

AFTERWORD

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ACADEMIC disciplines, like good wine, take time to come of age, and the subject of this book is hardly a generation old. Although language endangerment and death was mentioned routinely in journals and textbooks on linguistics, it was seen as “just another topic,” and—in an intellectual climate where the emphasis was on points of similarity across languages (universals) rather than points of difference—often said to be not a very important one at that. There was concern about individual languages, of course, but no suggestion that the problems might constitute a domain with its own theoretical, methodological, and terminological identity, and no sense of urgency or crisis until the 1990s, as acknowledged by many chapters in this volume (numerals in parentheses refer to chapters).

We commonly use child-development metaphors when describing the growth of a new academic discipline. We talk about a subject “being in its infancy,” “having growing pains,” “becoming youthful,” “coming of age,” and “developing maturity.” It may take a domain some time before it even gets an agreed name. In our case, we have a content brief, both concrete and abstract (“endangered languages,” “language endangerment”) but no academic label. The recency of the term is partly responsible.

Even in relation to species diversity in general, “endangered” dates only from the 1960s (a first recorded usage in 1964, according to the *Oxford English Dictionary*), and came to be used in relation to languages only in the 1980s. At a recent conference, the section headings showed several branches of linguistics (“sociolinguistics,” “psycholinguistics,” etc.), but the one relating to the content of this book was called “endangered languages.” A subject that has outgrown its infancy, and become at the very least youthful, should be able to do better than that. On analogy with other recent developments, such as “clinical linguistics” and “internet linguistics,” I will therefore use endangerment linguistics in this Afterword—a term that at the time of writing had no hits on Google.

Is intellectual youthfulness a fair characterization? The chapters in this book do show that the subject still has growing pains. Or to change the metaphor, we need to get everyone singing from the same hymn sheet. Take the basic question of how many languages there are—a statistic that is one of the most widely repeated among linguists, as well as the general public. The figure of 7,000 is often used in this book (e.g., 10, 28, 34), but we also get 6,848 (1), 7,097 (13), and 7,000–7,500 (4). The figure of 7,000 has been

cited for quite a long time. Yet, if languages are disappearing at a rate of one every three months or so (1), that figure cannot remain constant, even allowing for the occasional newly discovered language. To keep using it contradicts the premise that motivates the entire exercise. It is time to leave the comfort of conveniently rounded statistics behind, despite the annoyance it might cause to writers and reporters. These are growing pains.

Another example is the use of first approximations about the number of endangered languages and the rate of loss. Despite the many expressions of caution in this book, the percentage of languages that are said to be endangered hovers around the midpoint—in the opening chapter (1), 45% are said to be currently endangered to some degree, and several other writers concur, with little variation. The uncertainty about rate focuses on the time frame within which this scenario is thought to operate, in which “a century” is typically proposed, resulting in the commonly cited figure of a language dying every two weeks or so. As Belew and Simpson point out, it is time to leave this “vague extrapolation” behind. It comes from the “middle-of-the-road” position derived from the estimates reported by Michael Krauss in 1992, which ranged from 20% to 90% loss over the next century. Although scholars (such as myself) would surround this prediction with the usual academic cautionary hedges, these were lost sight of when the media became interested in the story. As British journalist and broadcaster John Humphrys said (in a diary piece for *The Spectator* in 2006), the basic law of journalism is: “First simplify, then exaggerate.” That is how language myths grow.

When it comes to language, the mythology among the general public is enormous. All linguists know that, when asked about their profession, they have to spend inordinate amounts of time explaining what linguistics is *not*, and trying to eliminate the myths about language that people hold. New branches of the subject are especially affected. To take another domain whose time-period of growth is similar: linguists involved in internet linguistics have had to counter such beliefs as that the internet is destroying language, that text-messaging is fostering a generation of young people unable to spell, and more, before they can get on with the task of explaining what exactly is happening to language and languages in electronic communication. Endangerment linguists have similarly had to engage in a great deal of myth-busting, such as the view that multilingualism is a biblical curse, or that monolingualism is a way of obtaining peace. The early years of the subject also illustrate a wide-eyed innocent enthusiasm that today we can see was part of the subject’s immaturity, and several of the chapters in the present volume take time to remind us of those initial naiveties, typical of a discipline in its infancy. It is a useful perspective, as it enables us to obtain a sense of direction in the evolution of the subject, and helps us appreciate the true complexity of the realities of language endangerment.

Authors recall, for example, the romanticized and at times evangelistic view of endangerment, similar to that experienced earlier in wildlife conservation. There was often an unspoken assumption that “everyone was nice”—that speakers of endangered languages were nice guys waiting with a warm welcome and open arms for the arrival of another band of nice guys, the indefatigable linguists, who carried out their task without experiencing any personal problems. We now know that an endangered language

community is just as human as any other in society, containing political tensions that are far beyond our control (13), personalities with radically different views about what is needed (14), and all kinds of personal and tribal conflicts (36). They are situations that are full of stress, for both speakers and linguists, and make demands that are hardly ever mentioned in the early literature on the subject, such as how a linguist should deal with a sense of personal failure or handle the offer of a bribe in a culture where such things are routine (36).

Another assumption, understandable at a data-impooverished stage of development in a subject where time is of the essence, is that, when it comes to collecting linguistic data, "anything is better than nothing." We now know that this can lead to data-gathering that is of poor quality and of limited usefulness—or, at worst uselessness (33). People do not naturally think about what is significant in their culture until a circumstance makes them do so. This applies to all languages, of course, endangered or not. One of the biggest problems in teaching English as a foreign language comes when speakers from one part of the English-speaking world say something that is opaque to listeners from elsewhere. An American speaker of English will say "that was from out of left field" without realizing that British listeners, being unversed in the mysteries of baseball, will have no idea what they are talking about; and conversely, British idioms (such as "he played that with a straight bat") will likely be received with incomprehension by anyone equally unversed in the mysteries of cricket. So a speaker of an endangered language will not think to mention the special significance of—to take some of Holton's examples—a kinship term or a piece of furniture, and will settle for a vague gloss ("chair") or a translation approximation that is vague, misleading, or just plain wrong because of an inexpert appreciation of the cultural or environmental background. The examples of a naive reliance on botanical field guides are compelling. The compilers of the *OED* used specialists to provide accurate definitions of botanical entities, and linguists need to do the same, to ensure that plants are properly identified.

This is part of a general argument that endangerment linguists should not act alone in their work. Biocultural diversity is inevitably interdisciplinary in character (30), and requires detailed analysis of the ways in which the contributing disciplines interact. This theme emerges strongly throughout the book. Holton is insistent that linguists cannot do documentation on their own but need collaboration with biologists, geographers, climatologists, botanists, and others. Domains such as ethnomathematics in relation to such behaviors as weaving and house-building provide fruitful areas of research. The enterprise requires an interaction between linguistic and encyclopedic content—a boundary that is always fuzzy and reflects different views as to what people want to talk about (and look up in reference books). In this respect it is important to note differences between British and American lexicographical traditions. In *Webster* we will find a great deal of information about people and places; we will find no such thing in the *OED*. Nor are there many precedents. It is the exception to see cultural knowledge incorporated into a standard dictionary: an example was the *Longman Dictionary of English Language and Culture* (1992), containing entries on a diverse set of topics, such as famous TV programs, political parties, and nursery rhymes. It was a dictionary that got

itself into trouble, when its inevitably selective and simplified accounts of places and people led to its being banned from sale in some countries for what was perceived as negative stereotyping. The same risks apply to any language study which takes on board a cultural perspective; but it is particularly strong when dealing with the sensitivities surrounding endangered languages.

This is a message that comes across loud and clear in the chapters of this book. The writers are now asking basic questions about issues that were largely taken for granted twenty years ago, and answering them in a sophisticated way, with evidence from a wide range of case studies. What exactly do we mean by the notion of "endangered knowledge" and what comprises an ideal "knowledge legacy" (31)? What makes a good record of a culture (16)? What linguistic interactions does a community want to maintain or revive (7, 11)? How is success in revitalization to be defined (26)? And what is a community anyway (18)? These questions are now being given detailed answers illustrated by case studies, but there are hidden complexities in all of them. Real communities vary in all kinds of unpredictable ways, and attribute different degrees of importance to different spoken, written, or signed events, such as the performing arts, memory of the past, and traditional literature, with some kinds of knowledge being considered desirable for transmission to future generations and others considered to be sensitive or even dangerous (13). We now have a greater appreciation of the nature of the data in an endangered language, both qualitatively and quantitatively. A widely held assumption was that corpora and descriptions of endangered languages would be just like those that had previously been compiled for healthy languages such as English, where the working principle is to make the account comprehensive: "describe everything." The small size of documentation corpora makes it inconceivable that "everything" could ever be described (11), over and above the content selectivity required in response to community concerns.

An example of the greater degree of sophistication in present-day endangerment linguistics can be seen when answering the question: What exactly happens when intergenerational transmission takes place (21)? This has been a primary criterion from the outset of endangered-language studies, and retains its place as one of the four criteria in the Language Endangerment Index, along with domains of use, number of native speakers, and trends in number increase/decrease (1, 2). It seems like a simple notion: of course a language must be passed on to the children. But how exactly is it done? O'Grady's chapter focuses on the precise linguistic conditions that enable intergenerational transmission to take place, and asks some basic questions. How much exposure to a language is required for children to acquire it? What sort of language do adults need to use to their children (such as directed speech)? How frequently does a language have to be used in order to be maintained? Do adults have a realistic prospect of success in language learning? Much of this is a familiar world to me, as the founder-editor of the *Journal of Child Language*, where such questions have been repeatedly explored—though hardly ever in relation to endangered languages (just five addressed out of over 1,500 articles in the first forty issues—on Chintang, Irish, Navajo, K'iche', Warlpiri). Analogously, research from that branch of linguistics has

rarely been referenced in the endangered-language literature. That situation has to change.

Several of the notions frequently mentioned in endangerment linguistics receive a similar fresh and more detailed examination in this book, bringing to light everyday realities. The notion of “immersion” is an example: it turns out to have more senses or applications than we might at first expect (20), and a detailed case study (25) shows the day-to-day actualities, such as a lack of qualified teachers, the heavy teaching administrative workload that cuts down on interaction time, and minimal family and community participation. Another notion that receives a similarly more sophisticated treatment is “minority,” along with the associated notions of language rights, advocacy, and identity (28), and providing a more nuanced account of language shift (which is sometimes a force for good). We also see two sides to the notion of language “contact”—a situation that is usually viewed as a critical factor leading to endangerment, but which can be shown to not always result in conflict (3) with other factors (such as economic pressures, political situations, and language attitudes) playing their part.

These are external factors. This book also demonstrates a greater understanding of the factors *within* an endangered language that can hinder rather than help maintenance. There are often disputes over what variety of language is to be maintained (9) and differences of opinion as to what counts as a good use of an endangered language or a competent speaker. The belief among elders that one must speak the minority language “correctly” can actually encourage endangerment (3), as this is likely to lead to a rejection of the language of the young (26). It is something I have repeatedly encountered in Wales, where young people are said not to be speaking correct Welsh (essentially, the formal variety that traces its origins to the first Welsh translations of the Bible) because of the amount of borrowing and code-switching they use. It does not occur to the elders that a preservationist ideology, with its emphasis on an imagined “pure” ancestral code, is harmful to intergenerational transmission (18).

An overriding impression, from reading the chapters in this book, is the accumulated experience and wisdom that has been achieved in the past decade—as seen, for example, in the case studies on the relationship between orthography and identity (14), the situation in Africa (27), and the character of a sleeping language (24). We do now have more comprehensive knowledge about the endangered linguistic situation than ever before, and also about the relationship between languages and species (29). The result has been a significant step forward in the direction of generalization, at least as far as methodology is concerned, as seen in the Language Endangerment Index (1, 2), proposed stages and criteria for revitalization (23), and the Survey of Global Language Revitalization Efforts (20). Perez points out that the subject is still at the case-studies stage. This is a familiar trajectory for a science. Medicine went through a long period of case studies before robust diagnostic statements became the norm—something that has also happened in clinical linguistics in its relation to speech pathology. One of the most important current developments in endangerment linguistics is thus the development of a comparative perspective, as illustrated by the above projects, so that the many factors that make different endangered situations similar or different can be related and evaluated.

A revitalization strategy that might work in language community A might not work in community B, and we need to know why.

Several writers affirm that methods have become more sophisticated and results therefore more robust. Of especial importance is the prominence given to the notion of metadata, and the identification of the factors that are critical for high-quality metadocumentation, such as the need to incorporate ethnographic information about any texts containing content that a community would consider sensitive (18). Another is the central role of archiving (15), where proper consideration is now being given to who uses language archives and why, resulting in different archive versions for different purposes. The ethical issues involved with endangered language data are also now being thoroughly explored, such as informed consent, privacy, ownership, rights, and access.

The chapters in this book also make an honest appraisal of the limits of our present knowledge, and identify several "known unknowns," such as the following:

- The focus on language, identity, and homeland has meant there has been relatively little work on diaspora communities, especially in cities as a result of immigration (17).
- We still lack data on languages that *think* themselves endangered (1)—a notion that, surprisingly, is encountered in languages that we would not immediately think of as endangered, such as Dutch (where the loss of functions—the use of English instead of Dutch in higher education, for example—is a regular concern in the country's media).
- Rapid language attrition has been less well studied (21). To what extent can lost linguistic skills be recovered? A great deal depends on age and the amount of time that elapses before someone is re-exposed to a language, but what are the conditioning factors? Must children have continuous long-term exposure to a language, even into adolescence? It would seem so.
- What are the actual factors, and combination of factors, that promote revitalization (19)? We need to consider the interaction between child learning, adult learning, modernization of the language, and language use. What actually happens in "family programs"? The realities of home life are such that successful intergenerational transmission requires support from sources outside the nuclear family—in particular, the extended family, friends, community life, and the school. It is a synergy that has received little study.
- Phenomena such as language mixing and code-switching have long been recognized as a major feature of languages that are becoming endangered, but the reasons for these behaviors are still largely unclear (2, 3). Sociolinguistics, stylistics, and pragmatics are the most relevant domains, but whereas sociolinguistics receives several mentions throughout this book, the other two areas receive little attention. A consequence is a general tendency to talk about fluency, attrition, and so on in terms of "language," whereas what we are dealing with is differential competences in the constituent modalities: listening, speaking, reading, writing, and signing.

- There is still varying recognition of the nonsegmental (or suprasegmental) dimension of description—the use of pitch, loudness, speed, rhythm, pause, and timbre to convey linguistic meaning. Always the most difficult area to study and transcribe—Dwight Bolinger used to call it “the Cinderella of the linguistic sciences”—it is often ignored in transcriptions of discourse, and it receives only passing mention in this book (e.g., in 6, 11, 12, 14), though it is given a more central recognition in the discussion of linguistics teaching (36).
- The field of endangered sign languages has still some way to go to catch up on the levels achieved to date in relation to traditional oracy and literacy (8). As so often happens in this field, authors find it necessary to spend most of their space explaining what is involved in sign, presenting a descriptive method, and dispelling myths. This leaves precious little space to reflect on the processes of endangerment that are actually operating in specific situations. In this domain, the case-study stage is still on the distant horizon.

It was unfortunate, in a way, that the field of endangerment linguistics came into being at the same time as the internet revolution burst onto the scene: Tim Berners-Lee's World Wide Web was announced in 1991, the year before Michael Krauss's seminal paper. As with so many other domains of linguistics, the arrival of the electronic medium forced descriptive linguists to review all their generalizations they had happily been making about traditional speech and writing. New generations of corpora emerged. The world's languages and dialects became accessible in unprecedented ways, both in written and spoken form. And endangered languages were presented with new opportunities. But all this took a decade or more to become routine. The result is that we are now dealing with a methodology grounded in the offline past that needs to be reinterpreted for an online future. The issues are beginning to be addressed (e.g., 10, 22, 32, 38).

The well-recognized problem is that the electronic world is changing so fast that researchers need to come to terms with its strengths and weaknesses, especially as new digital formats and equipment make older versions difficult or impossible to use (10). Nor is there any sign of stability. At present, the online world is predominantly graphic; but the digital industry is predicting an increasingly oral/aural future. Access to the internet is currently mainly via computer terminals; but the industry is predicting a future that is increasingly mobile and miniaturized—a situation that already exists in regions of the world where mainframe computers are few and far between. In some parts of Africa, for example, traditional village meeting-points have given way to internet-cafe-type centers in nearby locations where the people can get the best satellite signal.

The consensus is that, despite the problems, digital technology is a blessing rather than a curse. When endangered languages use it, they are given an audible and visible presence in the community that was unavailable before. Distance learning and mutual communication among separated speakers becomes easier, and social media motivate youngsters in a way that traditional teaching methods never managed to achieve (22). The future is unpredictable, of course, but social media seem set to alter the dynamic of

what intergenerational transmission means. Rice and Thieberger (10) are surely right when they say that "technology is a support, but it is not technology that saves a language, it is people." On the other hand, for young people, where the screen plays a central part in their lives and books are marginal (as opposed to pre-internet adults, for whom books are central and the screen is marginal), there may well be a sense that the technology could in fact do just that. (As long as it works, of course. We have all experienced the frustration that comes with software and hardware failure.) What is important is to develop a critical awareness of the new technology. What are the pitfalls? Who is the software designed for, and what do the users want from it (38)? Are the criteria whereby we evaluate success using traditional methods the same when it comes to the electronic world? I can imagine before too long it will be necessary for Rehg and Campbell to be editing an entire book, not just a couple of chapters, on the not-yet-existing domain of digital endangerment linguistics.

The digital world is not the only one where there are new horizons and where we need to anticipate a change in mind-set. It can be argued that we need to change the depressing vocabulary of death and extinction to one that is more positive (39). Endangerment could be replaced by empowerment in a mind-set switch where an endangered language is seen no longer as solely a memorial of the past but as a key to a revived future, as a means of achieving a fresh cultural identity (26). Perhaps the field will one day be called "empowerment linguistics." Also among the new horizons are the many interconnections with other disciplines, both within and outside linguistics. In relation to neurolinguistics: what happens in the brain when a language goes into disuse (39)? In relation to climatology, what are the correlations between climate change and migration patterns that have consequences for language disruption (32)? The personal and social psychological impact of being able or unable to use one's own language is another huge domain that is still in its infancy. What are the implications of the view that "language is medicine" (39)? The witness testimonies reported by Taff et al. show clearly the complex of factors that are affected, and that contribute to an overall notion of "wellness"—on the positive side, such as pleasure, balance, identity, healthy spirit, and a sense of direction; on the negative side, suggested correlations with stress (32), suicide, alcoholism, and crime.

These are testable topics that will one day form part of a general theory of language endangerment. The movement from serendipitous description to systematic case studies leads inexorably toward a stage of hypothesis testing, which is prerequisite for the evolution of a general theory. The chapters in this book provide many examples of testable hypotheses, or give clear indications of how such hypotheses might be formulated. To take just one example: in relation to environmental factors, there are those reported in Harmon and Loh (29), such as the likely correlation between a dry climate and a dehydrated larynx, which in evolutionary terms could create a bias against the use of tones (which require flexible vocal fold manipulation). Not all branches of linguistics will be equally useful in generating hypotheses. Sociolinguistics is an important perspective, but variationist hypotheses will be difficult to formulate when there are few speakers, and in a community diversified by semi-speakers and second-language

learners (7). But hypothesis-testing, leading to the creation of theoretical models, is an essential next step if endangerment linguistics is to achieve a comparable status to that already obtained in some other areas of linguistics.

Methodology is a crucial part of the process, and one of the real strengths of this volume is the way so many of the chapters share a wealth (sometimes a lifetime) of experience, moving toward a more standardized approach to study, and offering guidance to new practitioners. How exactly do linguists set about writing descriptive grammars (12) and dictionaries (13)? What are the specific problems that lexicographers encounter, such as in relation to cultural untranslatability (34)? What is involved in the actual process of documentation (7, 10, 36)? What is the nature of a language documentation corpus (5, 11)? Practical considerations are not ignored. How should activists be trained? (37) What issues have to be anticipated when applying for funding (7, 35), especially in interdisciplinary applications? (33)? There are ever-present problems that come from encountering the medical and legal models that govern so much of present-day research, in which the health and safety of the investigator, the informed consent of the speakers, the legal liabilities of an ethics review board or a funding organization, and other such factors can result in endangerment researchers being made to use procedures that are culturally inappropriate. Forewarned, as they say, is forearmed.

The chapters in this volume leave me in no doubt, to resume my developmental metaphor, that endangerment linguistics has come of age. It has developed its own confidence and identity. It should no longer feel the need to defend itself against the very different intentions of theoretical linguistics, preoccupied with giving formal shape to language universals (6). The focus is on diversity as an end in itself, and this demands the selective and eclectic use of other branches of linguistics, such as typology (6), and raises issues that other domains of linguistics have not had to deal with (11). Nor is endangerment linguistics a branch of applied linguistics—which is where several conferences located it a few years ago. The search for a theory of language endangerment (language endangerment universals, as it were) is an intellectual challenge that exists independently of the application of the findings of that theory in the solution of problems. It is a theory that at present we are only dimly aware of, with putative postulates, axioms, and models at a primitive stage of formulation. In the absence of a “top-down” approach, the development of a theory of endangerment is proceeding “bottom-up,” arising out of the need to solve problems, and concentrating very much on methodology. Most of the present book is an illustration of what I would call “applied endangerment linguistics,” an enterprise that is developing much faster than the associated theory (“pure endangerment linguistics”). In this respect, there are clear parallels with some other recent developments, such as clinical linguistics.

Maturity for the discipline is in sight. But as with all subjects that are groping their way towards a theoretical level of inquiry, there is a need to keep a close eye on terminology, especially as the subject becomes increasingly interdisciplinary. Many of the chapters in this volume illustrate and sometimes debate the proliferation of terms, and indeed there are far more around today than ever before—“extinct,” “wakening,” “awakening,” “re-awakening,” “sleeping,” “dormant” . . . (19), “participants,” “partners,”

“consultants,” “subjects” . . . (9), “language revival,” “reversal,” “reclamation,” “revitalization” . . . (20), the various terms for “first peoples” (39); and so on. It is too soon to expect standardization, but—as with the languages these writers are exploring—there needs to be a self-examination of the metalanguage of their own linguaculture, using the standard techniques of citation lexicography. The time is right for a dictionary of the terminology of endangerment linguistics.