf. 10.2.3), and for the documentation of endangered languages. However, this argument can in no way be justified. As Krauss (2001: 37) points out, these costs are insignificant compared with the cost of certain military hardware, such as a jet fighter.

There is another problem with governments. They – like the mass media and general public – do not seem to recognize any value in languages as a cultural heritage. For example, the Japanese government regularly nominates a small number of people as "National Treasures". These National Treasures are mainly people who preserve traditional performing arts, handcrafts, and the like. But this government policy is never applied to language. So, the writer says to his students – partly jocularly but partly seriously, "Well, if those people are nominated as National Treasures, then why aren't I nominated as a World Treasure? I am the last and the only speaker of Warrungu in the whole world" (Tsunoda 1998a). The students laugh at this, but they fully appreciate what the writer intends to show, i.e. the lack of the government's interest in languages as cultural heritage.

[4] Administrators, educators, and other officers

It has often been reported that certain – if not all – administrators, educators, and other officers consider the existence of a minority language as an obstacle

for education. Thus, Hudson and McConvell (1984: 39) state that some administrators, educators and other highly placed people would probably be glad to see all Aboriginal languages die away, either because they cling to the assimilation view or because they think it would make their jobs easier.

[5] Community members

Community members may not see any value in their traditional language. Thus, old people may not seize upon an opportunity to have their language recorded – much to the regret of their descendants (Tsunoda 1996a: 156). Also, community members may be opposed to language revitalization activities, or they may think that revitalization efforts are pointless or worthless; see 11.4.2-[11]-(a), Fishman (1991: 11), and Maher (1995: 91).

10.3.3. Linguistic rights

We now return to the issue of linguistic rights, discussed in 10.2.3. If it is a right to maintain one's traditional language, wouldn't it also be a right to abandon it (Brenzinger, Heine, and Sommer 1991: 41; cf. also Matisoff 1991: 221)? Recall that it is in order to survive (7.3.1-[2], 7.3.4) or, more generally, for the betterment of one's life that minorities shift to the dominant language. An article in a Japanese newspaper reports the view of a man who hails from the Ryukyu islands and is now a professor at a university in Tokyo. He in effect seems to welcome the decline of the Ryukyuan language, which has decreased the "language barrier" facing people who move to mainland Japan. (Ryukyuan is genetically related to Japanese; see Maher 1994.) Ladefoged (1992) reports and apparently supports the view of a speaker of Dahalo, a dying language of Kenya, who seemed to be happy that his son had been to school and only spoke Swahili.

However, Ladefoged neglected one important role of linguists (mentioned in 10.2.2.11), namely, to inform people of the grief and regret that are felt by those people who have lost their language. His stance was criticized by Dorian (1993b: 576), who points out regarding the Gaelic-speaking East Sutherland fisherfolk of Scotland that "some of the youngest members of their own kin circles have begun to berate them for choosing not to transmit the ancestral language and so allowing it to die".

The above shows that the issue of rights should take into account not only the present generation but also future generations. Any dealings with endangered languages should take future generations into consideration. It is relevant in this context to mention the following: Many people and many governments claim it is their right to consume resources and they continue to pollute

the earth. Their claim ignores future generations. But the latter, too, have a right to survive.

10.3.4. Linguistic diversity

We now turn to the issue of linguistic diversity, discussed in 10.2.4.6. One factor that is said possibly to hinder the maintenance of linguistic diversity – i.e. the cost – was discussed, and dismissed, in 10.3.2-[3]. There is another potentially hindering factor: it may be argued that linguistic diversity constitutes an obstacle for national unity. Pawley (1991: 10) points out that “ethnic identity (of which language is an important emblem) often brings political problems for nations”. This seems to be the case in many nations in Africa (Brenzinger 1998a: 92). Recall also the situation in the former Yugoslavia.

However, this argument does not apply to every country. Consider Switzerland and India. They are multi-lingual, but this does not seem to split the countries. This shows that, when considering such an issue, we need to look at not just the languages but also the surrounding socio-political environment. That is, the language may play an important role, but it is not decisive.

10.4. Language, culture, and identity

10.4.1. Introduction

Some community members are of the opinion that their language contains irreplaceable cultural knowledge, and that it is a conveyor of their culture (10.2.2.4). This view is shared by linguists (10.2.4.4), and, no doubt, by language activists as well. Thus Miyaoka (2001: 9) argues that “the disappearance of any language represents a loss of intellectual heritage not only for the people but for humanity as a whole”. It is important in this context to make the following related inquiries:

(a) What is lost when a language is lost? What remains after a language is lost?

(b) Is it still possible to retain a culture after the traditional language associated with it is lost? This question may be rephrased as follows: Is it possible to be Xmen without Xish? (The terms “Xish” and “Xmen” are taken from Fishman 1991: 11. The former stands for the name of any language and the latter for the members of the community.)

We shall look at each of these two questions.

It is useful in this context to look at a definition of culture. Marvin Harris (1997: 88) defines “a human culture” as follows: “the total socially acquired life-style of a group of people, including their patterned, repetitive ways of thinking, feeling, and acting”. Then, according to this definition, a culture will include the language, as well as many other components such as (i) patterns of behavior, (ii) practices concerning food, clothes, child rearing, (iii) myths and other beliefs. The definition of culture by Harris is in fact one by a researcher, but it does not seem to contradict the concept of culture as entertained by community members.

It is also relevant to recall the distinctions of the function or value of language (cited in 10.2.2.1): (i) integrative vs. instrumental, and (ii) symbolic vs. communicative.

10.4.2. What is lost when a language is lost?

What remains after a language is lost?

An obvious fact is that, when a language is lost, it is lost. Also, the loss of a language is bound to entail the loss of aspects of the culture that were conveyed by the language, e.g. (i) knowledge of ceremonies, mythology, environment, technology, language skills, and (ii) songs, linguistic artifacts (10.2.2.4, 10.2.2.5, 10.2.4.4, 10.2.4.5).

However, Trudgill (1991: 67) argues: “It is not inevitably the case that when a language is lost, a culture is lost with it”. Fishman (1964: 51, 1972: 123–124, 1991: 16) points out that components of a culture such as self-identification, patterns of behaviour and group loyalty may remain long after the traditional language was lost. Similarly, Edwards (1984: 281, see also 284, 289) notes: “communicative language, distinctive dress and ornamentation, and other public manifestations of group identity tend to disappear; aspects of domestic life, the symbolic significance of language and religious observations may remain”.

Woodbury (1993: 108) observes: “Patterns of language use may persist in a community even when the code matrix undergoes change”. This is probably what Giles, Bourhis, and Taylor (1977: 327) term “ethnic speech style”.

Eades (1982, 1988) painstakingly argues that a culture may be retained even after the language has been lost. Specifically, on the basis of her observation of certain groups of Aboriginal Australians of southeast Queensland, who now speak a variety of English, Eades proposes that the traditional culture is retained in aspects such as (i) the way English is used by them (an example of ethnic speech style), and (ii) patterns of behavior, such as avoidance behaviour.

(a) Use of English. “While the chosen language code is frequently English, there are important continuities in the ways language is used” (Eades 1988: 97) and this is reflected in aspects such as questions and information seeking. According to Eades, these Aboriginal Australians employ a different strategy from that of middle class white Australians. She lists the following three differences regarding questions and information seeking (Eades 1982: 73–75).

(a-i) Direct questions such as *Were you very young then?* tend to be avoided (Eades 1982: 65). Instead, a declarative sentence with question intonation (or a following interrogative tag) is used, e.g. *Grandfather used to live at Tirroan?* Basically the questioner presents some proposition for confirmation (or correction).

(a-ii) Direct questions are also used, though much less frequently.

(a-iii) Interjections and repetitions are used to encourage a speaker who has given some information to give some further information – *yeah, mm, oh, what?* and the like.

Additional examples of reflection of an Australian Aboriginal language in English are *Me belly no good*, (meaning ‘I am sad’, etc.) and *Me belly good* (meaning ‘I am happy’, etc.); see (10-3) and (10-4) and comments on them.

(b) Avoidance behaviour. As noted in 8.3, in traditional Australian Aboriginal communities certain kin members are in a taboo relationship to each other. Thus, a man and his mother-in-law should avoid close contact and may not address each other directly. Eades points out that this pattern of behaviour is still retained among the people in question. An example (Eades 1988: 103) concerns “a man in his sixties with a bad leg who often walks about two kilometres to town. On the way he often passes his mother-in-law’s house where he sometimes rests. However, he never enters the house, but rests in the shed out the back”.

To sum up, it seems unjustifiable to say that when a language is lost, the culture is lost entirely. Woodbury (1993: 109) concludes carefully: “Interrupted transmission of an integrated lexical and grammatical heritage spells the direct end of some cultural traditions and is part of the unraveling, restructuring, or reevaluation of others”.

10.4.3. Is it possible to be Xmen without Xish?

As seen repeatedly, a given language provides an important clue for understanding the culture. Then, is the language the most important component of the culture? This question may be reformulated as follows: Is it possible to be Xmen without Xish? There are two opposing answers to this question:

(a) No, it is impossible to be Xmen without Xish, and;

(b) Yes, it is possible to be Xmen without Xish.

This question is extremely controversial both emotionally and politically. The opinions are divided among language groups, among communities, among community members, and also among linguists. We shall first look at community members' opinions, followed by linguists' opinions.

[1] Community members' opinions

The answer to the question "Is it possible to be Xmen without Xish?" may vary from one language group to another (see Giles, Bourhis, and Taylor 1977: 327; Thomason 2001: 240, 243). Furthermore, it may vary among communities within one language group, and among members even within one community. Then, what is behind this variation in the answers to this question? This is examined below.

Although this is not always explicitly mentioned in the literature, the answer to the question posed above seems to be generally – though not always – related to the degree of the endangerment of the language in question. That is, the answer seems more likely to be "No, it is impossible to be Xmen without Xish" if the language is healthier, but it is more likely to be "Yes, it is possible to be Xmen without Xish" if the language is less healthy. Furthermore, within one and the same community, the answer seems to correlate with the person's personal knowledge of the language. That is, the answer seems more likely to be "No, it is impossible to be Xmen without Xish" if the person is more proficient in the language, but it is more likely to be "Yes, it is possible to be Xmen without Xish" if the person is less proficient in it. Examples of divided opinions follow.

Some community members hold the view "No, it is impossible to be Xmen without Xish". See Dorian (1999b: 36) and Florey and van Engelenhoven (2001: 212) for examples. However, opinions may be divided among communities, and among community members. Thus, Jocks (1998: 230), a Mohawk person of the USA, reports: "In traditional circles one frequently hears the assertion that language and culture are inextricably linked, and the loss of an Indigenous language prefigures loss of distinct culture and identity. But one also hears the opposite assertion: that Native people can and do live traditional lives without speaking or understanding their traditional languages. I agree". The same kind of split in opinion is found in Wales as well (Crystal 2000: 120).

A parallel division in opinion is reported by Dorian (1998: 20) from Scotland: "I found that when I asked speakers of Scottish Gaelic whether a knowledge of Gaelic was necessary to being a 'true highlander', they said it was;

when I asked people of Highland birth and ancestry who did not speak Gaelic the same question, they said it wasn't". Note that the answer correlates with the person's proficiency in the language. Similarly, Langan (1993: 1) reports regarding K'iche' speakers of Chichacastenango of Guatemala that more proficient speakers tend to say that they cannot really be K'iche' if they do not know the K'iche' language, but that less proficient speakers tend not to share this view.

One single person may entertain both possibilities. Thus, Jocks (1998: 219) states as follows: "I and most Native people I know hesitate to embrace the radical ... view ... that without our languages we are no longer Native people – but on the other hand, I fear that without our languages it is all too easy for us to become cartoons". (For "cartoons", see 10.2.2.4.)

[2] Linguists' opinions

As is the case with community members, linguists' opinions are divided. A stance very close to that of "No, it is impossible to be Xmen without Xish" is vehemently argued for by Miyaoka (2001: 8): "once an ethnic group loses its own language, even if some fragments of its material culture (e.g. ethnic costumes, crafts, or whatever) live on, they may represent little more than a lingering twilight; the culture may possibly have been lost or, at least, may not be functioning as an organic whole any longer. In this sense language may be said to be the last stronghold of a culture". For a similar stance, see Tovey, Hannan, and Abramson (1989: 34) regarding Irish.

There are, however, linguists who maintain the view "Yes, it is possible to be Xmen without Xish". Thus, Rigsby (1987: 370) argues that it is necessary to distinguish between (i) external traits, such as speech, dress and appearance, and (ii) the inner values and principles that guide people's lives and make up the real substance of their social and personal identity, and he challenges the view that "one cannot be a real Indian unless one can speak an Indian language". Similarly, Woodbury (1993: 108) argues: "Language and cultural identity are logically independent". See also Dimmendaal (1989: 28). As alluded to in 10.4.2, Edwards, Fishman, and Trudgill seem to share the view "Yes, it is possible to be Xmen without Xish".

A view intermediate between these two views is held by Nancy Dorian (p.c.): a person who does not speak Xish is still an Xman, but is an impoverished Xman by comparison with his fluent grandfather or grandmother. See also Dorian (1994d: 114, 1999b: 31).

We have seen various answers to the question "Is it possible to be Xmen without Xish?".

If, for the sake of argument, we accept the view that a given culture can be retained after the loss of the traditional language, then is it pointless and worth-

less to document endangered languages and to revitalize extinct ones? The answer is emphatically “No!” An example from Australia is cited. In 1972 the writer was able to record only eight words from the late Alec White, the last speaker of the Gabilgaba language, which used to be spoken in the Townsville area (Tsunoda 1996b). More than a quarter century later, the late Alec White’s descendents are trying to recover their ancestral language. Lyle Johnson, his grandson, said to the writer, “Even just one or two words, or 20 words are important”. So, the people are not content just to say, “We can retain our culture without our language”. Every bit of the language is sought after. They want to regain their traditional languages as much as possible, although this may only be partial.

To conclude this discussion of the link among language, culture, and identity, the following remarks are offered. We have seen two apparently opposing views. One asserts that almost all the culture is gone once the language is gone, namely, that it is very difficult (if not impossible) to be Xmen without Xish. The other maintains that the culture and identity can be retained after the language has been lost, i.e. it is possible (and not difficult?) to be Xmen without Xish. These two views may look polar-opposite, but perhaps they emphasize different aspects of the same spirit. That is, the former stresses the importance of a language in the retention of the culture, while the latter points out the value of any lingering elements. The former may be taken to be an alarm directed at a community whose language is still alive, while the latter may provide people whose language is extinct with little documentation, with a foundation on which to construct their identity. Even in cases where the traditional languages no longer have an instrumental and communicative function, they certainly have an integrative and symbolic function.

10.5. Summary of Chapter 10

Chapter 10 looked at the views that argue for the importance of linguistic heritage: those of community members, of language activists, and of linguists (comparing them with the views of people who do not share this concern). Most of the views have to do with language as cultural heritage. The argument that advocates the value of linguistic diversity does not seem convincing as it stands, but it will have a forceful power if linguistic diversity is shown to benefit humankind in general, and community members in particular. Emotionally the most compelling reason for this concern comes from the grief that is felt by the people who have lost their traditional language. Rationally the foundation for this concern should be sought in linguistic rights.

Chapter 10 also looked at the controversy as to whether it is possible to be Xmen without Xish. Indeed the loss of a languages entails the loss of many important aspects of the culture, but what remains may be utilized to reconstruct the basis of the group's identity.

11. Language revitalization: maintenance and revival

11.1. Introductory notes

While on the one hand many languages are disappearing, on the other there are many attempts to maintain endangered languages. There are even attempts to revive extinct ones. This chapter looks at issues that surround these activities.

Various terms have been used with reference to such activities, e.g. language maintenance (Fishman 1964), language revival (Fishman 1964: 53), reversing language shift (Fishman 1991), language preservation (Rigsby 1987: 370; Silverthorne 1997; Wurm 1997), language reproduction (Williams 1992), language restoration (Spolsky 1995: 194), language reversal (Tezozomoc, Danza Azteca Huehuetotl, and Danza Azteca Tenochtitlan 1997: 74), language renewal (Fettes 1997; Daniel Rubin 1999; Amery 2000: 18), language revitalization (Jones 1998; Reyhner 1999: iii; Spolsky 1995: 178), language resurrection (Amery 2000: 17), language reclamation (Amery 2000: 17), language recreation (Thieberger 2002: 325), and linguistic revival (Edwards 1984: 304). (See Amery 1994, 2001: 17–18 for a brief survey.)

The present work employs the following terms. The term for the general subject is “language revitalization” (as indicated in the chapter title), which may be characterized as “restoration of vitality to a language that has lost or is losing this attribute” (cf. Spolsky 1995: 178). It is divided as follows.

(a) Language maintenance: this concerns languages that are endangered, but still alive.

(b) Language revival: this has to do with extinct languages.

Furthermore, Amery (2000: 17–18) classifies language revival (as characterized above) into the following two types.

(b-i) Language renewal: language revival in situations where there is no fluent speaker left, but a significant amount of the language is known within the community.

(b-ii) Language resurrection or language reclamation: language revival in situations where the language is no longer spoken and little is known orally within the community, i.e. an attempt to relearn a language from earlier materials on the language. (For examples of such attempts, see 11.5.14.)

There is already a large literature on language revitalization. General works and/or surveys on this issue include Crystal (2000: 91–166), Fishman (1964,

1972: 107–154, 1991, 1996b), Nettle and Romaine (2001: 175–204), Thieberger (1990, 2002), Tsunoda (2001e: 8352), and Wurm (1998). Anthologies include Bradley and Bradley (2002), Fase, Jaspaert, and Kroon (1992b), Hinton and Hale (2001), and Linda King (1998). Anthologies or surveys of specific areas include the following.

(a) Australia: Baldauf and Luke (1990), Bell (1982), Hartman and Henderson (1994), McKay (1996), Nathan (1996), and Schmidt (1990).

(b) North America: Cantoni (1996b), Reyhner (1997), and Reyhner et al. (1999).

(c) The former USSR: Shoji and Janhunen (1997).

Detailed accounts of specific language revitalization activities include Huss (1999), Jones (1998), Kendall King (2001), and Maguire (1991).

The above-cited works mainly deal with aboriginal languages, but some of them include accounts of enclave languages (cf. 1.4), including immigrant languages.

Language revitalization may sound romantic to some readers. However, it should be stressed at the outset that it is a formidable and daunting task, despite the existence of a very small number of success stories such as Hebrew and Maaori. Hebrew had died as the medium of everyday conversation more than 2,000 years ago, but it was revived with considerable effort in the late nineteenth and early twentieth century; see Fishman (1991: 289–336), Mesthrie (1994: 1989), and Spolsky (1995). Maaori did not become extinct, but was (and still is?) endangered; see 3.3.1 and also 11.5.2.

11.2. Can languages be revitalized?

As mentioned in 11.1, there are a large number of language revitalization activities being conducted in many parts of the world. But is it really possible to revitalize languages? In other words, can a language revitalization program succeed? See Schmidt (1990: 104–106), Fishman (1991: 10–38), and Amery (2000: 21) for discussions. In the following, we shall attempt to elaborate on this question. There is no unequivocal answer to this question. The answer depends on (i) the definition of language revitalization, and (ii) the aim of a given revitalization program, as shown below.

[1] Definition of language revitalization

It is crucial to consider what is meant by language revitalization. We shall look at (i) degree of language endangerment and death, and (ii) intactness of the language structure.

(a) Degree of language endangerment and death. As seen in Chapter 2, language endangerment consists of successive phases, ranging from “weakening” to “extinct”. We shall consider the case of extinct languages, as an example.

Is it possible to revive a dead language? As is the case with language endangerment, language death comprises successive phases, and there are various definitions of language death (5.2). Certain scholars consider a language dead when it is no longer used as the vehicle of communication in the community. In this view, revival of the language means restoring it to the state where it is again used as the means of communication. This is an extremely difficult task to achieve, again despite the existence of the celebrated success story of Hebrew. There are other views, e.g. the view that a language is alive if place names in the language survive. In this view, language revival is an easy job; mere replacement of a few place names with the indigenous ones will result in the revival of the language. For example, the traditional names of some of the islands of the Palm Island group of North Queensland, Australia are Palm Island *burrhuman*, Curacoa Island *ngugu*, Phantome Island *yumili*, and Havanah Island *muyirr* (Tsunoda 1996b). Replacement of these English names with the Aboriginal names would result in the revival of the language of the area (the *buluguyban* language). The revival of place names will be further discussed in [2] below and in 11.5.13.

(b) Intactness of the language structure. If revitalization means maintaining or restoring a structurally intact language to the way it is/was spoken by its traditional, fluent speakers, then this task is formidable. Even in what is considered to be the successful revival of Hebrew, the children were developing a new Hebrew, which deviated from its traditional norm. Also, regarding the revitalization of Welsh, Jones (1998: 141, 149, 150, 280, 351) reports the development of “a form of school dialect” of Welsh. Victor Golla (e-mail of 21 June 2001) reports that, although the teaching program of Strait Salish of the USA and Canada is successful, the learners’ speech is substantially different in terms of phonology, grammar, and lexicon from that of the oldest generation. See 8.4.5.3-[4], [5] for more on structural changes in language revitalization.

In many cases where there are traditional, fluent speakers and where the children may be considered to be acquiring the language in a natural context (as against a language program, as is the case with Hebrew, Welsh, and Strait Salish), the children’s language often shows deviations; see, for example, Dorian (1992: 144, 1994c: 481–484) on the Tiwi, and Dalton et al. (1995) on Gurindji, both of northwest Australia.

[2] Aim of language revitalization

Aims of language revitalization activities vary, depending on (i) the amount of documentation of the language in question, and (ii) the individuals.

(a) Amount of documentation of the language in question. Thus, for Warrungu of North Queensland, Australia, the writer recorded about 6 hours of running texts, about 1,500 words, and fairly detailed grammatical information (cf. 8.3), and it is therefore possible to plan a fairly comprehensive program. In contrast, for Buluguyban of the Palm Island group, he recorded about 50 words and a few frozen phrases (cf. 5.2-[7]), and, unfortunately, it is impossible to entertain an ambitious aim.

(b) Individuals. Some people may have modest aims, while others may be more ambitious. Some of the people the writer interviewed in North Queensland stated that they wish to use their ancestral language (i) to say “Hello” when they meet on the street, (ii) to start a meeting, and (iii) to have road signs such as “Welcome to the country of ...”. There are also people who seem to be happy if they can sprinkle a few Aboriginal words in their English sentences (see Schmidt 1990: 35). These aims are fairly easy to achieve. On the other hand, there are people who are not content with modest aims. They wish to speak their language – if not fluently like their ancestors. This aim is more difficult to achieve than the ones mentioned above.

To sum up, the answer to the question as to whether a language can be revitalized depends the definition and aim of language revitalization.

The generally adopted – even when not explicitly stated – view seems to be that language revitalization aims to maintain or restore a language to such a state that it is spoken by a reasonable number of people, reasonably fluently, and in a reasonably intact form. See Amery (1994: 147), Schmidt (1990: 106), and Tovey, Hannan, and Abramson (1989: 33). (This characterization leaves unanswered the question of what is meant by “reasonable”.) This or similar view is shared by community members who are involved in language revival activities. Thus, Rachel Cummins, (who is a granddaughter of the late Alf Palmer (cf. 5.2-[6]) and who is now the central figure in the revival movement of the Warrungu language in North Queensland (cf. 11.5.14-[2])), expressed one of the aims of their movement as follows: “I want 50% of the children to speak the language”. No doubt, an aim of this kind is not uncommon among the people throughout the world who are contemplating the revival of their ancestral language.

On this view of language revitalization, the writer’s impression concerning the languages Kimberley, Australia, is as follows: Under the current circumstances and unless something drastic takes place, language revitalization is extremely difficult. Although a number of languages have fluent speakers and are spoken in certain communities, the best that can be hoped for is not to halt, but

merely slow down, the process of language loss. However, note the caveat “Under the current circumstances and unless something drastic takes place”. Circumstances could change and something drastic could happen, as is witnessed by the success of Hebrew and Maori. A more detailed account of the situation in Kimberley is given towards the end of 11.4.2.

It seems that some – if not many – of language revitalization activities have a little chance of success. So, is it really worthwhile to undertake such efforts? Dorian (1987: 63–66) on Irish, Amery (1994: 147–148), McKay (1996: 137), and Schmidt (1990: 107) on Australian Aboriginal languages, and Bradley (2001: 158) on languages of Southeast Asia, argue that the answer is in the affirmative. Their arguments may be summarized as follows.

Language revitalization activities create a cultural climate where the people’s ethnic heritage (the language, culture, history, etc.) is appreciated and respected and where publications on them are available to those interested. They in turn foster the people’s sense of pride, self-esteem, identity, and ethnicity, and they contribute to the attenuation of the negative attitude towards the language and to raising its profile. Schmidt (1990: 107) cites a member of the Kuranda community of North Queensland, who is probably a Djabugay person: “Before we were shame to speak our language. No more. Now you can hear language more, in the street, in town, these fella now talk language even if white-fella are around”. (Accounts of the Djabugay language program are in Johnson 1994, McKay 1996: 136–138, and Schmidt 1990: 109–111.) Overall, language programs help to build bridges between indigenous and non-indigenous peoples and improve the relationship between them. Furthermore, revitalization programs may bring economic benefits, e.g. creating jobs, such as teachers, and teacher’s aides. This is an attractive benefit for many Aboriginal communities in Australia, where unemployment is a perpetual problem. An example of this type of success concerns Kaurna of the Adelaide area of South Australia; see 11.5.14.

Rigsby (1987: 374) suggests that language revival programs in Australia and North America have not been successful and that, consequently, scarce human and other resources should be concentrated on the maintenance of those languages which are still transmitted intergenerationally. However, this suggestion is unlikely to be welcomed by those community members who are hoping to revive their ancestral languages.

11.3. Strategies for language revitalization

We shall look at the following two issues: (i) what to revitalize: language, or language-and-culture? (11.3.1), and (ii) levels of language revitalization: the societal or macro level, and the individual or micro level (11.3.2).

11.3.1. What to revitalize: language alone, or language-and-culture?

“Language and culture are of course inseparable” (Amery 1994: 141), as seen in Chapter 10. Amery (2000: 249), Stephen Harris (1994: 13–37), and Stiles (1997: 248) argue that both language and culture are needed for a successful revitalization program. Similarly, Wurm (1997: 49, 1998: 199–200) positively encourages inclusion of traditional culture and activities, e.g. singing, dancing, handcraft, hunting, and fishing, in the hope that they will refresh the knowledge of the language.

Such views are shared by community members who are planning to embark on a language revitalization program. Dalton et al. (1995: 94) state, regarding a prospective Gurindji language program in northwest Australia, that its aim is “Aboriginal language and culture maintenance”. Similarly, several representatives of the people who are involved in the revival of Warrungu, Gugu-Badhun, and a few other languages of North Queensland (11.4.3.2, 11.5.14-[2]) clearly stated that they want to revive their language and culture, such as songs and dances, among other things. This is echoed by a voice from North America; see Cantoni (1996a: viii).

The relationship between language and culture in revitalization activities may be divided into the following two types: (i) revitalization of language *and* culture, and (ii) culture *for* assisting language revitalization, e.g. by creating a natural context in which to speak the language (cf. Schütz 1997: 57). For example, dancing is used to revitalize the Classical Nahuatl language (of Mexico) by several dance groups in Los Angeles, USA (Tezozomoc, Danza Azteca Hueheteotl, and Danza Azteca Tenochtitlan 1997: 56). In practice, however, such a dichotomy need not be made. In either method, both the language and culture will be promoted.

Language programs differ with respect to the relative emphasis assigned to language and to culture. Amery (1994: 141) notes that the Kurna program of Adelaide, South Australia (cf. 11.5.14) has a very strong focus on teaching the Kurna language, while the Djabugay program of North Queensland (mentioned in 11.2) focuses on the Djabugay culture, by teaching culturally significant vocabulary, among other topics.

A survey of the literature indicates cultural aspects such as the following are incorporated in language revitalization activities: singing, dancing, handcraft, and collecting plants used for traditional medicine (Okuda 2001: 106, 109 on Ainu, Japan); hula dancing, shipbuilding, voyaging, martial arts, and herbal healing (Schütz 1995: 58, 1997: 57–58 on Hawaiian; see 11.5.2-[2]); traditional customs, genealogy, and roles and responsibilities to one's siblings (Jeanette King 2001 on Maaori; see 11.5.2-[1]), singing, kinship system, plants, traditional stories (McKay 1996: 136 on Djabugay, Australia); kinship system and terms (Dalton et al. 1995: 96–97 on Gurindji, Australia); and music (Almasude 1999: 121 on the language of the Amazigh people (or Berbers) of North Africa).

It is important in this connection to point out that there is a pitfall in the incorporation of cultural aspects into language revitalization activities. The crucial fact is that learning to speak a language is a far more time-consuming and demanding task than learning to dance, to sing, and so on; for an account of a frustrating language learning experience, see Nicholson (1990). This may make people turn away from learning the language and be attracted to learning the culture. This will in turn create a situation in which cultural activities are flourishing but in which the language itself is not revitalized. Okuda (2001: 106, 109) suggests that such a situation obtains in the Ainu revitalization activities. Indeed, in Australia, a fair number of Aboriginal dance theatres and music bands appear to be highly successful, such as the Tjapukai Dance Theatre of Djabugay group (cf. McKay 1996: 137–138). (“Tjapukai” is also spelt “Djabugay”, as seen in 11.2.) However, this does not automatically lead to the revival of the Djabugay language. Singing and dancing can play an important role in language revitalization activities, helping the learners to familiarize themselves with the language and making the lessons more enjoyable. (An example of use of singing in Maaori activities is given in 11.5.2-[1].) However, it is important not to have the illusion that a given language revitalization program is a success only because its associated cultural activities, such as dance theatres and music bands, are enjoying great popularity.

11.3.2. Levels of language revitalization: the societal level and the individual level

Postulation of strategies for a language revitalization program may be considered at the following two levels, although these two levels are closely interrelated and by no means discrete: (i) the societal or macro level, concerning the extent to which the language is used in the community, and (ii) the individual or

micro level, regarding the degree of an individual's proficiency in the language. Thus, Rachel Cummins' aim cited in 11.2-[2]-(b) – "I want 50% of the children to speak the language" – has to do mainly with the societal level. We shall first look at the issues that in the main surround the societal level, and then at those which largely deal with the individual level.

11.3.2.1. *The societal level*

The strategies of language revitalization programs may vary depending on various factors. McKay (1996: 226) notes that such factors include the following:

- (a) the current viability of the language as a full communication system;
- (b) the number of speakers, the integration of language use, and the isolation of their community;
- (c) the economic situation of the speakers and the political status of them and their language;
- (d) use of the language in areas such as religion, education, media, and;
- (e) the attitudes of the speakers to their language and to the dominant language.

These factors – in particular (a), (b), and (d) – have to do with the degree of viability of the language in question (that is, the degree of its endangerment, looking at the same coin from the other side). There have been a number of proposals for strategies of language revitalization that are largely based on the degree of viability of the language concerned. Indeed, this seems to be considered one of the most crucial factors and possibly the most crucial one when devising a revitalization program. We shall look at four such proposals.

[1] McKay (1996: 225–226), in his survey of language maintenance programs operating in Australia in the early 1990s, lists the following three aims, ranging from the most ambitious aim, (a), to the least ambitious one, (c):

- (a) continuing use of the language across all generations for communicative purposes;
- (b) the adoption and use of elements of the language in developing a special in-group form of the dominant language (English), and;
- (c) obtaining and preserving knowledge about the language in a reaffirmation of links with the group's cultural heritage.

Michael Krauss (cited by Rigsby 1987: 380) puts forward a proposal similar to McKay's.

[2] Amery (1994: 143–145) lists five types of language programs, which may be re-arranged as follows, in terms of the degree of viability of the language concerned.

(a) Full-blown second language programs: a language that is still fully viable is taught elsewhere, where the language is not the traditional language of the region.

(b) Language revitalization programs are employed in a situation where the language is still spoken, even though very few speakers of the language remain. (Amery’s use of the term “revitalization” differs from ours. The term “revitalization” in our use is the general term, and comprises language maintenance and language revival; see 11.1.)

(c) Language renewal programs attempt to tap into a language that is still known within the community in situations where there are no fluent speakers and the language is no longer actively used.

(d) Language reclamation programs operate in a situation where very little of the language is still known or remembered within the community but where there is a reasonable amount of documentation on the language.

(e) Language awareness programs teach about a language where there are no longer any fluent speakers of the language, little or none of the language is still known actively, and documentation is minimal. For an example, see 11.5.13 on the use of place names.

[3] Bauman (1980: 10), as cited by Dauenhauer and Dauenhauer (1998: 59), “identifies five categories of language status, with matching strategies for retention”, which is shown in Table 11-1. No access is available to Bauman (1980), and details are not known. Presumably, his classification concerns languages of North America, but it is no doubt applicable to those of other regions as well.

Table 11-1. Bauman’s classification of language maintenance strategies

language status	flourishing	enduring	declining	obsolescent	extinct
retention strategy	prevention	expansion	fortification	restoration	revival

[4] Fishman (1991), who is the most influential figure in the field of language revitalization, sets up “A Graded Typology of Threatened Statuses” (Fishman 1991: 87), which consists of eight successive stages, with the languages of Stage 1 being the most viable and those of Stage 8 being the closest to extinction. For each stage, he provides a characterization of the situation (cited in 2.2-[2]), and suggests what needs to be achieved to reach that stage. Such efforts he terms “reversing language shift”. Reyhner (1999: vi–vii) summarizes these eight grades as follows, and for each stage he provides up-dated suggestions based on presentations at the Stabilizing Indigenous Languages symposiums (cf. Cantoni 1996b; Reyhner 1997; and Reyhner et al. 1999) and other sources.

Stage 1: (i) Description: Some language use by higher levels of government and in higher education. (ii) Suggestions: Teach tribal college subject matter classes in the language. Develop an indigenous language oral and written literature through dramatic presentations and publications. Give tribal/national awards for indigenous language publications and other notable efforts to promote indigenous languages.

Stage 2: (i) Description: Language is used by local government and in the mass media in the minority community. (ii) Suggestion: Promote use of written form of language for government and business dealings/records. Promote indigenous language newsletters, newspapers, radio stations, and television stations.

Stage 3: (i) Description: Language is used in places of business and by employees in less specialized work areas. (ii) Suggestions: Promote language by making it the language of work used throughout the community (cf. Palmer 1997). Develop vocabulary so that workers in an office could do their day-to-day work using their indigenous language (cf. Anonby 1999).

Stage 4: (i) Description: Language is required in elementary schools. (ii) Suggestions: Improve instructional methods utilizing the total physical response method (cf. Cantoni 1999) and other immersion techniques. Teach reading and writing and higher level language skills (cf. Heredia and Francis 1997). Develop two-way bilingual programs where non-speaking elementary students learn the indigenous language and speakers learn a national language or international language. Need to develop indigenous language textbooks to teach literacy and academic subject matter content. (See 11.5.6 for the total physical response method, and see 11.5.10 for two-way education.)

Stage 5: (i) Description: Language is still very much alive and used in community. (ii) Suggestions: Offer literacy in minority language. Promote voluntary programs in the school and other community institutions to improve the prestige and use of the language. Use language in local government functions, especially social services. Give recognition to special local efforts through awards, etc.

Stage 6: (i) Description: Some intergenerational use of language. (ii) Suggestions: Develop places in community where language is encouraged, protected, and used exclusively. Encourage more young parents to speak the indigenous language in home and around their young children.

Stage 7: (i) Description: Only adults beyond child bearing age speak the language. (ii) Suggestions: Establish language nests after the Maaori and Hawaiian models, where fluent older adults provide pre-school childcare where children are immersed in their indigenous language (cf. Anonby 1999; Fishman 1991). (See 11.5.2 for the immersion method, and for the language nests of New Zealand and Hawaii.)

Stage 8: (i) Description: Only a few elders speak the language. (ii) Suggestions: Implement Hinton's (1994) master-apprentice model, where fluent elders are teamed one-to-one with young adults who want to learn the language. Dispersed, isolated elders can be connected by phone to teach others the language (cf. Taff 1997). (See 11.5.5 for the master-apprentice method, and 11.5.7 for the telephone method.)

Neither Fishman (1991) nor Reyhner (1999) mentions this, but it would be possible to set up a Stage 9, in which the language is extinct and for which language revival may be required; see 11.5.14 for examples.

As mentioned in 2.2-[2], almost all the languages the writer worked on in North Queensland and in Kimberley, Western Australia in the 1970s were at best at Stage 8, and many of them have since become extinct. This shows that a large portion of Fishman's scale, and of his and Reyhner's suggestions, are irrelevant to the situations in North Queensland and Kimberley. No doubt, this remark applies to many other areas in Australia and elsewhere. Revitalization methods that are applicable to such languages, i.e. moribund and extinct languages, will be discussed in 11.5.

11.3.2.2. *The individual level*

This concerns the degree of an individual's proficiency in the language. When discussing language learning or language teaching, it is important to distinguish the following:

- (a) learning *through* the language (cf. Stephen Harris 1994: 137);
- (b) learning *of* the language (cf. Amery 1994: 141; Stephen Harris 1994: 137);
- (b-i) acquiring that language for daily use, i.e. knowing how to use it in a real life situation (cf. Daniel Rubin 1999: 18);
- (b-ii) accumulating words and phrases (cf. Daniel Rubin 1999: 18), and;
- (c) learning *about* the language (cf. Amery 1994: 141).

These approaches are arranged in terms of the difficulty of implementation, with approach (a) being the most difficult and approach (c) the easiest.

In (a), the language is used as the medium of instruction, and this method is termed "immersion" (Stephen Harris 1994: 137). Its implementation will require the presence of a fair number of fluent speakers. For examples, see 11.5.2. Approach (b-i) is much more difficult than (b-ii). It is no doubt for this reason that many language revitalization programs are confined to learning just isolated words and phrases; see 11.4.2-[9]-(b-ii). Similarly it is probably for this reason among others that, as mentioned in 11.3.1, there are people who turn to cultural activities, rather than to learning the language itself. Approach (c) may be

used for a language awareness program (cf. 11.3.2.1-[2]-(e)). For an example, see 11.5.13 on the place name method.

Daniel Rubin (1999: 20) sets up the following five degrees of fluency that may be aimed at or achieved in language instruction, ranging from the most fluent category (a) to the least fluent category (e). (Degree of fluency was discussed in 9.4.1.1.)

(a) Creative: able to understand and speak the language fluently in ways that create new word usage and structures, showing a deeper understanding of the language and its potential new uses.

(b) Fluent: able to understand and speak the language with confidence and skill, with understanding of normal syntax, grammar and rules of form, and an extensive and growing vocabulary.

(c) Functional: able to speak the language, with basic understanding of its syntax, grammar, and rules of usage and a minimal vocabulary.

(d) Symbolic: able to use common phrases and sentences in formal settings, as symbols of language participation and cultural ownership.

(e) Passive: able to understand common words or phrases, with or without deeper comprehension of their meaning.

Rubin's typology will be useful when devising programs for revitalization. Note, however, that his classification and labels are inconsistent. Thus, the symbolic use of a language is one of its functions, and this use, too, is functional. Also, functions of language should not be confused with fluency. Both fluent and non-fluent speakers may use a language for a symbolic function.

11.4. Problems encountered in language revitalization activities

11.4.1. Introduction

Language revitalization activities face a multiplicity of problems. 11.4.2 discusses these problems, and, where available, lists suggested remedies for them. We examined the ecology of language in 6.2, causes of language endangerment in 6.3, functional domains in 7.2, and language shift in 7.3. Some of the factors examined there are relevant to the success or failure of language revitalization programs, and they are referred to below. In addition, a few factors which were not looked at in Chapter 6 or Chapter 7 but which are specifically pertinent to language revitalization activities are introduced. One of the most difficult problems concerns orthography, and it is discussed in some detail in 11.4.3. Also, the relevant literature puts forward additional suggestions that are intend-

ed to enhance the likelihood of success of these activities, and they are looked at in 11.4.4.

11.4.2. Problems and possible remedies

Many of the problems are very difficult to overcome, and it is difficult to suggest effective remedies for them.

The first six problems are generally already existent prior to the commencement of language revitalization activities.

[1] Complexity of the language

Schmidt (1990: 100, 103, 109), McConvell (1991: 154), and Dorian (1992: 146) on Australian Aboriginal languages, and Dorian (1994c: 492) on Irish, suggest that, in an endangerment situation, the complex grammatical systems of Australian Aboriginal languages and Irish, which radically differ from that of English, may render them very difficult to learn, particularly for those people whose primary language is English. This may reduce the likelihood of the transmission of the languages in question. (However, this issue is controversial, as noted in 7.3.1-[2]-(b).) One way to overcome this problem is a “compromise approach”, in which deviations from the traditional norms are accepted. See [11]-[c] below.

[2] Presence of other language(s) to revitalize

The task of revitalization will be easier if there is only one language to revitalize. Thus, the revitalization activities of Maaori and Hawaiian (11.5.2) have been assisted by the absence of any other language to maintain. This is in stark contrast to Australia, which has/had about 250 indigenous languages, and to California, which has fifty or so languages (Dixon 1991a: 249; Hinton 1994: 235). Recall in this connection that often speakers of different languages were brought to one place (6.3-[6]).

In Halls Creek, Western Australia, at least four languages are found (although not all of them are actively spoken): Kija (the traditional language of Halls Creek), Gooniyandi, Jaru, and Wanyjirra. There are plainly insufficient funding and human resources to cater for all of the four languages. The same applies to many other communities in Australia.

One way to solve the problem of the existence of more than one language to maintain is the geographical separation of speakers of different languages. In fact, a suggestion along this line was made by Janhunen (1997: 139–140). However, such a plan of action is beset with problems. First, it will be necessary to set aside a tract of land for the people, but this plan is likely to encounter financial and political problems. Second, such a course of action “is moral-

ly indefensible” (Edwards 1984: 278), and will impinge on human rights, and it can not be carried out unless the people concerned are willing to act in that way.

[3] Distribution of speakers

Often, speakers of an endangered language “live far apart from each other” (Hinton 1994: 223). The language would be easier to maintain if the speakers lived in one locality. Perhaps one of the most effective ways to avoid this problem is the “separation and concentration” (Fishman 1972: 126) or “isolation” (Suwilai 1998: 150) of the speakers of that language. That is, the speakers will have a land where they can live together, away from the speakers of the dominant language and other languages (Bergsland 1998: 45; Spolsky 1995: 188). As noted above, such a suggestion was put forward by Janhunen (1997: 139–140). But such an action, if forced from the outside, will violate human rights.

There are examples of such voluntary separation. Thus, in Australia, from the 1970s, the outstation movement occurred, whereby people set up a community and lived there, away from problems such as alcoholism and violence in town. One example is Ringer Soak Community, about 160km from Halls Creek, Western Australia (see McKay 1996: 55–67). In the community, the Jaru language is much more actively spoken than in the town of Halls Creek. When the writer visited the community in 1995, he heard children responding to him in Jaru.

In order to obtain such land, the government’s support is essential. Socio-economic autonomy, even if it is to a limited degree, will be helpful. Aboriginal Australians have been trying to regain their traditional land. Many groups have succeeded in this endeavour, and now run their own cattle stations. An example is Koongie Park Station, south of Halls Creek, Western Australia; it is run by a group of Jaru people. Activities to regain land are reported, for instance, in newsletters such as *Land Rights News*, published by the Northern Land Council (www.nlc.org.au, www.clc.org.au).

[4] Number of speakers

The number of speakers may not be a decisive factor (cf. 6.2-[2]-(c)), but, with other things being equal, a given language will have a better chance of survival when it has more speakers than otherwise. The existence of a sufficiently large number of speakers is indispensable for the success of the program (Tsunoda 2001e: 8352). However, many languages, e.g. those of Australia (Schmidt 1990: 100, 107–108) and those of California (Hinton 1994: 223), suffer from the shortage of fluent speakers. Thus, Hinton (1994: 235) points out: “Maori and Hawaiian, even at their lowest points, were still spoken by thousands of people. California languages nowadays may be spoken by only

a few dozens, or even as few as one or two individuals, almost always of an advanced age”.

[5] Dialects and standardization

If the language to revitalize exhibits no dialectal variation, then all the funding and resources can be devoted to one single cause. However, if the language has more than one dialect, this makes the already difficult revitalization efforts even more difficult. The funding and resources, if available at all, which are (almost?) always and everywhere limited and insufficient (see [7]-(c) below), will have to be divided between/among the dialects, which will make the revitalization efforts even less effective. There are at least three ways to tackle a bi-dialectal or multi-dialectal situation.

The first is to select one of the dialects for revitalization. This is, however, a highly sensitive issue, and it is likely to meet with opposition from the speakers of the other dialects, which are excluded from revitalization (Dorian 1994c: 484–485, 488–489).

The second is to set up a standardized form which will incorporate regional features of many, if not all, of the dialects (see Dorian 1987: 58–59). But this, too, is no easy task. Inclusion of certain regional features and exclusion of others will be likely to be confronted with antipathy.

The first and second alternatives will allow the funding and resources to be concentrated on just one dialect. However, as stressed above, they are by no means easy tasks; see Dorian (1987: 59).

The third and last alternative is to attempt to revitalize all the dialects, which would result in dividing the – already limited and insufficient – funding and resources between/among the dialects, thus further reducing the effectiveness of language revitalization efforts.

The third alternative has been adopted in the revival activities of Warrungu and other languages in North Queensland, Australia (discussed in 11.5.14–[2]). This appears to be motivated by a belief that is expressed by Rachel Cummins (a Warrungu person) as follows: mixture of languages is “an insult to ... our old people and our heritage”. (To be precise, Rachel Cummins said to the writer, “this will be an insult to the time you put into the programme and to our old people and our heritage”.)

Jones (1998: 137, 238, 309, 324, 356, 357) on Welsh and Breton, and Adelaar (2001) on Quechua of South America, discuss problems of standardization in revitalization efforts.

[6] Language documentation

A good documentation of the language, including a grammar, dictionary and texts, is indispensable, but this does not always exist (cf. Schmidt 1990: 100, 108, 111, Amery 1994: 147). If there are any speakers left, a good documenta-

tion of the language may still be possible, but if it is already extinct, then such documentation is simply impossible.

The six problems discussed above are, as noted above, generally pre-existent prior to the commencement of language revitalization activities. Most of these problems are extremely difficult to rectify, and, in particular, the complexity of the languages and documentation of extinct languages are beyond the control of both the community members and the outsiders, such as the government and linguists. In contrast, the problems discussed below are generally not pre-existent, although some of them may be covertly present prior to the commencement of language revitalization activities.

[7] Government support

Support provided by a government is important (Nagy 2000: 155; Tsunoda 2001e: 8352; Wurm 1998: 192), and it is therefore necessary to make the government – and also other relevant authorities and the general public – aware of the language endangerment situation (Needs and Rationale Group 1996; Suwilai 1998: 172). Needs and Rationale Group (1996), on languages of North America, claims: “Because of the federal and state governments’ long-term role in creating the current endangered status of American Indian and Alaskan Native languages, it is appropriate for them to provide assistance in helping American Indians and Alaskan natives to stabilize and renew their languages”.

Government support may be supplied in various ways, such as the following.

(a) Recognition of people’s human rights (cf. 10.3.2-[3]), and their culture and language (cf. Spolsky 1995: 188). This needs to be realized not only by the government but also by the majority of the society (Bergsland 1998: 45). Use of the minority language in school, government offices, and mass media should be accepted, or even encouraged. This will also help to maintain people’s self-esteem and self-confidence (Suwilai 1998: 172–72). It is important to note that the Maaori language is now an official language of New Zealand (Jeanette King 2001: 121). This has no doubt facilitated the maintenance of the language.

(b) Introduction of the language and culture into school (cf. Suwilai 1998: 173). It should be noted that the role of school in language revitalization is a controversial issue. Fishman (1991: 368–380) points out the limitations inherent in the teaching of a language in school, and emphasizes the importance of “intergenerational transmission” of the language in the home, neighbourhood, and community. That is, the school “can only supplement, not replace, the spoken interaction between members of the different generations in the community” (McKay 1996: xxvii, also cf. p.234). A similar view is expressed by Cantoni (1996a: viii) and Amery (2000: 1777). A false assumption that the school will

help the language will be likely to hinder the success of a revitalization movement (Cantoni 1996a: vii; Hinton 1994: 223; Schmidt 1990: 99–100). Thus, Hinton (1994: 223) comments that parents may say, “Oh, I don’t have to worry about it; the schools will take care of our language, so I’ll just teach the kids English!”.

However, this does not mean that school cannot contribute at all (Jones 1998: 354–355). Thus, the school played a vital role in the revival of Hebrew in Israel (Bar-Adon 1978) – so did kindergartens (Spolsky 1995: 186) – and that of Irish in Belfast (see 11.5.3). This shows the following: Indeed, where the language in question is still spoken, school may not be able to replace intergenerational transmission. However, in situations where the language is no longer spoken, teaching of the language in school can be a really useful way – although it may not always be a very effective way – for its revitalization. Jones (1998: 24) reports that in certain areas of Wales the “role of the classroom in language revitalization is highly notable” and that “the school has replaced the family to a large extent as the vehicle of language transmission”.

Furthermore, there are positive consequences that may derive from the teaching of a language in school. First, as noted in 11.2, it may create a cultural climate where the ancestral language is respected and its status and prestige are enhanced (Dorian 1987: 65–66; McKay 1996: xxvii). Second, it may help to involve participation in school education by community members (who are generally alienated from the school). An example from Kaurna of South Australia is reported in 11.5.14. Third, it may help to diffuse the language into the home; see 11.5.3 on Irish. Fourth, it may create employment opportunities for the community (Dorian 1987: 64).

(c) Funding, for instance, for purchase or construction of buildings (to accommodate the revitalization organizations), facilities, salaries (of teachers, teacher aides, and other employees), production of resources, and training of teachers and teacher aides. Funding is essential, but it is (almost?) always and everywhere inadequate (Schmidt 1990: 101); it is insufficient (Hinton 1994: 223), partial (Schmidt 1990: 91, 94), and short-term (Schmidt 1990: 101). Furthermore, there is a whole array of bureaucratic and administrative problems regarding funding, e.g. methods of fund allocation; see Schmidt (1990: 91–95) for details. All these problems surrounding funding lead to additional problems. The list below is cited from Schmidt’s (1990: 83–101) work on the revitalization activities of Australian Aboriginal languages, but no doubt many of the problems mentioned are present in other countries as well. (i) Absence of a permanent structure of support providing necessary resources, skills, finance and advice. (Suwilai 1998: 173, too, emphasizes the importance of such organizations.) (ii) Lack of an overall long-term plan for Aboriginal language mainte-

nance activity and fund allocation. (iii) Lack of accessible training schemes (cf. also Jones 1998: 35). (iv) Shortage of vital skills, language resources and materials. To sum up, funding is indispensable, but it is beset with many serious problems, and the situation needs to be rectified for the revitalization efforts to be successful.

(d) Another variety of government support is political non-interference by the government (Rouchdy 1989a: 94–95), and community control of the activities (Burnaby 1997: 293–295; Clarke 1996: 94; Jolly 1995: 11; McKay 1996: 228–229; Spolsky 1995: 194). Organizations which were purportedly set up for a given community's benefit may not always function in the way desired by them. Thus, the bureaucrats may be unsupportive (Schmidt 1990: 93) or even harmful (Bruce Sommer 1991), and they may even use the institution for their own benefit, rather than for the community's. In the context of school language programs, outsider teachers may provide no support (Dalton et al. 1995: 94; cf. also Jones 1998: 35). They may have no appreciation or understanding of the local language and culture, and they may even impose their views and culture on the children of the community. (Problems concerning educators will be discussed in [8] below.) Therefore, community members need to have a major say in the decision making as to who will teach what and how (cf. Cantoni 1996a: viii). Community control is desired by community members (see, for example, 11.5.10), and it has been a central and essential ingredient for the success of Maaori (11.5.2) and Irish (11.5.3) revitalization movements.

We mentioned in 11.1 that there is already a large literature on specific language revitalization movements. See the references in the present volume. See also the bibliography located at the: http://www.tooyoo.l.u-tokyo.ac.jp/~tsunoda/dlg_lst.html. Admitting that the information on the literature is by no means exhaustive and also being careful to avoid any political bias, if the number of works is any indication at all, then it seems that language revitalization movements are most actively and widely carried out in Australia, Canada, New Zealand, and the USA (in alphabetical order, not necessarily by number of works). Such activities need both the government's recognition of people's rights and the country's economic prosperity, among many other things. It may not be coincidental that the three countries listed above are former British colonies (with a small number of exceptions such as Quebec). (It should also be added here that in Japan, despite its remarkable economic prosperity, the government has paid very little attention to the issue of Ainu people and their language.)

We mentioned above that community members need to have a major say in the decision making. However, this issue may be culturally relative. (This ob-

servation is due to an anonymous reviewer.) Indeed, that statement is mainly based on works that deal with language revitalization activities in those former British colonies. It will be important to investigate the situation in other countries.

[8] Educators

There are problems with educators as well. Cantoni (1997: 5) reports that the following recommendations were made at the Symposia on Stabilizing Indigenous Languages held at Northern Arizona University (cf. Cantoni 1996b). Looking at the other side of the same coin, these recommendations indicate the kinds of problems that are observed in educators.

(a) All educators must show greater respect and appreciation for the cultures of their students' parents.

(b) All educators should not criticize those who use the native language in school.

(c) There should be no put-downs of people who use the tribal language on the part of anyone who does not know that language.

(d) Perceptions that English is better than the local language should not be accepted or transmitted.

(e) All educators (including the school principal) should try to learn the student's home language; even if they do not become very proficient, they will have indicated a certain degree of interest and respect.

(f) All educators must realize that, although they alone cannot be responsible for the intergenerational transmission of a language, they can do much to encourage positive attitudes towards it.

These recommendations were made in the North American context, but they are relevant to educators in many other places. For examples, see Jones (1998: 35) regarding Welsh, and the comments on the situation in Halls Creek, Western Australia, near the end of 11.4.2 below. In particular, recommendation (e) is reminiscent of a demand for "two-way education" put forward by the Gurindji people of Australia; see 11.5.10.

[9] Language programs

Language programs are conducted in many schools and other institutions, e.g. in Australia and North America. They are fraught with many serious problems. Such problems are listed below. Again they are largely cited from Schmidt (1990: 88–90, 95–101), but no doubt many of the problems mentioned are recurrent and observed in other countries as well.

(a) The success of a language revitalization program requires community support and parental involvement, as well as government support (McKay 1996: 137; Stiles 1997: 248). However, as is the case with government support, community support and parental involvement are not easily available. Commu-

nity members and parents may be too preoccupied with pressing problems to devote any time or energy to language revitalization activities; see [11]-(d) below.

We turn to the kind of problems that in the main derive from inadequate funding.

(b) Perhaps one of the most serious problems is that language programs are of low quality and offered just as a token (Schmidt 1990: 88–89, 101). This succinctly summarizes many problems, such as the following.

(b-i) Insufficient hours are allocated to teaching of the language (Hinton 1994: 223; Schmidt 1990: 99).

(b-ii) Unstructured programs and curricula, which are confined to the teaching of isolated vocabulary, rather than overall language ability, including communicative skills (Cantoni 1996a: vii; Clarke 1996: vii; Greymorning 1999: 11; Kendall King 2001: 168–169; Schmidt 1990: 88). An example from Kimberley, Western Australia is cited towards the end of 11.4.2.

(b-iii) Shortage of adequate language resources and language learning materials (Amery 1994: 147; Dorian 1992: 145; Jones 1998: 35; Schmidt 1990: 100–101, 108).

(b-iv) Lack of human resources, e.g. trained teachers, native speakers as teacher aides. (In the case of an extinct language, there is no speaker left to assist with the revitalization program; see Schmidt 1990: 100, 107–108. This problem is intrinsic, and is not due to inadequate funding.)

For an actual account of these problems, see Kendall King (2001: 168–169) on Quechua of Ecuador (known as Quichua; see Kendall King 2001: 45).

There are additional problems that seem to mainly derive from inadequate funding, such as the following.

(c) Lack of skills and knowledge among community members regarding the planning and execution of language revitalization (Schmidt 1990: 90–91, 100–101).

(d) Lack of communication with other communities involved in similar language maintenance activities (Schmidt 1990: 89, 101). Needs and Rationale Group (1996) and Native American Language Policy Group (1996a, 1996b: 47) on languages of North America, and Suwilai (1998: 173) on So (Thavung) of Thailand, emphasize the importance of a network of communication among organizations and the people involved.

In addition, there are problems that have to do with the expertise of consultants, such as linguists and educators.

(e) Lack of advice from experts, such as linguists and educators. However, there are cases where the involvement of linguists is rejected or avoided by the community. Examples are given in 11.4.3.3 and 11.5.12.

(f) Many linguists and teachers who are willing to assist in language revitalization programs have very little or no knowledge of language teaching methodology. (This applies to the present author.) Language teaching methodology needs to be included in the training of fieldworkers, as will be noted in 13.2.4.

There are still other problems that are observed in language revitalization programs.

(g) Writing systems. Many indigenous languages did not possess scripts for writing, and a writing system is needed for their revitalization. Writing systems employing Roman alphabets have been introduced for them, in Australia and many other countries. Unfortunately, writing systems, too, are surrounded by problems, of the following two kinds. First, a given writing system itself may have inherent problems. This will be discussed separately, in 11.4.3.3. Second, there may be more than one writing system for one language. Each of the writing systems may be free of problems, but the existence of more than one writing system may create an unfortunate situation where the members of the community “have to suffer factional struggles over which one should prevail” (Hinton 1994: 223–224). Jones (1998: 269, 307) mentions similar problems regarding Welsh and Breton.

(h) Literacy and publications. Literacy has merits and demerits. We shall look at this issue, paying attention to the role of publications as well. Janhunen (1997: 142) and McKay (1996: xxvii) consider the spoken language, and not literacy, to be crucial in language revitalization. However, it has also been argued or suggested that literacy plays an important role in language revitalization. The reasons are summarized as follows.

(h-i) If a given revitalization program aims to maintain conversational interaction in the language, then it is important to devote much of the time and effort on spoken language. However, if the program aims at preserving knowledge about the language and culture, then written language is appropriate (McKay 1996: 233).

(h-ii) Literacy helps to spread the language, e.g. by means of newspapers (Anonby 1999: 38–39).

(h-iii) Literacy can give the language permanence. “In general, languages with literacy traditions survive longer than languages with only oral traditions”, a notable example being Hebrew (Anonby 1999: 38–39).

(h-iv) In general, written language tends to be more conservative than spoken language. Black (1993: 216) and Cataldi (1990: 84, as cited by Black 1993: 216) observe that the written languages of Tiwi, Yolngu Matha, and Warlpiri of the Northern Territory of Australia, are more conservative than their respective

spoken counterparts and that this can be seen as a positive factor in support of language maintenance.

(h-v) Written language, e.g. writing systems, and publications such as grammar books, dictionaries, and story books, are often considered to provide indigenous languages with status, and to bring a sense of pride and self-esteem to the people: “Look, we have a book on our language. Our language is not primitive. It is just as good as English” (Anonby 1999: 39; Bielenberg 1999: 108; Dimmendaal 2001: 58; Janhunen 1997: 141; McKay 1996: 234). (In contrast with books, however, articles in journals, etc. do not seem to have this effect.)

There is, however, a pitfall in the use of literacy. In [7]-(b) above we commented on the illusion that the school alone can save the language. A somewhat related illusion is that “writing a language is what keeps it alive” (Cantoni 1996a: vii). (This is in fact one of Janhunen’s reasons for his suggestion of concentration on spoken language.) The writer has observed a similar illusion among certain community members that putting a language on CDs will keep it alive.

There are still many other problems with language programs.

(i) Limited or no opportunity to use or hear the language being spoken (Schmidt 1990: 100, 109; cf. also Amery 1994: 147; Cantoni 1996a: vii). Members of the community, particularly the children, must have opportunities to use the language (Hudson and McConvell 1984: 35). However, such opportunities are naturally non-existent in the case of extinct languages, and highly limited for endangered languages; often parents lack proficiency in the language (Cantoni 1996a: vii). One way to help create such opportunities would be the separation and concentration of the speakers (see [3] above). But such a course of action is simply not feasible under normal circumstances. There are, however, alternatives. See 11.5.2, in particular.

In addition, there are problems that concern the community members’ (i) way of life, and (ii) attitude and behaviour, specifically, towards language and language revitalization. They are treated below, under a separate heading, namely [10] and [11], together with a few other attitude-related issues.

[10] Way of life

Spolsky (1995: 188) argues that “the traditional values and practices need to be restored or replaced by modified values or practices that can be shown or argued to derive from traditional values”. As mentioned in 6.2-[3]-(e), retention of the traditional way of life, especially reindeer breeding, was a decisive condition for the survival of the Sami language of Scandinavia. Admittedly, however, this exercise is extremely difficult in the face of urbanization and industrialization, and it is simply impossible in many areas.

[11] Attitude and behaviour towards language and language revitalization
 Language attitude was already discussed in some detail in 6.2-[5] and 6.3-[9], in relation to language endangerment. In the following, it will be discussed in so far as it is pertinent to language revitalization activities.

(a) Interest and lack of interest. The children (and also adults) must be interested in the language and want to learn it (Hudson and McConvell 1984: 35; Wurm 1997: 48, 1998: 198). But some members of the community may be enthusiastic about language revitalization, while others may show no interest whatsoever in it (Rigsby 1987: 362). Hinton (1994: 222) reports that in North America there are cases where “Those who would preserve their languages are criticized, embattled, ignored or ridiculed by various authorities, by the odd racist or superpatriot, and even sometimes by their own communities and families”. Similar instances of negative attitude towards revitalization are reported by Burnaby (1997: 299) and Cantoni (1996a: vii). Needless to say, it is important that many, if not all, members of the community are interested in the revitalization of their traditional language. Otherwise, no revitalization movement is likely to succeed. So, is there any possible way to make people interested in the language? One example is mentioned in 11.5.14-[2].

(b) Language optimism may hinder language revitalization. One example is delayed recognition of the language loss threat (discussed in 6.3-[9]-(c)). This is probably one of the causes for the lack of interest. Also, it is possibly one of the causes for the low priority assigned to language revitalization; see (d) below. For a revitalization program to be successful, it is vital that the people of the community recognize the imminent demise of their language. It is important for linguists to draw the community’s attention to the fate of those languages which have already become extinct (cf. 10.2.2.11, 10.3.3).

Another example is the belief that “some endangered or destroyed languages are not dead, but merely sleeping” (Nathan 1999; cf. Amery 2000: 41).

An additional example is the “belief in what might be termed ‘gene-assisted’ language-acquisition advantages” (Dorian 1995: 131; see also Nathan 1999). That is, “There is a belief among the people in the community that if one belongs to a tribe, one will have an easier time learning that language” (Yamamoto 1998: 222). Such a belief creates a risk of swift disillusionment when a given language revitalization does not produce prompt results (Dorian 1995: 131).

(c) Language purism (or language conservatism) and language tolerance. It seems inevitable that, during a language revitalization process, a new form of the language emerges, diverging from its traditional norm. See 11.2-[1]-(b). Language purism may then hinder the success of a revitalization program (cf.

Cantoni 1996a: vii); examples are provided by Dorian (1992: 146, 1994c) from Tiwi (Australia), Cornish (Great Britain), Irish, Mexicano or Nahuatl (Mexico), and Arvanitika (an enclave of Albanian in Greece). Littlebear (1999: 3) proposes that elders and fluent speakers must be more accepting of those people who are just now learning the language. Dorian (1994c: 492) suggests a solution to this problem, proposing a “compromise” approach, an approach which is tolerant of language change.

(d) Low priority accorded to language revitalization. In many communities, language revitalization is assigned a low priority. This is possibly due to the delayed recognition of the language loss threat, discussed in (b) above. But it is no doubt largely due to the existence of other, more pressing social problems (e.g. alcoholism, health, and housing), which demand time and energy that are then unavailable for language revitalization (Schmidt 1990: 90, 101; cf. also Burnaby 1997: 297–298). That is, the surrounding social conditions need to be improved in order for the people to be able to direct their time and resources to language revitalization. As mentioned in 11.5.14-[2] below, the revival movement of Warrungu and a few other languages of North Queensland, Australia, started in the late 1990s, almost a quarter century since the writer recorded them in the early 1970s. It is no doubt relevant that the living conditions of the people there have radically improved since then.

(e) Efforts to speak the language. We saw in [9]-(i) above that one way to increase opportunities to speak a language is separation and concentration of its speakers, but that such a course of action is not feasible. A more feasible way is to create environments in which to speak the language, and various methods have been proposed to achieve this goal; see 11.5.2 and 11.5.3, among others. What is the most important is this: Those who can speak the language must speak the language. Unfortunately, however, there are people who say they want to keep their language, but who do not speak it to their children, grandchildren, or other members of the community. See, for instance, Rigsby (1987: 369) on Gitksan of British Columbia, Canada. See also Hudson (1994: 165).

(f) Shame, pain, lack of confidence, and sensitivity. As seen in 6.3-[9]-(a), many people felt or still feel shameful to speak their ancestral language (cf. a Djabugay person’s statement cited in 11.2), and that language is deeply associated with pain (see Wallace 1996: 104). They lacked or still lack confidence in their identity as well as their language proficiency (Janhunen 1997: 142). Also, for learners of the language, “trying to relearn it can be a very demoralizing experience” (Amery 1994: 147). These all make it necessary to exercise a great deal of sensitivity when carrying out language revitalization activities (Amery 1994: 147; cf. also Cantoni 1996a: vii).

(g) Identity and pride. The people concerned need to have a strong sense of identity with the language and have pride in it. Identity and pride are not sufficient, but they are absolutely necessary. (See Rouchdy 1989a: 94, and Tsunoda 2001e: 8352.) Shame felt for the language does not promote the language. At the same time, language revitalization activities themselves may enhance their sense of identity and pride, as seen in the Djabugay person's statement cited above and also in the case of Warrungu (11.5.14-[2]).

(h) Marketing of language. In order to overcome these problems, regarding (f) shame, etc. and (g) lack of pride, etc., it will be necessary to promote the profile of the language in the society, by a public campaign, which Nicholson (1997) calls "marketing of a language". Methods of marketing include (i) use of the language in the mass media, e.g. television, radio, and newspapers, (ii) use and distribution of posters, T-shirts, and so forth, and (iii) development of a body of literature to increase its prestige (Anonby 1999: 36, 43; Family and Community Group 1996a, 1996b: 78–79).

(i) Sense of group solidarity. Anonby (1999: 36–37) argues that a sense of group solidarity is important: "if language promotion is part of a nationalist movement or is perceived as an expression of solidarity or ethnicity, it has great potential for success".

(j) Determination, commitment, dedication, and even sacrifice. The people concerned have to be determined, committed and dedicated to the cause, and prepared to make a sacrifice, if necessary (Tsunoda 2001e: 8532). Otherwise, their revitalization program will have no chance of success. Thus, the people have to talk to children in their language, even if they find it easier to talk to them in the dominant language (cf. (e) above). An example of determination at an individual's level is given in Nicholson (1990), who went through a one-week Maaori language course, a truly frustrating and excruciating experience. As another example, Rhonda TeWheoro, who is the principal of Te Kura Kaupapa Maori o Te Whanau Tahī, a Maaori-medium school in Christchurch, New Zealand, told the writer that the school, which is now flourishing with perhaps more than one hundred students, was originally a private class in her home. A dramatic example of determination, commitment and sacrifice at a community level is exhibited in the revival of Irish in Belfast; see 11.5.3.

(k) Leadership and core individuals. Every successful program seems to have an individual or a group of core individuals with a vision for the program, who are determined, committed and dedicated, and who exercise a strong leadership (see Burnaby 1997: 298); see, for example, Bradley (1989: 33–34, 39–40) regarding Ugong of Thailand, Sawai (1998: 180) regarding Ainu of Japan, and Maguire (1991) for Irish in Belfast (11.5.3). These accounts show that, as Crawford (1996: 64) and Wurm (1997: 47–48, 1998: 198) emphasize (see also

Fishman 1996b: 195), it is the people of the community, and not outsiders such as language activists, linguists, educators, government officers, etc. who must do the job.

Incidentally, Burnaby (1997: 298) reports regarding revitalization activities in Canada: "For a reason I do not understand, most of these leaders have been women". As noted in 6.2-[9]-(e), it often seems to be grandmothers who influence the grandchildren linguistically and transmit the language to them. We termed this "grandmother effect". Thus, in Kimberley, Western Australia, it is always grandmothers, rather than grandfathers, who attend language meetings and accompany their grandchildren on bush trips. Now, almost all the people of North Queensland who are involved in the language revival activities described in 11.5.14-[2] are grandchildren of the last speakers whom Peter Sutton and/or the writer recorded. Their effort may be termed "grandchildren effort", in contrast with "grandmother effect". "Third-generation pursuit of an ancestral language" (Dorian 1993b: 576) is parallel to the "third generation return to ethnicity" (Edwards 1984: 278; Fishman 1964: 61, 1972: 143) often observed among migrants. This third-generation pursuit seems to be common, but what may be termed "second generation pursuit", too, appears to occur; see Florey and van Engelenhoven (2001: 207, 209, 212) on Moluccan languages (originally of Moluccan islands of Indonesia) in the Netherlands. This parallels the situation of language shift. It is often said to take three generations, but it takes only two generations in certain cases; see 7.3.2.

(1) Conflicts within the community. They exist even among the enthusiastic members, for example, regarding the writing system ([9]-(g) above), standardization ([5] above), and the intactness of the language ((c) above). They hinder the success of language revitalization activities.

Thus far we have looked at the problems that surround language revitalization activities and a few possible remedies for them. This discussion heavily draws on Schmidt (1990), who surveyed the situation in Australia as of the late 1980s. It is now a more than a decade since then, and things have since improved in certain respects. For example, published descriptions of Aboriginal languages, e.g. grammars and dictionaries, have increased. A fair number of permanent structures, such as regional language centres, exist, including the Kimberley Language Resource Centre (KLRC), situated in Halls Creek, Western Australia, with an annex in Fitzroy Crossing, 300 km west of Halls Creek. There are, however, many problems still waiting to be solved. As an example, the situation in and around Halls Creek as of the late 1990s is described below.

There is still not sufficient support from the Commonwealth government or the state government. The funding for the KLRC is insufficient and insecure. The centre has a linguist, but employment of just one linguist is nowhere near sufficient to cater for two dozen or more languages of Kimberley, including Jaru and Kija (immediately to the west of Jaru). Jaru and Kija are as different from each other as, say, English and Russian are, and to work on them single-handedly is an extremely demanding task, not to speak of other languages of Kimberley. A culture centre established in Turkey Creek, north of Halls Creek, was closed only after a couple of years' operation, due to lack of funding.

Language classes – on Jaru and/or Kija – are conducted in three Catholic schools and one state school. The intention itself is to be commended, but the classes the writer observed at the state school are not much more than “token” ones. The white teachers do not know the language. A few old ladies come to the class (another instance of “grandmother effect”), but what they do in the class is merely to repeat words or at best two-word sentences. Children do not acquire overall language ability, e.g. construction of sentences and their use in actual contexts. The principal is not interested in Aboriginal languages or culture, and would not seek advice from the linguist of the KLRC or from the present writer.

Despite the insufficient and insecure funding, the KLRC has achieved a great deal in the way of publications. It has published a large number of language materials, such as non-technical descriptions of languages, dictionaries, reading materials, videos, cassettes, and CDs. No doubt all these materials are indispensable for language revitalization activities.

However, the efforts to revitalize the languages of Halls Creek area are not successful. Reversing the language shift is simply out of the question. Thus, the invaluable materials produced by the KLRC are not utilized. The numbers of speakers are decreasing, as old speakers pass away. Young people and children are not acquiring their ancestors' language; they do not see any value in trying to learn it, and old speakers do not speak it to the younger generation. A similar situation is probably observed in other communities in Australia and elsewhere.

11.4.3. Confusion over writing systems

11.4.3.1. *Introduction*

As mentioned in 11.4.2-[9]-(g), some of the writing systems used for language revitalization have inherent problems, and these problems are the source of widespread confusion. We shall now look at the issues that surround writing systems.

It should be pointed out at the outset that, as alluded to in 11.4.2-[11]-(l), the issue of writing systems is a highly political one (for example, see Stebbins 2001 on Sm'algayax of British Columbia, Canada), and sensitivity is required in devising and discussing writing systems.

Before enumerating the problems with the writing systems, we shall first look at the suggestions the writer made for the Warrungu language of North Queensland.

11.4.3.2. Writing system suggested for Warrungu

The revival movement of Warrungu is now in progress (11.4.15-[2]). In March 2001, the writer had discussions with Rachel Cummins, the central figure in the movement, and proposed a writing system for Warrungu, roughly as follows.

(a) The English writing system is one of the worst in the world. It is inconsistent and confusing. One and the same letter may be pronounced in various ways. Thus, the letter *u* is pronounced at least in five different ways. (i) *but*, *cut*, (ii) *put*, *bull*, *cushion*, (iii) *cute*, (iv) *minute*, and (v) *bury*. Also, one and the same sound may be written in different ways. Thus, compare *field*, *photo*, and *rough*. The English writing system is really confusing. It is important to be consistent, with one letter for one sound.

(b) In addition, Aboriginal languages have sounds that do not occur in English. So, if you apply the English writing system to Aboriginal languages, there will be a big mess.

(c) The writing system that the writer suggests for Warrungu is the following:

a, i, u, b, d, j, g, m, n, ny, ng, rr, r, l, w, y

Dyirbal people use the same system for their language. (Dyirbal (cf. Chapter 8) is immediately northeast of Warrungu.) At the Kimberley Language Resource Centre, Jaru people have adopted a system very similar to this.

(d) In English, *p* and *b* are different sounds. So are *ch* and *j*; and *k* and *g*. For example, compare *pin* and *bin*, and so on. However, in Warrungu (and other Aboriginal languages), *p* and *b* are not distinguished. For example, *bama* 'man' can be pronounced either [pama] or [bama]. Similarly for the pair of *ch* and *j*, and for the pair of *k* and *g*. So, either *p-t-ch-k* or *b-d-j-g* can be used. Whichever you use, it is important to be consistent.

(e) In Warrungu, *rr* (generally a trill) and *r* (generally a semi-retroflex continuant) are two different sounds, although they are not in English. An example is *rirra* 'tooth'.

(f) Some people use *dj*, e.g. *Kudjala* (the language of Charters Towers area, Queensland), but *d* is unnecessary; just *j* is sufficient. (In addition, to be consistent, *g* can be used in place of *k*, resulting in *Gujala*.)

(g) About *u* (i.e. /u/). This can be pronounced either [u] or [o] in Aboriginal languages.

(h) It is important to be careful with the letter *u*. One such example is the spelling *kutjala* (/gujala/). Some people are confused and pronounce it [kacala]. As another example, the word *jambun* ([jambun] or [jambon]) ‘witchetty grub’ is used for the name of a community near Murray Upper, north of Townsville (cf. 8.2.1), and for the title of a children’s book. Unfortunately, however, it is spelt *jumbun*, rather than *jambun*. The writer asked a number of Aboriginal Australians from the locality (who did not know this word) to pronounce the spelling *jumbun*. They all said [jamban], and not [jambun] or [jambon]. This shows that, when confronted with this confusing use of the letter *u* for [a] and [u] (or [o]), the learner will not know whether the letter *u* is intended to present the sound [a] or [u] (or [o]). The name of the language of Fraser Island is spelt *Butchulla*. Because of the confusing use of the letter *u*, one would not know how to pronounce it. [bucula], [bucala], [bacula] or [bacala]? (Rachel Cummins agreed.) The writer heard some people say [bacala]. Then, it can be spelt *Bajala*, rather than *Butchulla*. This spelling is far clearer. Also, it is more economical.

(i) As noted in (g), in Warrungu, [u] and [o] are the same sound. If Rachel thinks [o] is more common than [u], or if people are confused by the letter *u*, then they can use the letter *o* in place of the letter *u*, e.g.:

Warrongo rather than *Warrungu*

(j) Someone said that, because her first language is English, it is hard for her to get used to this writing system. The writer emphasized to Rachel Cummins that it might take a while to get used to this system, but that it is better to use this system. If you apply the English system to Aboriginal languages, you will have a mess forever. Also, if you teach this writing system to children who have not learned the English writing system, they will learn it quickly. (Rachel Cummins agreed.)

(k) The writer cannot write any language materials on Warrungu if he is asked to use an English-based and confusing system.

Rachel Cummins agreed that this writing system is better than the English writing system, saying “This is clear”.

In connection with (j), it is relevant to cite the comment by Brother John Gi-con (e-mail message of 3 June 2003): Gamilaraay and Yuwaalaraay people of New South Wales consistently use the letter *u* for the phoneme /u/. As predict-

ed above, “People here, including and perhaps especially children, quickly get used to a consistent spelling system and can read it quite easily”.

11.4.3.3. Problems in writing systems

Other examples of Aboriginal words spelt in a very confusing way include the following: (i) *Birri-Gubba* (/birigaba/) ‘a language of Queensland’, and (ii) *Murrie* (/mari/), ‘man’ in many languages of Queensland, also (in certain parts of Queensland) ‘Aboriginal Australian(s)’ as against white people. Note that the use of the letters *rr* for the phoneme /r/obliterates the phonemic opposition of /rr/(a trill) and /r/(a semi-retroflex continuant) and it fails to present the phonological system of the language accurately. Note also that these spellings, e.g. *Birri-Gubba*, are more cumbersome than, e.g., *birigaba*.

The reasons for the use of such a confusing system appear to be (i) the lack of linguistic training on the part of people who devised such a system, and (ii) the people’s avoidance or rejection of advice from linguists. For example, the spelling *Birri-Gubba* (/birigaba/) appears to have been decided on without seeking advice from linguists.

One of the most serious sources of the confusion concerns the letter *u*. An illuminating example is the name of a language of New South Wales that used to be (and still is) spelt *Bandjalang*, e.g. Crowley (1978). It is, however, spelt *Bundjalung* in some of recent publications, e.g. Sharpe (1993) and McKay (1996: 52–53). Sharpe (1993: 73) states: “We spell it *Bundjalung* so that the average English speaker will read and pronounce it correctly, as desired by *Bundjalung* people. In some publications for linguistically trained readers, the name is spelt *Bandjalang*, but the *a* is meant to indicate a vowel like that of English *bun* or *lung* rather than that *ban* or *Lang*”. Sharpe notes that this is the community’s wish. Nonetheless, in the writer’s view, adoption of such a spelling is not advisable. There are at least two reasons for this: (i) accuracy, and (ii) cultural and linguistic awareness and distinctiveness. They are closely inter-related.

[1] Accuracy

The argument regarding the pronunciation of the letter *u* is not convincing. There are at least two reasons for this.

(a) In many (or most?) Australian Aboriginal languages, including *Bandjalang* itself (see Crowley 1978: 13–14 and Sharpe ed. 1995: viii), the phonetic realizations of the phoneme /a/are not confined to the vowel of *bun* ([ʌ]). Its phonetic value varies mainly depending on the preceding consonant, ranging from one similar to that in *ban* ([æ]) to the one in *palm* ([ɑ]). The use of the letter *u* to present such vowels is truly misleading.

(b) There is no need to use the letter *u* to present /a/([a]). Thus, in 1998 the writer was approached by an Aboriginal organization in Derby, Western Australia, which was seeking a name for a new building. The writer recommended the word *bandarang*, which is the name of a tree species that grows in the area. The writer requested a couple of average English speakers in Australia to pronounce *bandarang*, and they pronounced the letter *a* like that of *bun*, and not like that of *ban*. As another example, there is a child care centre in Townsville, North Queensland, whose name is Galbiri Child Care Centre. (*Galbiri* (/galbiri/) is the word for ‘children’ in Warrungu and a few other languages.) The people pronounce the letter *a* just as intended, as was the case with *bandarang*. As a final example, many Aboriginal languages of North Queensland have the word *bama* ‘man’, and this word is used in language activities there (cf. McKay 1996: 136–137). It is spelt *bama*, rather than, say, *bumma*.

To sum up, it is truly unfortunate that the letter *u* is used to present the phoneme /a/. The adoption of the spelling *Bundjalung*, in place of *Bandjalang*, merely helps to perpetuate this confusion.

It should be mentioned in this context that Maaori people (New Zealand) employ their own writing system. It is highly consistent and also distinct from the English system. But this does not seem to create any confusion among average English speakers. The same applies to the Hawaiian writing system.

The orthography of Manx, which was the vernacular of the isle of Man, resembles that of English. It is plainly inadequate for presenting the phonology of Manx, for example, failing to distinguish those distinctions which are absent in English, and as a result, it is one of the most controversial aspects of Manx in its revival activities. (See Sebba 2000.)

Jones (1998: 341) reports, regarding the orthography of Cornish of England: some people “advocated making it as similar as possible to English spelling in order to facilitate learning, whilst others preferred to make it as unlike English as possible in order to emphasize the different phonological systems of the two languages”. However, experiences by Gamilaraay and Yuwaalaraay people (cited in 11.4.3.2), by Maaori people and by Manx people make it doubtful if it is really worthwhile to make the Cornish orthography as similar as possible to the English spelling system.

[2] Cultural and linguistic awareness and distinctiveness

There has been in Australia a painful lack of understanding of Aboriginal languages (and cultures) on the part of the general public. It is important to make them aware of Aboriginal linguistic (and also cultural) heritage. Tamsin Donaldson (p.c.) points out that average English speaking Australians would not expect to read German or French writing systems in the way they read the Eng-

lish one and that the same expectation should apply to Australian Aboriginal languages. Also, in the writer's view, it will be important for Aboriginal Australians to assert their cultural and linguistic distinctiveness. A writing system which is different from the English system may help to foster the sense of this distinctiveness. The adoption of a spelling such as *Bundjalung* will not assist in any way towards the raising of the public awareness. (This may be indeed another form of cultural assimilation.) It is relevant in this connection to mention this: The writer visited New Zealand in August 2001, in order to learn from Maaori people's revitalization activities. He mentioned the spelling change from *Bandjalang* to *Bundjalung*, to the linguist Tamati Te Hau, who is a Maaori person, working on the compilation of a dictionary of his tribal dialect. He responded, saying "Why do they bow to English?" (As mentioned above, Maaori people possess their own writing system, which is consistent and also distinct from the English system.)

It should also be pointed out that the use of a writing system that is consistent (and different from the English system) for recording a language, which later became extinct, enabled the reconstruction of that language. If the English system had been used, the reconstruction of the language would have been very difficult, if not impossible. See 11.5.14-[1].

In conclusion, we shall cite Dauenhauer and Dauenhauer (1998: 90–91): "for passing on the accurate pronunciation of names and other cultural information, accurate spelling is crucial".

11.4.4. Further suggestions for language revitalization activities

A large number of suggestions have been put forward which are intended to contribute to the success of language revitalization movements. Some of them were already mentioned in 11.4.2. Additional suggestions are discussed below.

[1] Stable bilingualism

To sum up this view, stable bilingualism, coupled with separation of two languages into two distinct domains, will hinder language shift and facilitate language maintenance. Inclusion or maintenance of stable bilingualism has been recommended for language revitalization activities; see for instance, Janhunen (1997: 143), Rouchdy (1989a: 94), Suwilai (1998: 172); cf. also Wurm (1997: 39, 1998: 194). In this view, language revival activities will primarily aim at expanding the domains of use of the language (Amery 2000: 217). This theory looks attractive, but it is beset with a number of problems, as seen in 7.3.1-[1]-(b).

[2] Value of bilingualism

Bilingualism (also biculturalism) is said to have cognitive or intellectual advantages (Cantoni 1997: 2; Ellis 1994: 223; Jones 1998: 34; Letts 1994: 353–354; Thieberger 1990: 347–348; Tovey, Hannan, and Abramson 1989: 32; Wurm 1997: 48–49, 1998: 199). Thus, unlike monolinguals, bilinguals will be aware that the same thought may be expressed in more than one way, with different words and sentences in different languages, and that some words and expressions may have no exact equivalent in another language (cf. Wurm 1998: 199). Wurm argues that realization by the community of the advantages of bilingualism will encourage them to maintain their traditional language.

[3] Use of the language as a secret language

Wurm (1997: 48, 1998: 198–199) suggests that recognition of the value of a given language as a secret language unintelligible to the speakers of the dominant language may encourage the people to use it. Evidence in support of Wurm's view is mentioned in 7.2.2. Needless to say, the value of the traditional language as a secret language depends on the degree of endangerment (or viability) of the language in question. The value decreases if many people speak or understand the language (Jones 1998: 225–226).

[4] The aim should be realistic, and not too ambitious, taking into account the degree of the viability or endangerment of the language concerned (McKay 1996: 226). This point is emphasized by Fishman (1991) and Thieberger (2002); partial acquisition of the language is far better than no acquisition at all.

11.5. Types of language revitalization programs

11.5.1. Introduction

A fair number of methods for language revitalization have been proposed; for surveys, see Amery (1994: 143–147, 2000: 27–18), and Tsunoda (2001e: 8352). As seen in 11.3.2.1 and 11.3.2.2, a number of factors need to be taken into account when devising a language revitalization program, and the degree of viability or endangerment of the language concerned seems the most crucial. The proposed methods may be shown as in Figure 11-1, in terms of the range of applicability of each method. As defined in 11.1, those activities which deal with extinct languages are for language revival, whole those which have to do with weakening or moribund languages are for language maintenance.

This classification of methods is only tentative, and so are the labels employed for them. Also, this classification is not mutually exclusive. Two or more

types may be combined in one program. In certain cases, one type of method may be considered a variety of another method. And so on.

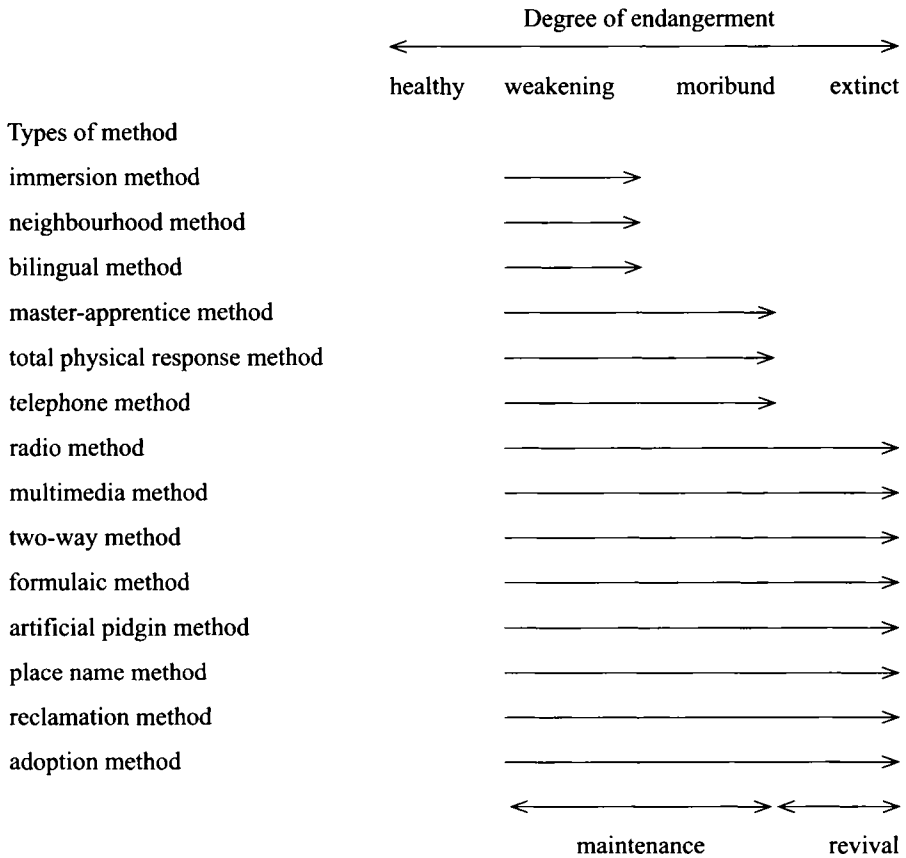


Figure 11-1. Types of language revitalization programs

Figure 11-1 indicates, for each method, the stage of language endangerment for which that method will be applicable. The number of available methods correlates with the degree of endangerment. That is, the more endangered a given language is, the fewer options it has. Thus, the immersion method could be applicable for healthy and weakening languages, but inapplicable for moribund and extinct languages. This shows that, in order to prevent the loss of a given language, the sooner the activity starts, the more options there will be available. Nonetheless, this should by no means discourage a more ambitious plan than in-

licated in Figure 11-1. Thus, with determination and ingenuity, the immersion method may be possible for moribund languages.

We shall now look at the proposed methods, one at a time, together with specific examples thereof.

11.5.2. Immersion method

An environment is provided in which learners will only hear and speak the language. Such an environment may be arranged, say, in a pre-school, a school, a one-week residential course, a week-end camp, or a one-day trip. This method is possible for weakening languages, very difficult (if not impossible) for moribund ones, and impossible for extinct ones. That is, this method is for language maintenance, rather than for language revival. The most successful and best-known language immersion program is “the language nest” for the Maori language of New Zealand. A similar program has started in Hawaii.

[1] Maaori

Revitalization activities of the Maaori language, which started early in the 1980s, are perhaps the best-known and most successful attempt at language maintenance of all the language revitalization activities. They are described by Jeanette King (2001), Nicholson (1990), and Spolsky (1995), among others. They are also cited in numerous secondary sources. (A brief account of the history of the Maaori people and language is in 3.4.1.)

The most prominent feature of Maaori language activities is the use of the immersion method. This method is carried out in various ways, such as (i) *Koo-hanga Reo* (nest + language, ‘language nest’) for preschoolers, (ii) *Kura Kaupapa Maaori* (school + philosophy/world view + Maaori), immersion schools for school-aged children, and (iii) *Waanaga Reo* (place of higher learning + language), immersion camps for adult learners. In August 2001, the writer had an opportunity to visit New Zealand to observe (and learn from) Maaori language activities. He visited one language nest and one immersion school in Rotorua, North Island, and also one language nest and one immersion school in Christchurch, South Island. The settings are highly contrasting; while Rotorua is the heartland of Maaori culture (Rangi Nicholson, p.c.), Christchurch is highly urbanized, being the third largest city of the country.

Each of the language nests that the writer observed consisted of perhaps up to 10 or 15 children (including babies!) and five or six adults (all women), including teachers and mothers. All the activities in the classroom were conducted in Maaori only, with no English intervening. Even during the free play time, at the language nest in Christchurch, the writer heard two children speaking in

Maaori. This is truly remarkable in view of the fact that that language nest is located in a suburb of Christchurch, and not, say, in a remote community. It may be added that the activities in the classroom involved much singing and dancing, using the Maaori language.

At the two immersion schools, all the classes were conducted in Maaori. It is by no means easy to teach all the subjects in Maaori, due to the shortage of teachers and teaching materials. This problem has been overcome, e.g. by televising a science class conducted in the Maaori language, to other schools. At the two immersion schools, the cultural aspects are incorporated into the school activities. Thus, visitors to the school are welcomed in what appears to be a traditional ritual, which involves much singing and hand gestures.

Regarding adult learners, a personal account of an adult going through an immersion course is given by Nicholson (1990) (mentioned in 11.4.2-[11]-(j)).

Maaori revitalization activities are highly successful – to the extent that the writer was able to observe in 2001; the pre-schoolers and students were speaking Maaori fluently. This observation is in contrast with Spolsky's (1995: 183) observation made in the mid-1990s: "all signs are that the actual level of Maori knowledge and use remains quite low, even among students in immersion programmes".

[2] Hawaiian

The language nest method was introduced to Hawaii in the mid-1980s, and immersion programs are now operating from the preschool level to the high school level, in which all subjects are taught in Hawaiian. Courses in the Hawaiian language and literature are offered at the University of Hawaii, and the first M.A. degree in Hawaiian was awarded in 2002 (8 May 2002 issue of the Honolulu Starbulletin; information supplied by Suzanne Romaine via Nancy Dorian). For further details, see Kamanaa and Wilson (1996), Kapono (1995), Niedzielski (1992), and Schütz (1995, 1997).

11.5.3. Neighbourhood method

This method may be considered a variety of the immersion method, but it is set up here as a separate type in view of one particular case that was a most remarkable and dramatic success, as described below. For a neighbourhood program to succeed, the language will probably need to be only at the weakening stage. The program will be extremely difficult if the language is moribund, and almost certainly impossible if the language is extinct.

In order to create a cohesive speech community, a group of eleven families bought houses in the same neighborhood, i.e. Shaw's Road in Belfast,

Northern Ireland, in the middle of the English-speaking community. They had themselves learned Irish as adults, and many of them learned it in prison (Maguire 1991: 202). (This is a manifestation of their remarkable determination.) They then raised their children as bilinguals (in Irish and English). The first family took up residence on Shaw's Road in 1969, followed by other families, and a school for Irish-medium education opened in 1971, with nine pupils. This project proved successful. A second school was established in the city in 1987–88 to meet an ever-pressing demand. The project exerted a significant impact upon the surrounding neighborhoods, and inspired other community enterprises throughout the North, particularly in the area of Irish-medium education. For details, see Maguire (1991), on which the preceding account is based.

This project may be considered an instance of language revival, rather than language maintenance. This is because, although Irish was spoken elsewhere on the island, it was not spoken in Belfast (Maguire 1991: 12). Therefore, as far as Belfast is concerned, Irish has been revived, rather than maintained.

The success of this project is extraordinary in a number of respects. The program overcame the usual problems, such as lack of funding and lack of support from the authorities, among other factors. But what is more remarkable about this program include the following.

(a) The parents learned the language as adults (just as some Maaori people do), and revived it.

(b) They achieved their goal in an urban setting (cf. Maguire 1991: 10, 152), rather than a rural setting. It is impossible to imagine an Australian Aboriginal language being revived in a similar way, say, in Melbourne.

(c) Apart from the children of the initial eleven families (in which the parents first learned the language), the children first learned the language and took it to their home, with the language eventually reaching the parents (Maguire 1991: 4, 107–131). That is, the school played a central role in the revival of Irish (Maguire 1991: 95). This complements (though not contradicts) the view that the school cannot replace intergenerational transmission of the language in the family, neighbourhood, and community. See 11.4.2-[7]-(b).

11.5.4. Bilingual method

The bilingual method may be applicable for weakening languages (and healthy ones as well), but it will be inapplicable for moribund or extinct languages. In this method, the minority language is employed as the medium of instruction, in addition to the dominant language. That is, this involves teaching *through*

the language, rather than teaching *of or about* the language (11.3.2.2). Thus, the Maaori language is used in immersion schools (11.5.2), and also in bilingual schools. Needless to say, in bilingual schools a smaller amount of time is devoted to the Maaori language than at immersion schools, and the students at the bilingual school the writer visited (in Christchurch) seem to be less proficient in it than are their counterparts at the two immersion schools he visited (one in Rotorua and the other in Christchurch).

Now, bilingual education may be classified into the following two models: (a) transitional, and (b) parallel.

(a) Transitional model (Edwards 1984: 300) (also known as transfer model; cf. Rigsby 1987: 362). In this model, the teaching is initially conducted in the minority language (in which the children are fluent). This is based on the view that “children learn better in their own language and can handle literacy better in their own language” (McConvell 1982: 67). It then gradually switches to the dominant language as the children move to higher grades and as subjects like mathematics and science are introduced. (See, for instance, Schmidt 1990: 66.) The transitional method has been employed in many bilingual programs in the Northern Territory, Australia. (See McConvell 1994: 235.)

(b) Parallel model. Both the minority and the dominant languages are employed throughout the course of the children’s education. The bilingual school that the writer visited in Christchurch seems to be of this type.

11.5.5. Master-apprentice method

A master-apprentice language program (Hinton 1994: 231, 1997) was developed for revitalization of Californian languages. Hinton (1994: 231) outlines this method as follows.

The idea is to fund the living expenses of teams of elders and young people with grants, so that they do not have to work for several months, and can thus isolate themselves from English-speaking society and become immersed in traditional culture and language. It was estimated that three to four months in an immersion situation would go a long way towards the development of proficiency, especially for people who already have some passive knowledge.

This method is a type of immersion method (Hinton 1994: 241). However, it differs from the kind of immersion program mentioned in 11.5.2. That is, a team in a master-apprentice program generally consists of just one master (i.e. a fluent speaker) and one apprentice (i.e. a learner), and occasionally an interpreter or the like. Since such a team involves only one fluent speaker, it can be ap-

plied to moribund languages. In contrast, the kind of immersion program mentioned in 11.5.2 generally requires a fair number of speakers, and consequently it is not easily applicable to moribund languages.

For this program, Hinton (1994: 243–244) lists eight rules of teaching for teachers.

1. Be an active teacher. Find things to talk about. Create situations or find something in any situation to talk about. Use the language to tell the apprentice to do things. Encourage conversation.
2. Don't use English, not even to translate.
3. Use gestures, context, objects, actions to help the apprentice understand what you are saying.
4. Rephrase for successful communication. Rephrase things the apprentice doesn't understand, using simpler ways to say them.
5. Rephrase for added learning. Rephrase things the apprentice says, to show him correct forms or extend his knowledge to more complex forms. Encourage communication in the language, even with errors.
6. Be willing to play with language. Fantasize together; make up plays, poems, and word games together.
7. Understanding precedes speaking. Use various ways to increase and test understanding. Give the apprentice commands to follow. Ask him/her questions. It is not necessary to focus on speaking each new word right away; that will come naturally.
8. Be patient. An apprentice won't learn something in one lesson. Repeat words and phrases often, in as many different situations and conversations as possible.

Hinton (1994: 243–244) also lists eight rules of learning for apprentices. They are almost exactly parallel to those for teachers, except the following two.

4. Practice. Use new words and new sentences and grammar as much as possible, to yourself, to your teacher, to other people.
5. Don't be afraid of mistakes. If you don't know how to say something right away, say it wrong. Use whatever words you know; use gestures, etc. for the rest.

No doubt, this advice by Hinton is instructive. But it is surely frustrating to adhere to this advice, hence the need for determination.

In retrospect, the writer's fieldwork with Alf Palmer on Warrungu is a variant of the master-apprentice method. After three spells of "apprenticeship" from 1971 to 1974, totalling to about 8 months, he became a – reasonably – fluent Warrungu speaker. (Still now, 30 years since then, he is able to produce Warrungu sentences.) No doubt much the same applies to many other fieldworkers who have become (reasonably) fluent in the respective languages. This shows that

the master-apprentice method can be highly effective. It will prove to be invaluable for the maintenance of moribund languages.

11.5.6. Total physical response (TPR) method

As described by Cantoni (1999: 53–54), the lessons in this method proceed as follows.

The teacher begins by uttering a simple command such as “walk to the window,” demonstrating or having a helper act out the expected action, and inviting the class to join in. Commands are usually addressed first to the entire class, then to small groups, and finally individuals. When a few basic verbs and nouns have become familiar, variety is obtained by adding qualifiers such as “fast,” “slowly,” “big,” “little,” “red,” “white,” “my,” and “your.” Since the students are not required to speak, they are spared the stress of trying to produce unfamiliar sounds and the consequent fear of making mistakes.

For more on the total physical response method, see Ellis (1994: 552, 571, 645). Cantoni (1999: 54) admits that this method has a limitation: “TPR promotes only the learners’ receptive language skills and ignore productive ones, which are essential to real communication”.

This method may be considered a variant of the immersion method. The language concerned probably needs to be only moribund, and preferably weakening. It will not be applicable to extinct languages.

11.5.7. Telephone method

Taff (1997) reports that this method is employed for the Deg Xinag language of Alaska, USA: “Since the number of Deg Xinag speakers, all elders, is less than twenty and the learners, young adults, are spread among sites too distant to make it feasible to get together face-to-face, we organized a one-credit distance delivery class under the authority of the University of Alaska” (Taff 1997: 40).

The speakers and learners meet by audioconference, once or twice a week. Due to the nature of the equipment used, i.e. telephone, the emphasis is on speaking and listening, rather than on writing.

This method, too, has limitations. For examples, the learners cannot see the faces, gestures, and other body language of the speakers. This makes it difficult to pronounce some of the sounds – particularly when the telephones do not work well.

Nonetheless, the class is invaluable. Taff (1997: 44) states: “compared to no language learning situation, the telephone class experience is wonderful. It allows us the only opportunity most of us have to listen to and talk with a group of fluent speakers”.

What is unique about this method is the use of telephone for language teaching/learning. It is also worth stressing that this course is accepted as a university subject. This method will be used for moribund languages, although it will be more easily carried out for weakening languages.

11.5.8. Radio method

The radio method can be used for all of extinct, moribund, and weakening languages. One example of this method is reported by Maher (1995: 86): In 1987, a commercial radio station in Hokkaido, Japan, began broadcasting an Ainu-for-Radio language course. The program is not broadcast nationwide but in Hokkaido only and it is aired early (6.05–6.20) on Sunday morning. It aims to create public interest in both the language and the traditional Ainu outlook on nature and life. The audience rating is relatively high for that day and time: 0.1–0.2 percent. This suggests that the program has achieved its aim, though to a limited extent.

11.5.9. Multimedia method: internet and CDs

Recently, with the development of IT, increasing use is now being made of computer technology, utilizing multimedia materials for language revitalization; see Kushner (1999), and Miyashita and Moll (1999). See also, for instance, David Nathan’s website *Aboriginal Languages of Australia* (<http://www.dnathan.com/VL/austLang.htm>) on multimedia resources on Australian Aboriginal languages. Community members are beginning to show interest in multimedia resources and to recognize value in them for language maintenance revitalization. For example, such materials make the lessons more fun and make the younger generation interested in the language, and they counter the lack of fluent teachers in the classroom (Siobhan Casson, p.c.). There are also language lessons available on the internet, e.g. a Welsh language lesson at the following site: <http://www.cs.brown.edu/fun/welsh/>.

There is, however, one serious problem. Insufficient funding makes it extremely difficult to purchase computers, not to speak of the production of multimedia materials or use of the internet for language revitalization.

The multimedia method may be applicable to any language at all – provided that funding and materials are available.

11.5.10. Two-way education method

This method will be in principle applicable to languages at any stage in Figure 11-1, although it will be more feasible if the language is healthier. According to McConvell (1982, 1994), the concept of a “two-way” school was suggested to him by Aboriginal Australians such as Pincher Nyurrrimyarri, a leading Gurindji man of the Northern Territory, Australia, in the mid-1970s. It derived from the Aboriginal people’s dissatisfaction with the current education system (which could be termed the “one-way” school system), which only teaches the “white-man’s” culture and English. They argue that one-way education should be replaced by a “two-way” system. In Pincher Nyurrrimyarri’s view, two-way education should involve the following two components.

(a) Discussions and negotiations between teachers, relevant Departments and the community over policies and programs, rather than having them imposed only from the white side.

(b) Two-way exchange of knowledge. (i) The Aboriginal people involved in the school would make an effort to learn and understand the aims and methods of the European programs, while the European teachers in turn would make an effort to learn about the language, culture and aspirations of the Aboriginal people. (ii) Similar two-way exchange of knowledge between old and young Aboriginal people.

This view is echoed by voices from North America. Thus, see 11.3.2.1-[4]-Stage 4 (“Develop two-way bilingual programs where non-speaking elementary students learn the indigenous language and speakers learn a national language ...”), and 11.4.2-[8]-(e) (“All educators (including the school principal) should try to learn the student’s home language ...”).

Pincher Nyurrrimyarri’s view is truly remarkable in the context of more than 100 years’ history of white domination. Unfortunately, his vision has not been as yet realized. No doubt, the same applies to the education of minority peoples in many other countries.

11.5.11. Formulaic method

This method was proposed by Amery (2000: 209–212) for the revival of the Kurna language of the Adelaide area of South Australia. It entails a staged introduction of well-formed Kurna sentences into speech that otherwise con-

sists of English words and sentences. The initial stage involves one-word utterances that can stand alone as, e.g., questions, responses, commands, greetings, and leave-takings. This is followed by the introduction of sentences that consist of just two or three words. And so on. A similar method is proposed by Fettes (1997: 309). This method aims at the levels of word speakers, phrase speakers, and possibly simple sentence speakers, discussed in 9.4.1.1-[1]. This method will be useful for extinct languages.

11.5.12. Artificial pidgin method

Amery (2000: 215–217) reports that what he seems to term “artificial pidgin method” (a term apparently cited from Powel 1973: 6–7) is employed in the revival of the Ngarrindjeri language, south of Adelaide, South Australia. Some people in the community have learned Ngarrindjeri and claim to speak it, but the Ngarrindjeri they have learned is a kind of relexified English. That is, word order is strictly AVO (according to the convention adopted in Chapter 8, but SVO in the tradition of word order typology) as in English, and the sentences are word-for-word translations of English sentences, even to the extent of using Ngarrindjeri case suffixes as separate words in translating English prepositions.

As Amery (2000: 216) notes, the advantage of this method is the ease with which the language can be constructed and used. However, the language that has been revived is far removed from its previous structure and it invites the question on the issue of “intactness”, discussed in 11.2-[1]-(b). Amery suggests that this is an unfortunate consequence of the community’s rejection of the involvement of linguists.

11.5.13. Place name method

This method is applicable to all the stages shown in Figure 11-1, including extinct languages. As seen in 11.2, according to the view that a language is alive if place names in that language remain, its revival only requires replacement of at least a few place names (in the dominant language) with their traditional equivalents.

In Hawaii, many (or perhaps most) place names are Hawaiian or Hawaiian-based, and a similar situation obtains with Maaori place names in New Zealand, in sharp contrast to Australia, where almost all place names are in English. In Ireland, Placenames Commission was appointed by the government as early as 1946 to “ascertain the correct Irish forms of the placenames of Ireland, and to

compile them” (Bord na Gaeilge 1998: 8). Note that this aim indicates the importance of accurate writing systems (see 11.4.3.3).

Replacement of place names is not what is generally meant by language revitalization (see 11.2). Nonetheless, Fettes (1997: 309) suggests that “even changing the name of the tribe or community may be a small step towards language renewal”. Furthermore, it has an important function in that it is useful for what Amery (1994: 145) calls language awareness programs. Thus, Nicholas Thieberger (e-mail of 1 February 2001) reports: Brian McCoy, on pp.17–18 of *Eureka Street*, Vol.1, No.1, makes a plea for naming places with their traditional names on the ground that it is the best way to honour places and our relationship with them, and that to speak old names is to begin to learn an original way of seeing the world around us.

11.5.14. Language reclamation method

In Amery’s (2000: 17) terminology (cited in 11.1), reclamation refers to revival of an extinct language, utilizing materials recorded earlier when the language was spoken. We shall look at the situation of Kaurna of the Adelaide area, South Australia, and of Warrungu of North Queensland, Australia.

[1] Kaurna of the Adelaide area, South Australia

A detailed account is in Amery (2000). See also McKay (1996: 135–136) and Nathan (1996: 184–202).

The last fluent speaker of Kaurna appears to have died in 1929, but the language was documented by the nineteenth century missionaries, Christian Teichelmann and Clamor Schürmann. Attempts have been made to restore the Kaurna language, including the sounds, on the basis of the written documents and of the sounds of other Australian languages, and even a CD of the language, including the sounds, has been produced. (For a method of reconstructing sounds on the basis of written documents, see the papers in Thieberger (ed.) 1995.) A Kaurna program commenced in the primary section of the Kaurna Plains School (an autonomous Aboriginal school) in 1992, and in two other schools in 1994.

Although the children are unable to develop communicative fluency, the program is judged successful by those involved in it on the following grounds. First, it involves students and the wider Aboriginal community in the education process. (Note that in this case Aboriginal people are involved in the education process, as was desired by the Aboriginal people who put forward the idea of two-way education, cited in 11.5.10.) Second, it has created and fostered a sense of identity and pride amongst Aboriginal people. That is, this pro-

gram has brought about benefits, despite the fact that the language seems unlikely to be restored to its fully viable state. The important thing seems to be re-acquisition of their ancestors' language – even if the re-acquisition is only partial.

It is fortunate that the people who documented Kaurna were German: Christian Teichelmann and Clamor Schürmann. They used a consistent writing system, which is different from the – inconsistent and confusing – English writing system. Had they used the English system, reconstruction of Kaurna might not have been possible. Again, this shows the importance of accurate writing systems (see 11.4.3.3).

[2] Warrungu of North Queensland, Australia

The revival movement of Warrungu already was mentioned in 11.2-[2] and 11.4.3.2. It is briefly outlined as follows. In the early 1970s, Peter Sutton and the writer worked on a fair number of languages in and around Townsville, North Queensland, recording them from the last speakers, who have since passed away. Sutton's main focus was on Gugu-Badhun, and the writer's on Warrungu. More than a quarter century later, Sutton and the writer were requested to assist with proposed plans for the revival of the languages and cultures of the region. Many of the people involved turned out to be grandchildren of the last speakers whom Sutton and the writer had recorded in the early 1970s. (This is an example of "grandchildren effort"; see 11.4.2-[11]-(k).) Their movement employs the reclamation method, since there is no speaker left, and the revival relies on the earlier records of the languages.

There is one particularly interesting aspect of this movement, and this has to do with pride, self-esteem, and interest in language that has been enhanced by a unique feature of the language. One day in March 2001, the writer was having a discussion with Rachel Cummins and her husband, John Cummins (who is a Gugu-Yalanji person, not a Warrungu person). Rachel and John have five daughters, and they were listening to our discussion. The writer explained one aspect of the Warrungu language roughly as follows:

Warrungu had a phenomenon that linguists call syntactic ergativity. This phenomenon is unique among the world's languages. It mainly occurs in Australia, in Queensland, and in fact, in North Queensland. It occurs in Warrungu, and also Warrgamay, Girramay, Jirrbal, Mamu, Ngadjan, and Yidiny. Because this phenomenon is unique among the world's languages, it is a very important part of the cultural heritage – not only for the people of this area, but also for the entire humankind.

Upon hearing this, Knomi, one of the five daughters, said, "I'm curious". Later, in June 2001, Rachel said in one of her e-mail messages, "You inspired

Tahlia [Knomi's younger sister]", and also "Tahlia is eager to go to Japan to study with you". (Tahlia was 17 at that time.) That is, the knowledge of the existence of a rare phenomenon in their ancestral language has raised Warrungu people's sense of pride, self-esteem and interest in it.

It proved infeasible for Tahlia to come over to Japan for study. Instead, the writer started giving Warrungu lessons in Townsville, in March 2002. The progress is slow, but the writer considers the prospect encouraging. The Warrungu revival movement is described in Tsunoda (2004), and also in an essay located at: <http://www.sgu.ac.jp/com/ksasaki/kaken/essay/essay-tsn.htm>.

11.5.15. Adoption method

Eve Fesl, who is the first Aboriginal Australian person to be awarded a Ph.D. degree in linguistics, describes in Fesl (1982) an unusual case of language revival: the revival of a language by means of adoption. Unlike Kaurna people, the people involved gave up the idea of restoring their ancestral language, but instead they adopted another language.

Aboriginal languages of Victoria were among the first to be wiped out after colonization. In the mid-1970s, Fesl was requested to search for a language of Victoria to revitalize, only to find none. Fesl then looked for a language which was spoken in a similar – naturally and socially – environment to theirs, that is, a coastal and urbanized area. Finally, Fesl found the Bandjalang – also spelt Bundjalung (11.4.3.3) – language of the Lismore area, New South Wales. It still had some speakers, and it was spoken in a similar environment, both naturally and socially. Fesl and the group applied to Bandjalang tribal elders for permission to teach their language in Victoria. Despite a prolonged debate that arose from jealousy in the Bandjalang community, the Victorians finally succeeded in obtaining permission to teach Bandjalang, on the condition that it is taught to Aboriginal children only. The Bandjalang people's reason is this: "the whites have ripped everything off – we want something for our children first" (Fesl 1982: 50). (For the teaching of Bandjalang in Victoria, see also McKay 1996: 52–53, 150–151).

As mentioned in 10.2.2.2, many Aboriginal Australians consider they own their ancestral language – even if they do not speak it. It is in view of this language ownership that Aboriginal Australians of Victoria needed permission from Bandjalang people to teach the language. Regarding this language, Bandjalang people are "language owners", while those Victorians who learned and use it are "language users".

Florey and van Engelenhoven (2001: 213) report another instance of the implementation of the adoption method.

The adoption method is in theory applicable to all languages, but in practice it will be employed for extinct languages only.

11.5.16. Methods of language revitalization: discussion

We have looked at various methods employed for language revitalization. As seen in 11.2, whether a given language revitalization program is considered a success or not depends on the definition of language revitalization and the aim of that particular program. Also, a given program may be considered a success if it brings concomitant benefits to the community, e.g. enhancement of the sense of self-esteem and identity, and the community members' involvement in the education process (11.2, 11.5.14-[1]). This makes it impossible to make a clear-cut judgement as to whether a given method will bring success or not.

Success of a given program may be measured in terms of the proficiency acquired and the number of resultant fluent speakers. Even if we confine ourselves to these criteria, it is still not easy to measure the effectiveness of the methods listed above. This is largely because the sources consulted do not provide clear information on these respects. In general, those methods which are applicable to weakening languages only, and not to moribund or extinct languages, e.g. the immersion method employed in New Zealand and Hawaii (11.5.2), will be expected to produce a higher degree of proficiency and a larger number of fluent speakers than otherwise, and indeed, this seems to be the case, judging by the accounts provided and also by the writer's observation in New Zealand. In contrast, those methods which are applicable to moribund languages as well, or even to extinct languages as well, may be expected to yield, at best, a low degree of proficiency and a small number of speakers. Fortunately, however, this is not always the case – as far as proficiency is concerned. Some of the latter methods, too, may create a high degree of proficiency – provided that the people are determined and that there is a social environment that enables the language revitalization activity in question. Thus, consider the master-apprentice method, which is applicable to moribund languages as well (though not to extinct ones). As mentioned in 11.5.5, the writer's fieldwork with Alf Palmer on Warrungu is a variant of this method. Three spells of "apprenticeship" from 1971 to 1974, totalling about 8 months, produced a fairly fluent speaker of Warrungu. Under a more favourable circumstance, this method will be able to yield a larger number of speakers.

11.6. Summary of Chapter 11

Chapter 11 pointed out that the answer to the question as to whether languages can be revitalized depends on the definition of language revitalization and the aim of a given program. It then looked at a number of proposals for strategies of language revitalization, mainly aimed at the societal level rather than the individual level. Language revitalization activities are beset with a multiplicity of very difficult problems, and these problems, together with suggested remedies, were considered. Chapter 11 then examined various methods of language revitalization. The number of available methods correlates with the degree of endangerment. The degree of proficiency acquired and the number of resulting fluent speakers will be expected to correlate with the degree of viability of the language in question. However, this does not hold in every case. Thus, the master-apprentice method, which can be applied to moribund languages, can produce (fairly) fluent speakers, as can be seen by some fieldworkers' fluency in the respective languages.

Chapter 11 has shown that language revitalization does not concern language exclusively. It "forms part of a much broader movement towards reestablishing societies on a human scale and in balance with nature" (Fettes 1997: 315) (see also Fishman 1991: 18; Thieberger 1990: 352). It requires "social justice" (Thieberger 1990: 348, 352), i.e. sociopolitical and economic justice (Hale 1993: 26, 1998: 215), such as the existence of a comfortable social environment (Sawai 1998: 188), and economic prosperity (Janhunen 1997: 138).

12. Role and ethics of researchers

12.1. Introductory notes

This chapter looks at the issue of role and ethics of researchers; in this regard we shall be mainly concerned with linguists, but many points of what is stated below will apply to researchers of other disciplines, such as anthropology.

Why is a chapter on the role and ethics of researchers included in this book? Is it necessary? Is it important? There are countless books on linguistics, and there are a large number of courses that teach the subject. However, most – if not all – of them seem to impart knowledge only, and do not seem to look at the issue of role and ethics of researchers. It is for this very reason that this chapter is included in this book.

12.2. Academic exploitation: communities' reactions and researchers' responses

12.2.1. Academic exploitation in general

It cannot be denied that there were (and still are?) cases where researchers (e.g. linguists and anthropologists) did not respect, or they simply ignored, the local community's rights and/or wishes. Often they exploited the local community, like guinea pigs, in order to enhance their academic success. Thus, David Wilkins (1992: 173) notes regarding the situation in Australia: Some communities “felt that past researchers had betrayed them; some through making secret-sacred material public, others through stealing sacred objects, and still others by simply not doing what the community thought they were going to do”. Three selected examples from Australia follow.

(a) A researcher published a book that contains photos of sacred and secret ceremonies of a certain Aboriginal group. Apparently those ceremonies are of the type that only initiated men are allowed to watch, to the exclusion of women and non-initiated men. It seems that the researcher did not expect the book to be distributed anywhere near the relevant Aboriginal group. However, copies of the book were displayed in bookshops in Alice Springs, and they came to the attention of the very Aboriginal group, who were then infuriated by the publication of photos of their sacred and secret ceremonies.

(b) Another researcher published a book that contains photos of sacred and secret ceremonies. He avoided Australia, and published the book in Germany.

However, some of the photos were reproduced in a weekly magazine in Australia, resulting in another outrage.

(c) A third researcher collected a large amount of Aboriginal artifacts, some of which are sacred and secret and should be only accessible to initiated men. He placed them on display at the museum in his university. He would hide them away when he had Aboriginal visitors and put them back on display after they had gone.

These scholars had many years' experience of working with Aboriginal Australians, and, no doubt, they knew that these sacred and secret ceremonies and artifacts should not be revealed to the public. It is almost certain that they had been advised to that effect by the relevant Aboriginal group, and that they promised the latter to respect their advice; otherwise they would not have been allowed to photograph such ceremonies or given such artifacts. It thus seems certain that these scholars did not keep their promise that they had made with the relevant Aboriginal group.

Episodes such as these indicate that there have been many researchers who do not treat the community with due respect, and who ignore the latter's wishes and possibly betray them. The existence of such researchers makes it necessary and important to include this chapter, on the role and ethics of researchers, in this book.

12.2.2. Aim of documentation of endangered languages

Different scholars have different aims in their research, e.g.:

(a) to satisfy their academic curiosity (cited by Okuda 1998: 143), and;

(b) to enhance their academic success (cited by Grinevald 1998: 151; by Okuda 1998: 143).

Specifically, in documentation of endangered languages, different linguists may have different aims, such as (a), (b), and also the following:

(c) to secure data for linguistics (Krauss 1993: 46; Mithun 2001: 34), i.e. for themselves and/or other researchers;

(d) to document endangered languages as a cultural heritage of humankind (Krauss 1993: 46), for the benefit of humankind, and;

(e) to document endangered languages as a cultural heritage of the communities, for the benefit of the communities – so that the research result can be used, for instance, for language revitalization. (See Tsunoda 2000a: 107, 2001a: 261, 2001b: 2; cf. also Mithun 2001: 34).

It seems that traditionally linguists have mainly been concerned with (a), (b), and (c), but that they have largely neglected (d) and (e). Very often linguists

conduct fieldwork for their own interests or benefits only. They choose a research topic that is interesting to them. This is no doubt a good enough reason as far as they are concerned. Furthermore, many – or most – linguists consider it their right, not a privilege, to carry out fieldwork, taking it for granted that the community concerned co-operates with their research. Often, they do not give anything back to the community. Such a situation seems to have been common in many parts of the world.

Recently, however, the situation has been changing. Communities in many parts of the world have begun to criticize and even reject those researchers who do not respect the communities' wishes. For example, in Australia, the biggest change that has taken place during the last two or three decades is that the communities have begun to control research, with concomitant demands such as (i) that the communities benefit from research results and (ii) that intellectual property rights be respected. They may reject those researchers who do not fulfill the requirements of the community in question (Tsunoda 2001f: 37–39). (A vivid account of an actual example of community control is provided by David Wilkins 1992.) Furthermore, a growing number of researchers are expressing similar views on this matter (see Tsunoda 2001a: 261, 2001b: 2). These reactions by communities are discussed in 12.2.3. Researchers' responses to the communities' reactions are dealt with in 12.2.4.

12.2.3. Reactions by communities

Communities have expressed their resentment in a number of ways, and also wishes related to their resentment, as seen below. Communities' resentment may be summarized as follows.

(a) Research is controlled by outsider linguists (England 1992: 33; Hinton 1994: 250; McKay 1996: 231).

(b) The community has not benefited from the research conducted there (Hudson and McConvell 1984: 77; Walsh 1982: 57).

Specifically, communities express resentments such as the following: (i) The research has not been explained to the community clearly (Hudson and McConvell 1984: 77). (ii) Research is conducted purely for the sake of science or for the researchers' benefits or interests, e.g. to advance their career or to satisfy their academic curiosity (Grinevald 1998: 151; Okuda 1998: 143; Yamamoto 1998: 215). As a consequence, some fieldworkers adopt a narrow approach, rather than a holistic approach. England (1992: 34) reports that some Mayan people consider a narrow approach as a weakness and failure, and criticize such linguists for "Doing partial and simplistic studies of Mayan languages for rea-

sons of economy, ease, preference or incompetence". (The importance of a holistic approach will be discussed in 13.1.3.) (iii) Researchers are ignorant of, or simply ignore, the community's interests and wishes, e.g. their wish to transmit the traditional language (Okuda 1998: 143; Sawai 1998: 178). (iv) Linguists have not aided language revitalization activities (Okuda 1998:143). (v) Researchers do not write up the research results in a language that is accessible to community members (England 1992: 33). (How research results should be presented will be discussed in 13.2.8.)

As noted in 12.2.1, there are cases where researchers betrayed the community. As a result of such conduct by (certain, and by no means all) researchers, community members feel that research is another form of exploitation (Yamamoto 1998: 215) or stealing the language from the community (Gerdts 1998: 19). Consequently, "communities have major concerns about how and where research results may be used" (Shaw 2001: 72).

Also, some community members resent a description of their language as "dying", "vanishing" or "endangered" by linguists (Sawai 1998: 177–180; cf. also Huss 1999: 25). It should be stressed, however, that it is one of the roles of linguists to inform relevant communities of the imminent loss of the latter's languages (10.2.2.11, 10.3.3, and also 12.3.2).

Confronted with the situation examined above, communities have begun to voice their objections and to demand that mode of fieldwork be changed. The most important demand is that research should be controlled by the community, and not by outsider linguists (Gerdts 1998: 17; Hinton 1994: 250–251; Hudson and McConvell 1984: 83; Shaw 2001: 71; Tsunoda 2001f: 38; David Wilkins 1992: 172; and cf. England 1998: 106, 111). (David Wilkins 1992 provides an account of his own experience – frustrating, but eventually rewarding – of conducting fieldwork under community control.)

More specifically, the demand for community control of research includes the following.

(a) The community should decide who is allowed to conduct research there (Hudson and McConvell 1984: 78; Shaw 2001: 71; Tsunoda 2001f: 38; David Wilkins 1992). An example from Australia follows. Permission from the relevant Aboriginal council or language centre is required in order to carry out fieldwork there. (A similar situation obtains in North America; see Shaw 2001: 71.) A request for permission needs to provide information on (i) the language to be investigated, (ii) the aim and significance of the planned research, (iii) the topics of the research, (iv) method of the research, (v) method of publication of the research results, and (vi) whether the research will be returned to the community, and how? That is, "academic theft" is no longer allowed.

(b) The community, and not researchers, should choose research projects (Hudson and McConvell 1984: 83; Tsunoda 2001f: 38; David Wilkins 1992: 175). The community may assign a research topic which is different from the one initially envisaged by the researcher.

(c) Researchers should inform the community of what is happening (Hudson and McConvell 1984: 78; David Wilkins 1992).

(d) Researchers should collaborate with community members (Grinevald 1998: 151; fn. 48, 152, 154; Hinton 1994: 251; Hudson and McConvell 1984: 83; Shaw 2001: 71; Watahomigie and Yamamoto 1992: 12; David Wilkins 1992; cf. also McKay 1996: 232), and should not marginalize community members in research (England 1992: 29). However, some community members “want to do the work themselves without help from foreign experts” (Gerdts 1998: 17).

(e) Communities object strongly to research on secret and sacred parts of law and ceremonies (Hudson and McConvell 1984: 77). However, in the writer’s view, it is important to record secret and sacred information – provided that permission is obtained. Recall Ken Hale’s account of *Damin*, a special speech style of the Lardil language of Australia (10.2.4.6-[2]). Since *Damin* was learned in the context of initiation (Hale 1992b: 36), it was no doubt a secret speech style. But for Hale’s work on it, the knowledge about such a unique phenomenon would have been lost to Lardil people and humankind. This shows the importance of recording secret and sacred information.

(f) It is not sufficient for researchers to publish for their own benefits (Hudson and McConvell 1984: 78; cf. Hinton 1994: 250–251). They should not monopolize knowledge (England 1992: 29, 33). They should benefit the community in question, by giving back the research results to the latter (Hudson and McConvell 1984: 79, 82, 83; Walsh 1982: 58; Yamamoto 2001). Thus, (i) research results should help the education of the children of the community (Hudson and McConvell 1984: 79). (ii) Linguists should train community members in linguistics (England 1992: 34; Grinevald 1998: 151, 152; Hudson and McConvell 1984: 79; Shaw 2001: 72; Watahomigie and Yamamoto 1992: 12; cf. also McKay 1996: 30–31) – so that the latter can conduct research. (iii) Linguists should aid language revitalization activities (Okuda 1998: 143; cf. Hinton 1994: 250), or bilingual education (Walsh 1982: 58). (iv) Research results should be fed into the general education system to make outsiders at school and college understand the community people more, to respect them and stop discriminating against them (Hudson and McConvell 1984: 79).

In principle, the community control of research should be respected. However, it may lead to unfortunate consequences. Two examples follow.

(a) There was a case in Australia where publication of an excellent dictionary that is based on more than a decade's dedicated work and that could be invaluable for language revitalization activities was banned by the community concerned. (Gerds 1998: 20–21 discusses similar, detrimental consequences of community control of research in North America.) It should be added, however, that the situation seems to vary from community to community, and the response is not always discouraging. Thus, the writer has received requests from community members of North Queensland and Western Australia to write books on their languages. Surely the people would not ban the publication of books that they have requested for. It is interesting to note that these people are "owners" (10.2.2.2) of the respective languages, but that they do not intend to monopolize them.

(b) Since the early 1970s, when the writer started fieldwork in Australia, the number of linguists (including postgraduate students) who work on Australian Aboriginal languages, does not seem to have increased, or at least, not significantly. This is despite the subsequent increase of linguistics departments at Australian universities and the concomitant increase of linguistics postgraduate students. Joyce Hudson (p.c.) suggests that one of the possible causes of this is the stricter community control of fieldwork.

The above suggests that, unfortunately, community control of research may pose an obstacle to documentation of endangered languages, and consequently, to language revitalization. That is, it may not benefit communities in these respects.

12.2.4. Researchers' responses: ethical codes

A growing number of linguists are aware of the criticism and demands raised by communities. Thus, England (1992: 34–35) lists four areas that she considers linguists' major obligations. David Wilkins (1992: 189–199) puts forwards a similar, but more detailed, proposal. One main concern of England and David Wilkins is ethics in research. A large number of academic institutions and associations appear to have recommendations or requirements regarding ethical codes in research. Thus, The Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra, has set up very strict ethical codes: *Guidelines for Ethical Research in Indigenous Studies* (also available on the internet: http://www.aiatsis.gov.au/rsrch/rsrch_grnts/rg_abt.htm). The guidelines consist of eleven principles, all of which and part of explanations thereof are cited below. They are based on the following belief: "The Institute

considers that these principles are not only a matter of ethical research practice but of human rights”.

A. Consultation, negotiation and mutual understanding

1. Consultation, negotiation and free and informed consent are the foundations for research with or about Indigenous peoples.

Researchers must accept a degree of Indigenous community input and control of the research process...

2. The responsibility for consultation and negotiation is ongoing.

... Ongoing consultation is necessary to ensure free and informed consent for the proposed research, and of maintaining that consent.

3. Consultation and negotiation should achieve mutual understanding about the proposed research.

Consultation involves an honest exchange of information about aims, methods, and potential outcomes (for all parties)...

B. Respect, recognition and involvement

4. Indigenous knowledge systems and processes must be respected.

Acknowledging and respecting Indigenous knowledge systems and processes is not only a matter of courtesy but also recognition that such knowledge can make a significant contribution to the research process...

5. There must be recognition of the diversity and uniqueness of peoples as well as of individuals.

Research in Indigenous studies must show an appreciation of the diversity of Indigenous peoples, who have different languages, cultures, histories and perspectives...

6. The intellectual and cultural property rights of Indigenous peoples must be respected and preserved.

...

7. Indigenous researchers, individuals and communities should be involved in research as collaborators.

...

C. Benefits, outcomes and agreement

8. The use of, and access to, research results should be agreed.

...

9. A researched community should benefit from, and not be disadvantaged by, the research project.

...

10. The negotiation of outcomes should include results specific to the needs of the researched community.

Among the tangible benefits that a community should be able to expect from a research project is the provision of research results in a form that is useful and accessible.

11. Negotiation should result in a formal agreement for the conduct of a research project, based on good faith and informed consent.

The aim of the negotiation process is to come to a clear understanding, which results in a formal agreement (preferably written), about research intentions, methods and potential results.

In connection with intellectual and cultural property rights, it is relevant to cite Dauenhauer and Dauenhauer (1998: 91), who express the community's view from North America: "There is a real and legitimate fear of traditional ethnic materials being appropriated, exploited, trivialized, or desecrated by outsiders, and this fear has led many elders and communities in the direction of secrecy". See Crystal (2000: 157–158) and Gerdts (1998: 19–20) for further discussions of this issue.

We have thus far seen the eleven principles of *Guidelines for Ethical Research in Indigenous Studies*, set up by The Australian Institute of Aboriginal and Torres Strait Islander Studies.

Applications for grants awarded by The Australian Institute of Aboriginal and Torres Strait Islander Studies must meet the ethical requirements stated in the above-cited guidelines. No applicant will be awarded a grant unless he/she satisfies these ethical requirements.

Similarly, the Australian Linguistic Society has the ethics sub-committee (*The Australian Linguistic Society Newsletter* No.84/4: 12), and it issued the statement of ethics in *The Australian Linguistic Society Newsletter* No.90/4: 14 (now available at: <http://www.latrobe.edu.au/rclt/als/ethics.html>).

As far as the discipline of linguistics is concerned, Australia is far more advanced in terms of concern with ethical codes for research than some other countries such as Japan. In Japan, with the notable exception of linguists working on Ainu, e.g. Okuda (1998), awareness concerning ethical codes appears to be absent among most linguists, even among those who would be expected to be ethically aware. Thus, at a symposium on endangered languages (!) that was organized by the Linguistic Society of Japan and held in October 1998, the writer put forward a proposal to set up a committee for ethical issues, but the proposal was flatly rejected.

Parenthetically, tentative notes on the nature of intellectual property rights are offered here. It seems that the concept of intellectual property rights as currently advocated consists of two separate aspects. One is the traditional one. As seen in 10.2.2.2, in Australia and North America (and possibly elsewhere as well) language is considered a gift from the creators. See Dauenhauer and Dauenhauer (1998: 91–93) for a further elaboration of the traditional concept of intellectual property rights. The other is the Western-influenced concept of rights in general. This Western concept of rights may have awakened the traditional concept of intellectual property rights, but they will need to be separated.

12.3. Role of linguists

12.3.1. Introduction

Ethical codes in research discussed in 12.2.4 are not confined to linguistics, but are relevant to other disciplines as well, such as anthropology. In the following, we shall be concerned with the role of linguists in language endangerment situations.

There are a number of tasks that linguists should carry out in the current crisis of language endangerment. Dixon (1997: 136–137), Grinevald (1998: 154), Krauss (1992: 8, 1993: 45–46), and Lehmann (1999: 7) argue that the business of endangered languages is that of the whole linguistic profession, not just the responsibility of, or limited to the interests of, fieldworkers. Grinevald notes that the work involved includes desk/archive work, fieldwork, training of fieldworkers, professional support for the work in the form of grant reviews, hiring decisions, promotion and tenure decisions, and other forms of reward decisions. Of all these tasks of linguists, the most urgent ones are no doubt the following two (Tsunoda 2000a: 108, 2001a: 261–262, 2001b: 2; cf. also Suwilai 1998: 173–174):

(a) to document endangered languages (Bradley 2001: 151; Brenzinger 1998a: 87; Dixon 1997: 136–137; Everett 2001: 183; Krauss 1992: 8, 2001: 28; Lehmann 1999: 7; Pawley 1991: 15), and;

(b) to benefit the communities by means of research results, e.g. for language revitalization (Brenzinger 1998a: 87; Krauss 2001: 28; cf. also Amery 2000: 39).

Thus, Lehmann (1999) argues: “Describing endangered languages is the only really urgent task of linguists” (p.7). This is because “Linguistic theory, language typology, mathematical linguistics, psycholinguistics and so forth ... can still be carried out at leisure after most of the languages of the world have died out: and some of them, notably linguistic theory and language typology, can be carried out the more fruitfully the more languages have been described” (p.7). Dorian (1994b: 802) and Pawley (1991: 15) express similar views.

In the following, we shall look at tasks of linguists, mainly in relation to communities (12.3.2) and the general public (12.3.3), and also, to a lesser degree, the linguistic profession itself (12.3.4). Regarding language revitalization, the role that linguists can and/or should play was also considered in Chapter 11.

12.3.2. Role of linguists (1): in relation to the community

It is essential to return research results to the community. In Japan, those researchers who work on the Ainu language have set a truly fine example; see

Okuda (1998). Regarding benefits for communities, see also Craig (1992), England (1992), Grinevald (1998), Hinton (1994: 249–254), Hudson and McConvell (1984: 76–86), Okuda (1998), Sawai (1998), and Yamamoto (1998).

There are a number of ways to return research results to the community. They include the following (Tsunoda 1996a: 153–156, 1997: 14, 2000a: 109–110, 2001a: 263–264, 2001b: 6–7, 2001f: 38–39).

(a) To send (copies of) field tapes (audiotapes and videotapes), field notes, vocabulary cards, etc. as well as the results of analysis to relevant organizations or institutions. In the writer's case, he lodges his materials on Kimberley languages with Kimberley Language Resource Centre (an Aboriginal organization in Halls Creek, Western Australia) and to the Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra.

Ideally, data should be available not only to community members, but also to other researchers. This is feasible in the case of established scholars, but in practice it is not feasible in the case of students who are writing up a thesis based on the data.

(b) To provide a grammar, a dictionary and texts, and to develop an orthography (Dorian 1999b: 37).

(c) To assist with activities such as the following: (i) teaching of the language (Gerds 1998: 14), (ii) preparation of teaching materials and other language materials (Dorian 1999b: 37; Gerds 1998: 14), (iii) publication of language materials, (iv) broadcasting radio and TV programs in the language, and (v) dissemination of information on the language and culture, and so on.

(d) To train community members in research skills, such as linguistics (Gerds 1998: 14; Krauss 2001: 33; McKay 1996: 232).

(e) To give lectures to non-indigenous people of the community on the local language and culture. This may help them to appreciate the indigenous language and culture of the community. An example of the writer's effort was mentioned in 10.2.4.3.

(f) To inform of the community members (if they have not lost their ancestral language yet) of the grief that has been felt by those people who have lost their traditional language and to advise them that one day they may regret its loss (Dorian 1993b: 576–577; Krauss 2001: 27–28). This was already mentioned in 10.2.2.11, 10.3.3, and 12.2.3.

(g) Regarding language revitalization: to advise the community members of various alternative methods, their merits and demerits, and their possible outcomes (cf. Chapter 11). Needless to say, the final decision as to which method to adopt lies with the community members, but it is important for linguists to know their wishes and to make efforts to meet their wishes.

(h) To “create a more favorable climate for the ancestral language by showing their [i.e. ‘linguists’] own interest in it and expressing their appreciation for the subtleties of its grammar and vocabulary” (Dorian 1999b: 34). An example of the writer’s effort was mentioned in 11.5.14-[2].

No doubt there are many other ways to return research results to the community. The important thing is not to become “an academic thief”.

Ideally, fieldworkers should write research results both in a language that is accessible to the community members (cf. England 1992: 33) and in English (in order to make them accessible worldwide). It seems to be generally the case that the researcher decides what language to use for writing up the research results, and that often the language chosen is his/her native language. (Thus, a large number of Japanese researchers conduct fieldwork overseas, and many of them write up the research results in Japanese. A notable exception is observed in Central and South Americas, where outsider linguists write up many, if not all, of their research results in Spanish.) If the language chosen is a foreign language, such materials are of no use to the community in question, although this may help to enhance the researchers’ academic advancement. However, this is becoming no longer acceptable. Thus, in the 1990s, a French linguist worked on a language in Kimberley, Western Australia, wrote an M.A. thesis, and sent a copy of the thesis to Kimberley Language Resource Centre. Unfortunately, the thesis was written in French, and this was not beneficial to the community. If it is not feasible to write research results both in a language accessible to the community members and in English, they should be accompanied by a summary in each of the two languages. (This should be included as a requisite for a grant application.) In addition, ideally fieldworkers should write research results in two different forms: one is non-technical, for the use of community members (see McKay 1996: 232), and the other is technical, for the use of other linguists.

Furthermore, where the circumstance permits, it is important to collaborate with local researchers (Yamamoto 2001). This collaboration is not just recommended but is required, for example, in South America (see Grinevald 1998: 152–153), and in *Guidelines for Ethical Research in Indigenous Studies*, set up by The Australian Institute of Aboriginal and Torres Strait Islander Studies, Canberra, Australia (see 12.2.4 above).

Bradley (1998: 52) and Gerdts (1998: 14) suggest that there is another role that linguists should or can play: to act as advocates to governments on behalf of communities.

Needless to say, all these activities are invaluable for the community concerned, and they will be indispensable for language revitalization, for example.

It is also relevant to recall (11.4.2-[9]-(h-v)) that publication of books, e.g. grammars, story books, and dictionaries, may help to elevate the self-esteem of the community members concerned, but that publication of papers in journals or the like is unlikely to bring about such an effect – although journal articles are in general more useful for the purpose of enhancing linguists' academic career than are books such as story books and dictionaries.

As has been repeatedly noted in this chapter, it is often the case that researchers' interests are in conflict with those of the community members. Patricia Shaw (p.c.) points out that there are cases where research benefits both parties. One such example is study of syntactic ergativity (8.2.5.1). Dixon's (1972, 1994) study of this phenomenon in Dyirbal has made an invaluable contribution to linguistics. Also, the knowledge that this phenomenon existed in their ancestral language enhanced a sense of self-esteem and pride among Warrungu people (11.5.14-[2]).

12.3.3. Role of linguists (2): in relation to the general public

It is important to elevate public awareness (Krauss 1993: 46, 2001: 27–28) by informing them of the language endangerment situation and related issues, such as the value of linguistic and cultural heritage. This can be done in a number of ways, including the following (Tsunoda 2000a: 110, 2001a: 264, 2001b: 7): (i) symposia, public lectures, (ii) newspaper articles, magazine articles, books, (iii) internet (an interesting attempt is “Welcome to the Linguistic Olympics!”; see <http://darkwing.uoregon.edu/~tpayne/lingolymp/index.htm>), and (iv) teaching indigenous languages and cultures in mainstream schools.

12.3.4. Role of linguists (3): in relation to the whole linguistic profession

Dixon (1997: 136–137), Grinevald (1998: 154), Krauss (1992: 8, 1993: 45–46), and Lehmann (1999: 7) vehemently argue that documentation of endangered languages is the responsibility of the whole linguistic profession. Unfortunately, however, as noted in 10.3.2-[1], there is, among the vast majority of linguists, a painful absence of concern for language endangerment. There are at least two things that need to be done.

One is to waken an interest among other linguists in this linguistic crisis of humankind. “If this ... does not happen inside linguistics, we cannot expect the general public, including funding agencies, to appreciate the importance of the issue” (Lehmann 1999: 7). This needs to be stated explicitly, although it is sad- dening for there to be a need for such a statement. It seems that the majority of

linguists are happy as long as “their” language, e.g. English and Japanese, survives and that they have no concern for disappearing languages. This is despite the fact that linguistic diversity is essential for the survival of linguistics itself (see 10.2.4.6-[2]).

The other is to develop an incentive system for younger linguists interested in documentation of endangered languages, e.g. in terms of hiring decisions, promotion and tenure decisions (Everett 2001: 183; Grinevald 1998: 154).

12.4. Summary of Chapter 12

Until recently (and still now) linguists have tended to carry out research for their own interests or benefits only. Very often, they have not to paid much (or any) attention to their role they are expected to play, and they have not been concerned with ethical issues involved in research. However, the situation has begun to change. In countries such as Australia, communities have begun to control research conducted there, and to demand that, among others, (i) they benefit from the research results, and (ii) their intellectual property rights be respected. Also, academic institutions and associations have begun to present ethical codes for research – in order to avoid “exploitation by academic thieves”. Researchers can no longer afford to ignore the community’s wishes. They are required to fulfil the requirements set up by the relevant community, academic institution or the like.

The most urgent tasks of linguists in the current linguistic crisis are (i) to document endangered languages, and (ii) to benefit the communities by means of research results, e.g. for language revitalization. Unfortunately, however, most linguists do not seem to be concerned with the crisis of language endangerment, and these tasks are in need of urgent attention.

13. Method of documentation and training of fieldworkers

13.1. Introductory notes

Once a language is lost, there will be no opportunity left to record it. Therefore, it is vital to make an adequate documentation of the language while there is an opportunity. This chapter first explores methods for documentation of endangered languages (13.2). The number of endangered languages is enormous, and it is important to increase the number of linguists who can make an adequate documentation of them. Methods for training of fieldworkers are considered in 13.3.

13.2. Method of documentation

13.2.1. Introduction

In the following discussion, we need to distinguish between (i) linguistic fieldwork in general, and (ii) fieldwork on endangered languages specifically. There is no spectacular method of documenting endangered as against healthy ones. Most of what is stated below applies to both types of fieldwork. Nonetheless, endangered languages differ from healthy ones in a number of respects. Thus, their speakers are few, and also advanced in their age, and so on. These differences necessitate special care when working on endangered languages.

13.2.2. Quality of documentation

Documentation of endangered languages (or any language, for that matter) should aim at the following level of quality (Craig 1997: 265; Lehmann 1999: 5–6):

- (a) accuracy: the documentation must be as reliable as possible, and;
- (b) comprehensiveness: the documentation must be as complete as possible.

That is, it “should provide a true presentation of the language” (Mithun 2001: 52). In view of these aims, particularly (b), it is vital to take a holistic approach, rather than a narrow approach. A holistic approach aims to document a language as a whole, including its socio-cultural background (Tsunoda 1998b,

2000a, 2001a, 2001b, 2001f). Note that this approach includes the socio-cultural background of the language (e.g. Dimmendaal 2001: 56, 69). There are at least two reasons to stress the importance of a holistic approach.

[1] Reason 1. A language is, like a human body, a complex but integrated system. Therefore, “each part relates to the whole and can only be properly understood in the context of the whole” (Dixon 1997: 133), and “it is very difficult to isolate one component of a language completely from another, since the pieces interact in intricate ways” (Rice 2001: 248). In the words of Rachel Cummins, a Warrungu person of Australia, “language comprises a whole”. Adequate understanding of a language requires investigation of its entirety, as an integrated system. Thus, Dixon (1994: 229) emphasizes the importance of a holistic approach in linguistics, which pays careful attention to every aspect or level of language, such as phonology, morphology, syntax, semantics, and so on. He goes on to say, “Someone who specialises in just one or two of these levels will never achieve revealing linguistic description or explanation”.

One example to show the importance of a holistic approach is the following (Tsunoda 1998b: 23). Many linguists are preoccupied with syntax, failing to pay attention to other aspects of the language. The same applies to studies of English pronominalization, such as Langacker (1969) and Ross (1969). There is, however, an important aspect to this phenomenon that is neglected in the above-cited studies. Thus, in the early 1970s, Takeshi Shibata, a visiting linguist from Japan, gave a lecture at the Japanese Department of Monash University, Melbourne. The lecture was preceded by an introduction presented by a lecturer, who is also a Japanese, and the introduction proceeded as follows: “*Professor Takeshi Shibata He ..., He ..., ...*”. That is, the name “Professor Takeshi Shibata” was mentioned only once, at the beginning of the introduction, and the subsequent references all employed the pronoun *he*. This is perfectly correct and grammatical, and conforms to the analysis proposed by Langacker and by Ross. However, after the lecture, an Australian friend of the writer’s remarked to the following effect: That introduction was really rude; the pronoun *he* should not be repeated many times, and after two or three repetitions, the name *Professor Shibata* should be mentioned, in place of the pronoun. This anecdote provides compelling evidence to state that the above-cited syntactic studies of English pronominalization are not incorrect, but that they are incomplete, paying no attention to actual language use.

Specifically regarding fieldwork, Rice (2001: 230) gives the following advice: “Avoid isolating areas of language so that you lose track of the fact language is a complex, dynamic system”. Similar views and advice are provided by many linguists, e.g. Everett (2001: 170), and Hyman (2001: 30). This stance is described by Hyman (2001: 30) as “a dedication to the whole language”.

Reason 1 has to do with linguistics and fieldwork in general, while Reason 2 is specifically concerned with fieldwork on endangered languages.

[2] Reason 2. Aims of documenting endangered languages include the following (12.2.2):

(a) to secure data for linguistics, i.e. for themselves and/or other researchers;

(b) to document endangered languages as a cultural heritage of humankind, for their benefit, and;

(c) to document endangered languages as a cultural heritage of the communities, for their benefit – so that the research result can be used, for instance, for language revitalization.

In the case of endangered languages, where there will be likely to be no speakers left for the future generations to consult with, it is essential to document an endangered language (or dialect) in such a way that “an interested person will be able to know what the once-existent language or the dialect was like” (Tamura 2000b: 49; translation by the writer). This is for the benefits of both the science of linguistics and the communities.

Regarding the benefits for the science, Mithun (2001: 53) advises as follows: “It is not appropriate to limit the record to data pertinent to issues of current theoretical interest”. (See also Evans 2001: 259.) This is because we “cannot tell what will be of theoretical interest later in the field of linguistics” (Grinevald 2001: 291), and therefore, ideally the data obtained “should provide the basis for answers to questions we do not yet know enough to ask” (Mithun 2001: 34).

Concerning the benefits to communities, revitalization of a given language would be virtually impossible if the information on it is limited to, say, its phonology or syntax. This shows the importance of documenting a language in its entirety. Furthermore, perhaps all the language revitalization activities concern not only the language but also the culture (11.3.1). This underlines the importance of documenting the language’s socio-cultural background.

13.2.3. Holistic approach

A holistic approach requires the linguist to look at the language in terms of various aspects, such as the following: (i) phonology, (ii) morphology, (iii) syntax, (iv) discourse, (v) semantics, (vi) vocabulary (including personal names and place names; recall that place names are important for language revitalization (11.5.13)), (vii) genres, e.g. monologue, dialogue, oral literature, (viii) styles (part 1), e.g. avoidance style, respect style, secret style, song style, rit-

ual style, (ix) styles (part 2), e.g. child language, motherese (i.e. caretaker's speech), old people's style, men's style, women's style, (x) sociolinguistics, including speech situation, (xi) dialectology, and (xii) historical linguistics.

In addition, concerning the socio-cultural background and related issues, the linguist needs to examine aspects such as the following: (xiii) non-verbal aspects, e.g. sign language, gestures, (xiv) kinship system and kin terms, (xv) naming, (xvi) mythology, (xvii) folklore, (xviii) songs, (xix) dances, (xx) social history, and (xxi) flora and fauna, including traditional medicine. An example of (xiii) is the following: Jaru people of Kimberley, Western Australia "protrude lips to indicate direction" (Tsunoda 1981: 15).

As Grinevald (2001: 288) points out, ideally documentation of an endangered language should be carried out by a multidisciplinary team of fieldworkers, such as linguists, anthropologists, ethno-botanists, musicologists, historians, and so on.

In sum, a well-balanced documentation is important. That is, as Marianne Mithun (cited by Yamamoto 1998: 226) says, "Fieldworkers cannot afford to be narrow". The importance of a holistic approach is central in the documentation program proposed by Himmelmann (n.d., 1998), that by Lehmann (1996, 1999, 2001, 2002), and that by Moore (2001). Himmelmann's and Lehmann's programs will be discussed in 13.2.4.

Dixon's (1972) study of Dyrbal of Queensland, Australia is a fine example of a holistic approach; it looks at many (though not all) of the above-listed aspects of the language – except that he published a book on songs separately (Dixon and Koch 1996). The writer would strongly recommend that every fieldworker read Dixon (1972), irrespective of the language he/she works on.

Unfortunately, however, still now it is not uncommon to come across a fieldworker who focuses on just one aspect of the language, e.g. phonology only, syntax only, or vocabulary only (cf. Dixon 1997: 133). A holistic approach is painfully absent among many linguists in countries such as Japan. Thus, in Australia, and probably in many other countries, fieldworkers are expected to write a grammar (cf. Grinevald 2001 and Kaufman 2001), whereas in Japan there is no such expectation whatsoever.

Indeed, a narrow approach may be convenient as a research method, and consequently useful for the purpose of enhancing the researcher's academic success (cf. 12.2.2-(b)). But it is not advisable in documentation of endangered languages. Results obtained by means of a narrow approach will not be useful for a person who wants "to know what the once-existent language or dialect was like". Nor are they useful for revitalization of languages and cultures.

Voegelin and Voegelin (1977: 338) point out the absence of adequate treatment of syntax in grammars of North American languages. Similarly, Dixon

(1979: 129) notes that it is often the case that languages “have not been properly described at the syntactic level (it is sometimes hard to know whether this indicates something about the language or something about the linguist!)”. More than two decades have passed since the above-cited papers were published, but the situation has not improved in countries such as Japan, where many fieldworkers are concerned with phonology and morphology, but not many pay careful attention to syntax. Needless to say, syntactic descriptions, too, are essential. This is not only for other linguists, but also for communities. Thus, if little or no attention had been paid to syntax in the writer’s study of Warrungu, today’s Warrungu people would have no way of knowing that their ancestral language had a unique phenomenon called syntactic ergativity (11.5.14-[2]).

The community, too, is beginning to criticize a narrow approach. Thus, as mentioned in 12.2.3, in Guatemala the community criticized certain linguists for “Doing partial and simplistic studies of Mayan languages for reasons of economy, ease, preference or incompetence” (England 1992: 30).

Admittedly, it is no easy task to make a holistic documentation of a language, but linguists should always bear in mind the importance of a holistic approach and they should not confine their attention to just one aspect of the language or dialect.

13.2.4. Lehmann’s and Himmelmann’s programs

Lehmann (1996, 1999, 2001, 2002) and Himmelmann (n.d., 1998) each proposed a program for documenting endangered languages. Both programs are truly comprehensive, and include the holistic approach proposed in 13.2.3. Lehmann’s program is sketched in the following, but what is stated about his program in the main applies to Himmelmann’s program as well. Lehmann (1999: 12) proposes a three-level approach, as shown below.

Structure of a language description

1. Documentation
 - 1.1. Monological texts
 - 1.2. Polylogical texts, e.g. conversation
2. Description
 - 2.1. Situation of the language
 - 2.1.0. Name of the language
 - 2.1.1. Ethnographic situation
 - 2.1.2. Social situation
 - 2.1.3. Genetic situation
 - 2.1.4. Historical situation

- 2.2. System of the language
 - 2.2.1. Semantic system
 - 2.2.1.1. Lexicon
 - 2.2.1.2. Grammar
 - 2.2.2. Expression systems
 - 2.2.2.1. Primary: phonology
 - 2.2.2.2. Secondary: writing
- 3. Comments on the description
 - 3.1. History of research
 - 3.2. Place of present description

Most components of Lehmann's program will be self-evident, but the following comments may be useful.

(a) Lehmann (1999: 11) distinguishes between documentation and description, as characterized below.

Documentation of a language is an activity (and, derivatively, its result) that gathers, processes and exhibits a sample of data of the language that is representative of its linguistic structure and gives a fair impression of how and for what purposes the language is used. Its purpose is to represent the language for those who do not have access to the language itself. Description of a language is an activity (and, derivatively, its result) that formulates, in the most general way possible, the patterns underlying the linguistic data. Its purpose is to make the user of the description understand the way the language works.

(b) "Comments on the description" concern the nature of the data, e.g. how the data was obtained, how reliable it is, and so on. The speaker's proficiency needs to be carefully evaluated (Dorian 1977: 29–30, 1986a: 564, 1999a: 115–119, 2001a), taking into account his/her biography (Dimmendaal 2001: 61; El-mendorf 1981: 45; Swadesh 1948: 234). Obviously, these points are essential when working on endangered languages. The data obtained may not reflect the stage where the language was healthy (Campbell 1994: 1966; Dorian 1973: 437; 1977: 23–24). Furthermore, it is useful to present information on the conditions of the work, the obstacles encountered, the reasons for choosing the site, sources and method (Dorian 1986a: 573).

(c) Lehmann's program includes an ethnographic and sociolinguistic account of language use. This incorporates Fishman's (1965) dictum, *Who speaks what language to whom and when?*, and Hymes' (1967, 1968: 110, 113) framework for "the ethnography of speaking" (both were cited in 7.2.1), but it is much more comprehensive and detailed than either of them. (Bohnemeyer, Lehmann, and Verhoeven 1994 provide an even more comprehensive guideline for an ethnographic and sociolinguistic account of languages.) An example to show the importance of this approach is the following.

Regarding speech act participants, Lehmann proposes the following classification for investigation: supernatural vs. human being vs. animal vs. none. Such a classification may appear too detailed and unnecessary. But Hinton (1994: 45–47) describes how animals talk in stories of Californian languages, and this in turn indicates that fieldworkers need to bear this classification in mind.

In 13.2.3, we recommended a holistic approach, and in 13.1.4 we have been looking at Lehmann's program. These are ideally what should be aimed at in documentation of endangered languages (and healthy ones, as well). However, in practice, this goal is extremely difficult to achieve. There are at least three reasons for this: (i) limitation on time, (ii) limitation on the linguist's competence (this must be admitted in certain cases), and (iii) the endangerment situation. As examples of (iii), the writer was able to record 8 words from the late Alec White, the last speaker of Gabilgaba of Queensland (mentioned in 10.4.3), and about 50 words from the late Reggie Palm Island, the last speaker of Buluguyban of Queensland (5.2-[7], 8.4.4.3, 9.4.1.1-[1]-(b-iv)). It was simply impossible to obtain the kind of exhaustive data recommended in Lehman's program.

Nonetheless, despite the existence of these practical difficulties, linguists need to keep in mind the importance of a holistic and comprehensive approach.

13.2.5. Fieldwork manuals, questionnaires, and memoirs

There are a large number of manuals for fieldwork, e.g. Bouquiaux and Thomas (1992), Samarin (1967), and Vaux and Cooper (1999). Also, questionnaires for fieldwork are available, although they are not numerous. Bouquiaux and Thomas (1992) include a very detailed questionnaire, on phonology, morphology, syntax, vocabulary, and socio-cultural background.

The profile of languages varies from region to region, and this is particularly true of the vocabulary. Thus, the word for "kangaroo" is indispensable for Australian Aboriginal languages, but it will be irrelevant for languages of, say, North America. It will be useful to have questionnaires which will suit the profile of the languages in question. But the availability of questionnaires seems to vary from region to region. Thus, a number of questionnaires have been published for Australian Aboriginal languages, e.g. Australian Institute of Aboriginal Studies (n.d.), Capell (1845), and Sutton and Walsh (1979). In addition, there are unpublished questionnaires by Barry Blake, by R.M.W. Dixon, and by K.L. Hale. In contrast with Australia, it is difficult to find questionnaires, say, for languages of Southeast Asia and South Asia, apart from Abbi (2001).

A list of fieldwork manuals and questionnaires is available at: <http://lucy.sgu.ac.jp:8080/kiki/FMPro>.

There are also accounts of fieldwork, e.g. Dixon (1989), Dorian (1986a), Grinevald (2001), Nagy (2000), Watson (1989), David Wilkins (1992), and the papers in Newman and Ratliff (2001b). Mc Laughlin and Sall's (2001) account is particularly interesting and enlightening; it includes the perspective of the "informant" (i.e. Thierno Seydou Sall).

Regarding questionnaires, Grinevald states: They are of limited use, although they may be useful for guidelines for direct elicitation. There is something intrinsically inappropriate in approaching a new language, undescribed yet, through the grid of a questionnaire (Grinevald 2001: 298). However, the writer's experience in working on Australian Aboriginal languages is different from Grinevald's. The questionnaires cited above have been invaluable (at the initial stage of investigation, at least) and without them the fieldwork would have been much more difficult. (However, each language has its own characteristics, and questionnaires may not be of much use at an advanced stage of investigation.) One of the reasons for this difference may be that Australian Aboriginal languages are on the whole fairly homogenous (see Dixon 1980), and that consequently the available questionnaires may be used for many (if not all) of the languages (no doubt, with minor alterations to the questionnaires, where necessary). In contrast, genetic variety and linguistic diversity of a very high degree are observed in the languages of the areas where Grinevald has been working, i.e. South and Central America (Adelaar 1991: 45–46; Garza and Lastra 1991: 93; Grinevald 1998: 127). No doubt this diversity makes it difficult or impossible to devise a questionnaire which will be applicable to a large number of languages.

13.2.6. Data collection procedure

Different linguists employ different procedures for data collection, and also the procedure may vary from situation to situation. The procedures that the writer has employed may be classified into the following two groups.

[1] The writer was able to collect about 50 words in Buluguyban, and 8 words in Gabilgaba, of Queensland. For such languages, he went through the most basic items in a vocabulary questionnaire.

[2] For Warrungu of Queensland and Jaru of Western Australia, on which a much larger amount of information was obtained, the procedure adopted is roughly as follows. First, starting with basic vocabulary, nouns were elicited, followed by verbs. Verbs were obtained in translations of English sentences, and not in isolation. The English sentences were designed to elicit information on

tense, aspect, mood or the like, as well as verb roots themselves. E.g. *the man caught a kangaroo yesterday*, and *the man will catch a kangaroo tomorrow*. In addition, sentences to elicit cases of nouns and pronouns were employed. At that stage, an outline of the language, i.e. basic phonology, vocabulary and morphology, had been obtained. Then, texts were recorded and transcribed. They yielded the kind of lexical and morphological information which had not been obtained through elicitation. (As every fieldworker knows, texts collection is not only “time-consuming” (Grinevald 1998: 158), but also excruciating! Thus, it takes the writer about 10 hours to transcribe 30 minutes of texts. Transcription of conversations is a nightmare.) Furthermore, they yielded the kind of syntactic information (i) which had been difficult to obtain through elicitation (e.g. subordination, such as *I saw him walking*), and (ii) which had not even been envisaged, e.g. syntactic ergativity (cf. 8.2.5.1). In addition, sentences and remarks uttered spontaneously were written down (or, tape-recorded). It will be seen that both elicitation and text collection play an important part (cf. Chelliah 2001). Information on the socio-cultural background, too, was collected.

It would be useful to learn to speak the language and conduct fieldwork in it (Craig 1997: 27), as K.L. Hale did (Hale 2001). (The writer has never been able to adopt this method.) However, the “monolingual method” has disadvantages as well; see Everett (2001: 182–184).

13.2.7. Fieldwork on endangered languages

As noted in 13.2.1, there is no spectacular method for documenting endangered – as opposed to – healthy languages. Thus, the fieldworker needs to be familiar with previous works on the language, as well those on related languages, if there are any (Dimmendaal 2001: 56; Evans 2001: 261; Rice 2001: 230). He/she needs to bear in mind that he/she becomes part of the social network of the community (Dimmendaal 2001: 55) and is integrated into it, which “requires the building of bonds of trust, respect, and friendship” (Everett 2001: 170). He/she needs, where required, to respect the speakers’ confidentiality, anonymity, and privacy (Dimmendaal 2001: 68; Dorian 1986a: 573; Newman and Ratliff 2001a: 4). (The role and ethics of researchers were discussed in Chapter 12.)

Nonetheless, endangered languages differ from healthy ones in a number of respects. For example, the numbers of speakers have been severely reduced, and vital linguistic communities are no longer maintained. Often the speakers are scattered in various places, and have no opportunity to gather to speak the language. They are advanced in their age, and their memory may be failing.

There will be no speaker left in the future. It is no longer possible to record various genres, styles of speech, and speech situations. (See Grinevald 2001: 292–294, 297). These differences necessitate special care when working on endangered languages. Many of the accounts of fieldwork cited in 13.2.5 concern fieldwork on endangered languages, and they contain useful, practical advice for such a fieldwork situation.

The special circumstances surrounding endangered languages and the special care that must be taken accordingly, include the following.

[1] Variation among speakers

As seen in Chapter 9, when working on endangered languages, the fieldworker is likely to encounter various types of speakers, and, recognition of the diversity of speakers is crucial (cf. Rigsby 1987: 371). We shall look at two issues: (i) degree of proficiency, and (ii) partial knowledge.

(a) Degree of proficiency. Different speakers have different degrees of proficiency in the language, and (if there is a sufficient number of speakers) they may exhibit a proficiency continuum (cf. Figure 8-1). Also, recall (8.2.4.1-[2]) that the allomorphy of the ergative case in Gugu-Badhun is very similar to Stage 2 in the simplification process of the ergative allomorphy in Dyirbal, and that Peter Sutton attributes this to language obsolescence. These facts indicate that the fieldworker needs to be aware of the nature and the limitation of the data obtained. Dorian (1973: 437) notes: “the last speakers of a dying language can be a very misleading source of information about ... the language”.

(b) Partial knowledge may be distributed across speakers. This points to the imperative need to assemble data from a variety of speakers, in order to reconstruct the full system (Grinevald 2001: 293, 297). Thus, according to the belief of Aboriginal Australians around Halls Creek, Western Australia, there live five sisters in the moon. Mona Green (a Jaru speaker) remembered four names: *dulayibangali*, *jandarabangali*, *giwandabangali*, and *wijrrabangali*. Maggie Scott (a Wanyjirra speaker) remembered three names: *wijrrabangali*, *dulayibangali*, and *gan.gurrabangali*. Fortunately, the three names Maggie Scott remembered did not coincide with the four names that Mona Green remembered. Jointly they produced all of the five names: *dulayibangali*, *jandarabangali*, *giwandabangali*, *wijrrabangali*, and *gan.gurrabangali*. Also, a given language may have men’s speech and women’s speech (see Hinton 1994: 139–143; Taylor 1982, 1989), and it is important to record both male and female speakers.

[2] Coverage of data

Grinevald (2001: 291) advises as follows: You may be the only one, and the last one to work on the language, which makes it vital to collect all the data you can collect, even data in which you may not be personally interested be-

cause of your own theoretical leaning and interests (cf. 13.2.2-[2]). Recall that one of the two criteria for assessing the quality of data is comprehensiveness (13.2.2).

In linguistic fieldwork, and particularly when working on endangered languages, linguists tend to be preoccupied with adult speakers, and especially elderly speakers. However, attention must be paid to language acquisition (Grinevald 2001: 294), and also “motherese”, i.e. caretaker’s speech, if any opportunity arises. One example of child language and one of motherese follow.

An example of child language. In 1995, the writer was visiting Mt. Mayu community of Northern Territory (by far the most remote community he has ever visited), and was interviewing Kathleen Duncan, a Wanyjirra speaker. A little baby was nearby; he is Chris Duncan, about 1 or 2 years old at that time, and Kathleen’s son’s son. He was trying to say something, and the writer turned the microphone to him. Chris was saying something like [ajo] or [aojo]. It turned out that he was trying to say /ngawuju/ ([ŋaɔjo] ‘father’s mother’) to Kathleen, i.e. his father’s mother. (As predicted by Jakobson 1968:53, the phoneme /ng/ ([ŋ]) was not acquired at the time /j/ ([j]) had already been acquired.) That was a rare opportunity, being the only occasion that the writer has ever heard or recorded a baby speaking an Australian Aboriginal language. This is remarkable in view of the fact that in 1995 Wanyjirra was already facing extinction, with probably less than 10 speakers left.

An example of motherese. In the mid-1970s, in Halls Creek, Western Australia, the writer heard Tanba Banks (Jarú names: Danbangali, Jidngarri), a Jarú speaker (a woman), saying [abolo] and [alai] to a baby (her sister’s daughter and about 1 year old). These words correspond to the following counterparts in the adult speech: /ngabulu/([ŋabolo] ‘milk’) and /ngalayi/([ŋalai]‘(woman’s) child’). Here again, /ng/was dropped. This suggests that Tanba Banks is aware that babies have not acquired /ng/by the time they have acquired /b/and /l/. Again, that was the only occasion the writer has ever heard motherese of any Australian Aboriginal language.

These anecdotes show how important it is to pay attention to everything that is happening around the fieldworker. He/she may even have an opportunity to record child language when the language is already on the verge of extinction.

[3] Languages to record

My suggestion is: Record any language you come into contact with and record as much as you can – even if you don’t have time to analyze the data. An example is the following. In the mid-1970s, while working on Jarú, the writer obtained some basic materials on surrounding languages, such as Malngin. He never managed to analyze the Malngin data, but twenty years later, in the mid-

1990s, Megumi Ise, a postgraduate student from the University of Hokkaido, Japan, used his Malngin data, checked it with the last two Malngin speakers, and wrote a description of the language (Ise 1999).

[4] Natural language use

Natural data, i.e. natural speech or natural discourse, is important (see Dimmendaal 2001: 71, and Mc Laughlin and Sall 2001: 202). It basically means data that is not the product of translation (Grinevald 2001: 293). However, endangered languages are no longer used as the medium of communication, and it is no longer possible to record them in their natural settings (Grinevald 2001: 292), which makes it necessary to recreate settings for natural language use. Specifically, natural data may be produced spontaneously, or it may be produced on the basis of certain kinds of verbal, visual or manipulated stimuli (Grinevald 2001: 293).

The best way is to bring speakers together in order to provide opportunities for social gatherings and language interaction. Ideally, the data should be videotaped (Grinevald 2001: 294). An example is the following. A six-day camping trip which in 1999 the writer participated in and which involved three Wanyjirra speakers produced an ideal setting for linguistic interaction, and yielded a large amount of natural data. Needless to say, the speakers thoroughly enjoyed the trip, which took them back to the country where they grew up and to a number of important Dreaming sites.

Bringing speakers together is easier said than done (Grinevald 2001: 294). If this is not feasible, then one alternative to obtain natural data is to request the speaker to talk about still pictures, videos, or manipulated objects (Grinevald 2001: 295–296). Narrative texts (e.g. traditional tales, personal narratives), too, should be collected in a natural setting, i.e. in the presence of another person, to control for the artificiality of taking to a machine (Grinevald 2001: 294).

It is convenient to mention [5] here, although this is not confined to fieldwork on endangered languages.

[5] Audio- and video-recording

It is important to make audio-recording and also video-recording of texts, conversations, gestures (including sign language), songs, dances, and so on (Krauss 1992: 8).

In this connection, the following needs to be mentioned. In the 1970s, when the writer was a student, in efforts to economize on tapes, he sometimes only wrote down words and sentences, without tape-recording them. In retrospect, that was a serious mistake. He should have recorded everything. In elicitation, it may take the speaker a while to recall the word requested for, and it may be considered waste to keep the tape recorder running during that time. However,

this may not be waste. As seen in 8.2.7.2 and 8.4.4.6, in language obsolescence, some words are more prone to loss, while others are more resistant to it. If it takes the speaker a shorter time to recall some words, and a longer time to recall others, this difference may indicate which parts of the vocabulary are more affected than others, and it will provide important data. Therefore, it is not really waste to keep the tape recorder running.

[6] Latent speakers, recallers, and second language speakers

Even when all the speakers of the language appear to have passed away, there may be people who know the language. Thus, there may be people who conceal or deny their knowledge of the language, for fear of, e.g., discrimination or prosecution; they are latent speakers (9.2.1). There may be people who regain their linguistic competence after some work with the linguist; they are recallers or recollectors (9.4.1.2). There may also be “another-group language speakers” (5.2-[8]), who speak the language of a group other than their own group. They are not “owners” of the language, although they speak it (10.2.2.2). They may “hold back from showing their actual language competence ... because they do not have primary rights as a ‘language owner’” (Evans 2001: 273). Evans (2001: 273) concludes: “Such cases illustrate that it is rash to make pronouncements on who is a ‘last speaker,’ and ... patience, and repeated visits to a community over time, can often reveal a higher level of knowledge in some individuals than one originally suspects”. It is important not to make any hasty judgement on speakers’ proficiency. Recall (cf. 9.6) that Maggie Scott, a Wanyjirra speaker of Australia, turned out to have retained a knowledge of a complex and irregular phenomenon called dual replacement, although this was totally unexpected judging by her knowledge of the lexicon.

We emphasized in [1] the importance of collecting data from more than one speaker. However, this is not always possible. (Thus, in the writer’s fieldwork, only one speaker was available for each of the following languages: Warrungu, Gabilgaba, and Buluguyban of Queensland, and Gardangarurru of Northern Territory.) Then, what can be done if there is only one speaker available? The following is a list of what can be done, and what the writer did when working with Alf Palmer on Warrungu.

[7] To check the data again

Dixon (1983: 504) comments on his vocabulary of Nyawaygi, formerly spoken immediately east of Warrungu: “Every word has been checked at least twice, at an interval of a year or more”. Similarly, the writer played tapes of Warrungu texts, recorded from Alf Palmer, to him twice, with perhaps a couple of weeks’ interval. There is, however, a pitfall in repeating questions. The speaker might respond by saying “You asked me that before”, indicating that he/she is bored or frustrated with repetitions (cf. Yamamoto 1998:214) or that he/she has a cer-

tain degree of doubt on the linguist's competence! Therefore, repeated questions need to be carefully phrased.

There may be an occasion to check the data with another speaker when all the hopes of doing this seem to have already gone, as shown by the following anecdote. From 1971 to 1974, the writer worked with the late Alf Palmer, a Warrungu speaker. He was aware of the existence of another Warrungu speaker, the late Alec Collins, but he did not know his whereabouts. Then, finally, in August 1974 he found Alec Collins, who was – Alas! – lying in bed at Herberton Hospital. Alec Collins was already too weak to do any linguistic work with, but the writer talked to him in the Warrungu language that he had learned from Alf Palmer. It seems certain that Alec Collins understood the writer's Warrungu perfectly. The writer asked him a fair number of questions in Warrungu, which he answered in Warrungu. One example is (13-1), in which the writer asked Alec Collins about Alf Palmer:

- (13-1) TT: *ngani-Ø* *nyungu* *gugu-Ø?*
 what-ABS 3SG.GEN language-ABS
 'What [is] his language?'
 AC: *warrungu-Ø*.
 Warrungu-ABS
 '[His language is] Warrungu.'

(Warrungu has no word for "be".) Furthermore, the writer made up and narrated a hunting story in Warrungu (the kind of stories Alf Palmer had narrated to him in many texts), which involves antipassives and syntactic ergativity (cf. 8.2.5.1). Alec Collins apparently enjoyed it very much. There were no signs of incomprehension on his part, which again suggests that Warrungu as passed on to the writer by Alf Palmer is reliable, being perfectly interpretable by another speaker of the language.

[8] To look for irregularities in paradigms

As seen in 8.2.4.1 and 8.4.4.3, language obsolescence often causes levelling of paradigms. Therefore, if there is any irregularity in a given paradigm, and if it occurs persistently, then it is likely to constitute reliable data (cf. Dorian 1977: 30). (Imagine yourself working with the last speaker of English. If he/she consistently used the irregular forms *went* and *gone*, rather than the regular forms **goed* and **goed*, then these forms would be likely to be bona fide forms, rather than the speaker's invention.) One example from Warrungu is cited. For vowel-final stems, the ergative suffix is *-nggu*, e.g. *bama-nggu* 'man-ERG', and *gunira-nggu* 'Gunira-ERG'. (*Gunira* is the Warrungu name given to the writer by Alf Palmer.) Vowel-final kin nouns, too, take this suffix, e.g. *gaya-nggu* 'father-ERG' and *gaya-na-nggu* 'father-KIN-ERG'. (*-na* is a derivational suffix

attached to vowel-final kin roots.) Now, there is at least one kin stem that can take the irregular *-lu* for its ergative, viz. *gaya-na-lu* ‘father-KIN-ERG’. Interestingly, *-lu* cannot be used if *-na* is deleted, that is, **gaya-lu* (Tsunoda 1974: 84, 179). Thus:

<i>gaya-nggu</i>	<i>gaya-na-nggu</i>
<i>*gaya-lu</i>	<i>gaya-na-lu</i>

As can be seen, the use of *-lu* is extremely irregular. Nonetheless, its use is consistent, and it must be considered a bona fide Warrungu form. (Dixon 1980: 319 postulates that, at one stage in the diachronic development of Australian languages, the ergative suffix for vowel-stems was *-nggu* for disyllabic stems and *-lu* for trisyllabic or longer stems. This is the case with the contemporary Jaru; see Tsunoda 1981: 54. This suggests that the irregular form *gaya-na-lu* may be a remnant of that stage.) This example shows that the existence of irregular forms may provide the data with credibility.

Data on related languages or earlier data on the same language may be brought to check the reliability of the data obtained, but if everything else fails, “an assessment of the speaker’s overall competence may be the only evidence one can bring to bear” (Evans 2001: 261).

In view of space consideration, it is impossible to list all the useful tips for fieldwork. See the manuals, questionnaires, and accounts of fieldwork cited in 13.2.5. Just one anecdote is cited below.

[9] False teeth

Peter Sutton (p.c.) suspected that Gugu-Badhun, formerly spoken immediately south of Warrungu, had an opposition, in stops and nasals, between lamino-dentals and lamino-palatals, i.e. /dh/vs. /dy/, and /nh/vs. /ny/. However, the late Harry Gertz, one of the last fluent speakers of the language, no longer had teeth, and it was not possible to confirm the existence of this opposition. Sutton requested Gertz to wear a set of false teeth. Gertz then went and found his set of false teeth, which he inserted. The pronunciation with the false teeth on confirmed the existence of the opposition in question. This anecdote shows the importance of exercising ingenuity – particularly when working with the last speakers.

We now turn to the last issue.

[10] Data Processing

The data needs to be processed in such a way that future analysis will be possible (Grinevald 2001: 291–292; and see also Lehmann 2001: 89). For example, transcriptions of texts need to be accompanied by morpheme-by-morpheme glosses, literal translations, and free translations (Grinevald 2001: 292; Lehmann 2001: 91). It is also useful to include ethnographic notes and comments by the speaker(s). An example of recording comments is the following. In the

late 1990s, the writer started playing tapes of texts recorded from the late Nyunjaja Paddy (a speaker of Wanyjirra, immediately east of Jaru) in 1976, to Maggie Scott, another Wanyjirra speaker. Maggie Scott would say for a given sentence, “We can also say like this”, and provide alternative expressions. She would also say, “This is short-cut” (i.e. this sentence is incomplete), and replace it with a complete sentence. And so on. All these comments were included in the publications of the Wanyjirra texts (e.g. Tsunoda 2001c).

Recall (cf. 13.2.2) that one of the two criteria for assessing the quality of data is accuracy. The reliability of the data needs to be assessed (Dorian 1986a: 564), and care must be taken in order to provide a reliable documentation. Thus, Dixon (1983: 504) remarks on his vocabulary of Nyawaygi (cf. [7] above), which is based on the data mainly collected from the last two speakers (Long Heron and Willie Seaton):

Items given by Long Heron or in minor sources were all checked out with Willie Seaton; all forms given by Seaton were checked with him on a later occasion. About 50 items for which confirmation could not be obtained have been eliminated from the vocabulary; some may have been simply mistakes, some may be words from neighbouring languages, but some may be bona fide Nyawaygi terms that Seaton just did not know.

The care taken by Dixon to maintain a high degree of accuracy is admirable. Nonetheless, it is preferable to adopt a different method for presenting the vocabulary of a language. First, all the items obtained will be included, and no item will be eliminated. Even those items for which confirmation has not been obtained will be included. Recall that, as Dixon suggests, they may be bona fide words of the language. Speakers may furnish conflicting comments such as the following, but such comments will be all included in the vocabulary presentation.

(a) “Speaker A gave this word, but later he/she said there was no such word”. This may have been caused by an error on the side of the linguist, e.g. mishearing. But this may also be due to an error on the side of the speaker. If the latter is the case, such items may turn out to provide interesting data on performance errors, e.g. metathesis. Or, they may foreshadow a future phonological change (if the language can survive at all).

(b) “This word was given by Speaker A, but it was not recognized by Speaker B”. This may be a reflection of dialectal variations.

(c) “Speaker A gave this word as Xish, but later he/she said that it was Yish”. Such items may be indicative of incipient borrowing, and they may be useful for study of language contact.

(d) “Speaker A said this word was Xish, but Speaker B said it was Yish”. This looks confusing, but it has to be accepted. Different speakers may have

different ideas as to which word belongs to which language or which dialect. No two people speak in exactly the same way. Thus, the late Robert Moses (the writer's main teacher for Jaru; see Tsunoda 1981) and his brother, the late Barney Moses, used different words for a very basic item such as 'woman': /ngumbirr/ by Robert Moses, and /ngaringga/ by Barney Moses. (/ngumbirr/ and /ngaringga/ are mainly used in the western dialect and the eastern dialect, respectively. Barney Moses' speech seems to have been the western dialect, apart from the use of /ngaringga/ 'woman'.) As another example, the current three Wanyjirra speakers exhibit slight variations among themselves, despite the fact that they all grew up at the same place, i.e. Inverway Station of Northern Territory. In particular, Tiny McCale mixes a few suffixes and nouns which the other Wanyjirra speakers consider to be Gurindji, a language spoken immediately east of Wanyjirra. This is despite the facts that Tiny McCale was born and brought up in the Wanyjirra country (i.e. at Inverway Station), that she has never lived in the Gurindji country (except for a few short visits there), that her late father (Wanyjirra name: Gurdiwirdi, English name: Inverway Joe) is considered a most representative Wanyjirra man, and that she considers herself a Wanyjirra speaker. (Dorian 1994a, 2001a reports the existence of "unexplained" individual variations in the Gaelic spoken in small and homogenous communities in Scotland. Regarding the Rhoslannerchrugog dialect of Welsh, Jones 1998: 206 reports isolated occurrences of items that are considered to belong to another dialect. These works indicate that such individual variations may be more common than has been assumed to be the case.) Furthermore, traditionally Aboriginal Australians are bi-lingual or multi-lingual (Dixon 1980: 32, 46, 55, 69, 94–96, 478; Evans 2001: 256), and, as Dorian (1986a: 557) notes, in the case of bi- or multi-lingual speakers, "it is difficult to assess the amount of cross-language influence".

13.2.8. Research results: triad (grammar, vocabulary, texts) and raw data

Research results may be classified into two groups: results of analysis, and raw data.

[1] Triad: grammar, vocabulary, and texts

It has been considered important to publish "the triad" (Grinevald 2001: 287), i.e. a set of grammar, texts and vocabulary of a given language – the so-called Boasian tradition, apparently initiated by Franz Boas (see Boas 1917: 1; and also Krauss 2001: 33; Mithun 2001: 35). Heath's (1980, 1982, 1984) work on Nunggubuyu of Northern Territory, Australia, is a fine example; he published a grammar of 664 pages, texts of 556 pages, and a dictionary of 399 pages. (Un-

fortunately, however, this respectable tradition is painfully absent among many linguists in countries such as Japan.)

In 13.2 .6, we saw the procedures that the writer has adopted for data collection in fieldwork. Now, the procedure that he has adopted for analysis and write-up is the following. After texts were transcribed and checked, gaps in the information on morphosyntax were filled in, where possible. Vocabulary was collected from elicitation materials and texts. Then, a grammar was written.

For Jaru, only the grammar has been published (Tsunoda 1981), and the vocabulary and texts as yet remain unpublished, although the writer lodged photocopies of Jaru vocabulary cards with the Kimberley Language Resource Centre. The linguists at the Centre consulted the grammar, and, on the basis of the information obtained from it and from the vocabulary cards, the Centre published a Jaru dictionary book, and Jaru story books, cassette tapes and other language materials in or on Jaru (e.g. Kimberley Language Resource Centre 1992, 1996b). Also, in consultation with Tsunoda (1981), the Catholic Board of Education prepared Jaru materials, which are used at two Catholic schools of that locality (Tsunoda 2000a: 109).

The preceding shows that, once a grammar is available, other linguists can consult it and prepare a vocabulary and story books. In contrast, however, it is much more difficult, though not impossible, to write a grammar on the basis of texts alone, and it is impossible to write a grammar on the basis of a dictionary alone. Therefore, in the writer's view, the primary task of fieldworker linguists is to write a grammar, although this does not deny the importance of vocabulary and texts, and raw data (see [2] below). (See Tsunoda 2000a: 109; and also Grinevald 2001: 287.)

There are a number of guidelines for writing grammars, e.g. Comrie and Smith (1977), and Comrie, Croft, Lehmann, and Zaefferer (1993). The grammatical profile varies from language to language, and from region to region, which makes it extremely difficult, if not impossible, to prepare one single guideline for writing a grammar of all the languages of the world. The guideline by Blake and Dixon (n.d.) is useful for Australian Aboriginal languages.

[2] Raw data

Himmelmann (n.d., 1998), Lehmann (1996, 1999, 2001, 2002), Moore (2001), and Tamura (2000b) argue for the importance of publishing raw data, as distinct from the results of analysis. Raw data is important for a number of reasons, including the following (Tsunoda 2001a: 268, 2001b: 6).

(a) Technical papers are generally unintelligible to the community members. The same applies to grammars and dictionaries if they are technically oriented.

(b) A given piece of analysis – in particular, a paper – presents only a fraction of the language, and does not provide an entire picture of the language.

(c) A given analysis may contain errors on the part of the linguist.

(d) The linguist may omit important information from his/her published works. Recall Dixon's comments on his Nyawaygi vocabulary, and the writer's comments on them (13.2.7-[10]).

Raw data, accessible to community members and linguists, may take the form of field notes, audio-tapes, or video-tapes. Particularly in the case of raw data, care should be taken to respect the privacy and, where desired, confidentiality of speakers and information. Ideally, the results of analysis and raw data should include information on the various aspects of the language and its socio-cultural background listed in 13.2.3 and 13.2.4. Needless to say, grammars, vocabularies, texts, and audi- and video-materials are all important for language revitalization activities (cf. Schmidt 1990: 79, 104, 108, 111; and Bauman 1980: 11–12, cited by Dauenhauer and Dauenhauer 1998: 60).

In addition, multimedia resources are useful, for instance, language revitalization, as seen in 11.5.9.

13.3. Training of fieldworkers

13.3.1. Introduction

There are two aspects to the training of linguistic fieldworkers: (i) content of documentation, and (ii) social context of fieldwork. Writers such as Grinevald (2001), David Wilkins (1992), and some in Newman and Ratliff (2001b) argue – and the present writer concurs – that currently available courses on field method are not adequate, one of the main reasons being that they concentrate on (i), paying virtually no attention to (ii). A likely outcome is that students who have gone through a field work method course are not well-prepared for the reality of the field. We shall look at the issue of the content of documentation in 13.3.2, followed by that of the social context of fieldwork in 13.3.3. (The following discussion is based on and incorporates Tsunoda 1998b, 2001f.)

13.3.2. Content of documentation

In order to adequately train field linguists – in order that they will be capable of producing an accurate and comprehensive documentation – it is important to pay attention to the following three aspects: well-balancedness of the program (13.3.2.1), general linguistics (13.3.2.2), and linguistic theory (13.3.2.3).

13.3.2.1. *Well-balanced program*

Obviously, the importance of a holistic approach (13.2.3, 13.2.4) can never be overemphasized, and this clearly indicate that, in order adequately to prepare students for fieldwork, we need to have a well-balanced program of linguistics – a program which provides “adequate training in all subfields of ... linguistics” (Craig 1997: 265). People often talk about, and sometimes only talk about, field method courses when discussing the training of fieldworkers. However, there is a limit to what a one-year course can do, and no lecturer – however dedicated and ingenious he/she may be – can accommodate in a one-year course all that are mentioned or referred to in 13.2.3 and 13.2.34. Therefore, it is necessary to have a well-balanced linguistics program which covers all branches of linguistics, from phonology to historical linguistics, listed in 13.2.3, as well as phonetics. Training in phonetics, e.g. observation and pronunciation of actual speech sounds, is indispensable for fieldwork.

A number of linguists argue that preparation for field work must include training in linguistic theory. This will be dealt with separately, in 13.3.2.3.

In addition, students need to be trained in related disciplines, particularly, anthropology, and preferably sociology as well (cf. Hinton 1994: 253; Sapir 1951: 161, 166).

Ideally, students should attend a field method course only after having studied the subfields of linguistics and also relevant neighbouring subject(s). That is, a field method course should be considered “the final touch” in the training of fieldworkers, incorporating and synthesizing what the students have studied in a wide range of classes listed above.

Thus far, we have looked at what might be called “traditional linguistics”. Furthermore, as seen in Chapter 12 (12.2.3, in particular), linguists are required to assist language revitalization, which makes it important to include applied linguistics in the training for fieldwork on endangered languages, e.g. subjects such second-language learning and teaching (Grinevald 1998: 158; Hinton 1994: 253).

In Japan (and possibly in some other countries as well; cf. Dixon 1997: 133), there is a tendency among some linguists to focus on one single topic for research (cf. a narrow approach, discussed in 13.2.2), and such “highly specialized” linguists are considered “true scholars”, while on the other hand those linguists who have a wide range of interests are regarded as “not decent” (in the words of a certain linguist). Unfortunately, there are many cases where this tendency is reflected in teaching; students are either encouraged to take a narrow approach or indoctrinated into taking that approach for granted and casting no doubt on its validity.

13.3.2.2. *General linguistics and specific linguistics*

General linguistics and specific linguistics may not constitute a clear-cut dichotomy, but they may be tentatively characterized as follows: general linguistics deals – or, at least, aims to deal – with languages in general, while specific linguistics is concerned with specific language(s). Thus, an account of structural changes observed in dying Dyirbal (8.2) is an instance of specific linguistics, while an overview of structural changes in language obsolescence (8.4) is one of general linguistics. An account of ergativity of Dyirbal in Dixon (1972) is an instance of the former, while Dixon (1994) on ergativity in general is one of the latter.

It is useful for a fieldworker to have a typological perspective (another instance of general linguistics), for which the writer would recommend Foley and Van Valin (1984) and Shopen (1985).

General linguistics and specific linguistics go hand in hand. Knowledge of general linguistics broadens fieldworkers' perspective and provides various angles from which to look at languages. In return, the results of research into specific languages will contribute towards the development of general linguistics, and again in turn this will be useful when investigating specific languages.

Students need to broaden their perspective by obtaining some knowledge on the general subject and on languages other than the one they are working on – preferably typologically different languages. For example, if the student is working on the case system of a certain language, he/she needs to read general works on case, such as Blake (1994b), and works on the case system of other languages.

In Japan (and possibly elsewhere as well) there seems to be apathy among some fieldworkers to general linguistics. Again, unfortunately, there are many cases where this is reflected in teaching; students concentrate on the language under investigation (on one single, narrow topic, for that matter), with no perspective of general linguistics.

13.3.2.3. *Linguistic theory*

A number of linguists argue for the importance of linguistic theory for fieldwork (e.g. Chelliah 2001: 163, Everett 2001: 166, Gil 2001: 125, Hyman 2001: 21, Mithun 2001: 52). Thus, Mithun (2001: 52) states: "Preparation for fieldwork must ... include a solid background in linguistic theory". However, as is the case with general linguistics, there seems to be apathy among some fieldworkers to linguistic theory. One sometimes hears the statement that fieldworkers need no theory. We shall look at this issue.

First, the term “theory”. Many linguists, including those cited above, use this term without defining it. But one definition of theory is “scheme or system of ideas &c. held to explain observed facts &c.” (*The Australian Pocket Oxford Dictionary* 1976). In the words of the late Stanley Starosta (p.c.) a theory is “a model of the reality”. A theory may concern specific languages (an instance of specific linguistics), but most (or all?) proposed theories seem to purport to be applicable to languages in general. According to these definitions of theory, and also, as generally understood in the linguistic academia, the concept of phoneme and that of morpheme, for example, are products of particular linguistic theories, respectively. Examples of theories in the field of syntax include case grammar (Fillmore 1968), relational grammar (Cole and Sadock (eds.) 1977), and role and reference grammar (Foley and Van Valin 1984).

Now, we return to the apathy to linguistic theory. Contrary to the view that fieldworkers need no theory, all linguistic works involve one kind or theory or another (Pawley 1991: 15). Even those people who show apathy to theory, use the concept of, for example, phoneme, but this concept itself is taken from one phonological theory. Therefore, the view of those people who hold this apathy seems self-contradictory. Actually, by theory, they seem to mean certain theories that were developed in the USA during the latter half of the 19th century. But some of such theories, too, are useful for fieldworkers, as shown below.

Case grammar taught the writer the importance of recognizing the level of semantic roles (e.g. agent, patient, recipient, instrument) as distinct from cases and grammatical relations, while relational grammar points out the need to separate grammatical relations (e.g. subject, object) from cases (e.g. nominative, accusative, absolutive, ergative). Role and reference grammar shows the intricate interaction among semantics, morphology, and syntax. All these have helped to broaden the writer’s perspective and consequently to improve the quality of his works on Australian Aboriginal languages (it is hoped!).

As is the case with general linguistics, knowledge of linguistic theories broadens fieldworkers’ perspective and provides various angles from which to look at languages. In return, the results of research into specific languages will contribute towards the development of linguistic theory. As seen in 10.2.4.6-[2], Australian Aboriginal linguistics has made enormous contributions to linguistic theory (and general linguistics as well), and these contributions in turn have provided fieldworkers with a broader perspective. To sum up, theory and description go hand in hand (cf. Everett 2001: 166; Gil 2001: 125; Hyman 2001: 21).

There are, however, three important provisos. First, as noted in 13.2.2, “It is not appropriate to limit the record to data pertinent to issues of current theoretical interest” (Mithun 2001: 53).

Second, students should not be trained in just one kind of theory. They need to “be familiar with more than one theory or grammatical tradition and develop an awareness of the limitations of each” (Chelliah 2001: 163).

Third, as Dixon (1997: 133) and Nakayama (2001) emphasize, we should not distort a language under investigation in order to fit it in any particular theory. We need to have a broad and flexible perspective on theories.

13.3.3. Social context of fieldwork

A cursory survey of relevant works such as Grinevald (2001), David Wilkins (1992), and papers in Newman and Ratliff (2001b) suggests that most of field method courses concentrate on how to obtain data, and they do not prepare the students for the reality, namely, the complexities of the society that they encounter in the field. Furthermore, as seen in Chapter 12, the social context in which fieldwork is conducted has changed drastically during the last two or three decades. Gerdts (1998: 21) notes: “The good-old-days of popping in, doing some fieldwork, doing the analysis, going home, and publishing are gone forever”. Consequently, usual field method courses are totally inadequate for preparing students for the fieldwork situation (cf. Grinevald 1998: 157). The above-cited works provide accounts of the “harsh” reality in the fieldwork situation that could not have been envisaged in a field method course. Specifically, “linguistics is not done in a political vacuum” (England 1992: 29; cf. also Dorian 1993b: 576). David Wilkins’ (1992) account of his fieldwork is particularly painful, and, because of that, it is extremely revealing and useful. These issues dealt with by those fieldworkers should be incorporated into a field method course. They include the following, repeated from Chapter 12.

(a) Research is controlled by the community. For example, permission from the community is necessary in order to conduct fieldwork there.

(b) The linguist is required to benefit the community by means of the research results, e.g. by assisting with their language revitalization activities.

(c) Intellectual property rights must be respected. Thus, confidential and/or secret information should not be published.

(d) The linguist needs to write up the research results in a language which is accessible to the community members. For this purpose, students need to become sufficiently proficient in that language to be able to write in it.

(e) Ethical codes for research must be observed. Thus, individuals’ privacy must be respected.

Nonetheless, the following should be added in connection with (c). As Hale’s account of the secret style of the Lardil of Australia indicates (10.2.4.6-[2]), it

is important to record secret information – provided that approval is issued by the community. If such information is on the verge of disappearance, then it is the researcher's role to persuade the community members of the importance of its documentation (12.2.3).

The preceding discussions highlighted what may be considered the “harsh reality” of fieldwork. However, this is only one side of fieldwork, and in fact there is the other side to it, namely, the exhilaration that derives from it (Dixon 1997: 134). Therefore, a field method course should not discourage students from conducting fieldwork. On the contrary, it should encourage them to do so, for example, by mentioning the exhilaration and satisfaction that have been experienced by fieldworkers (Grinevald 2001: 301). Many examples are given in Newman and Ratliff (2001b). One of the examples from the writer's experience is the following. In the early 1970s, he worked on Warrungu and a few other languages of North Queensland, Australia. They became extinct when the last speakers passed away. More than a quarter century later, the last speakers' grandchildren started a movement to revive their ancestral languages. All the hardship that the writer had experienced during that fieldwork was obliterated when he was welcomed back with their remark: “We are grateful that you recorded our languages” (Stephen Walsh, a Biri person).

13.4. Summary of Chapter 13

Regarding documentation, a holistic approach needs to be adopted, paying attention to all aspects of the language and its socio-cultural background. The data should be as accurate and comprehensive as possible. Care must be taken in view of the precarious state in which the language is. The research results should be made available in the form of raw data (including audio- and video-tapes) as well as in the form of analysis results, particularly, the triad (i.e. grammar, vocabulary, and texts). Concerning training of fieldworkers, linguistics programs need to be well-balanced, incorporating all the branches of linguistics, paying attention to general and theoretical linguistics as well. Ideally, students should be trained in neighbouring disciplines, such as anthropology. They also need to be prepared for the social reality of fieldwork, particularly for the situation where “academic theft” is no longer allowed.

14. Concluding remarks

The preceding chapters have looked at a wide range of issues that surround language endangerment and revitalization. There are, however, a large number of issues that have not been dealt with. One of them concerns the criteria for selecting languages for documentation. Dixon (1991a: 230) proposes that “we should aim to gather some information on languages from every language family and every branch of each family” (cf. also Dorian 1994b: 799). Nonetheless, as Dixon (1991a: 230) points out, “Priorities have to be set”. Specifically, it has been suggested that criteria such as the following should be employed in consideration of the urgency for documentation:

(a) degree of endangerment of the language (Brenzinger 1999: 3; Krauss 2001: 34);

(b) quality and quantity of extant documentation of the language (Krauss 2001: 34);

(c) quality and quantity of extant documentation of the family or branch to which the language belongs (Brenzinger 1999: 7);

(d) genetic isolation of the language (Brenzinger 1998a: 96, 1999: 7; Krauss 1992: 8; cf. Dorian 1994b: 799);

(e) typological uniqueness of the language (Krauss 1992: 8, 2001: 34), and;

(f) feasibility of carrying out research (Brenzinger 1999: 8; Krauss 2001: 34).

Most of these criteria have to do with the “scientific value of the language” (Brenzinger 1999: 7). There is, however, one important criterion missing:

(g) the community’s wish.

For an example, the writer is working on Wanyjirra, which used to be spoken immediately east of Jaru of Western Australia (he published a grammar on Jaru: Tsunoda 1981). Wanyjirra and Jaru are members of the same group, and they are very similar in terms of phonology, grammar, and vocabulary. In fact one of the tasks in work on Wanyjirra is to find out its differences from Jaru. In terms of (c), (d) and (e), it would be rated low in the degree of urgency for documentation. Nonetheless, the writer is working on it at the advice of the Kimberley Language Resource Centre: “We have your book on Jaru, so we would like you to work on Wanyjirra”.

Furthermore, the preceding chapters have posed many problems to which no answer seems forthcoming. For example, language endangerment and language revitalization are very much functions of the socio-political environments, and this in turn involves political issues such as land rights and human rights, in-

cluding language rights. It seems impossible to halt language endangerment and to advance language revitalization without dealing with these political problems. Then, should linguists participate in political activities, for example, carrying out lobbying activities to the government (Bradley 1998: 52; Gerdts 1998: 14; Krauss 1998: 112) or should they, for example, concentrate their time and energy on documentation of endangered languages? If linguists decide to take political actions (bearing in mind that this could be dangerous and that, in certain countries, it could even lead to imprisonment or deportation of foreign scholars; cf. Grinevald 2001: 291), what will be the most effective way?

Language revitalization activities are being carried out in many parts of the world, and there is a growing literature on them. Despite the people's devoted efforts, there do not seem to be many programs that are successful (11.2). Development of a more effective method of language revitalization should be ranked high on the agenda of research topics.

One of the most serious of all the problems is the continuing lack of concern among the vast majority of linguists (10.3.2, 12.3.4, 12.4). Superficially, the situation may look changing. Thus, the number of linguists who talk about language endangerment and language revitalization is increasing. So are the numbers of organizations, committees, conferences, books, etc. that are devoted to the cause. Nonetheless, the number of linguists who go out to the field and work on endangered languages or who participate in language revitalization activities, does not seem increasing, at least not significantly – as far as Japan and Australia are concerned. It is easy to talk, but it is not easy to act. We shall conclude this book with quotations from two of the most eminent scholars of the field: Nancy Dorian and Michael Krauss. “Arguably the single most fundamental obstacle, ..., is an absence of mobilizing will on the part of the profession” (Dorian 1994b:799). “If we do not act now, we should be cursed by future generations for Neronically fiddling while Rome burned” (Krauss 1992: 8). If linguists don't act, who else will?

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