There are about 6,700 languages spoken on Earth today. To consider the future survival of these languages I will take as my starting point a provocative quotation on the back cover of a recent book by Andrew Dalby: “a language dies every two weeks: what are we going to do about it?” Are languages indeed disappearing and, if so, how and why? Where do suggestions come from of language loss at the rate of one language per fortnight, and what are some possible responses to what looks like an impending crisis for the survival of the world’s languages? Are all smaller languages doomed to extinction, or are there signs that loss of languages can be reversed?

The world’s languages can be ranked in terms of the estimated size of the populations who habitually use them as a first (or native) language, and as a language of wider communication (typically spoken as a second or third language). It is difficult to determine speaker numbers exactly, and the very notion of ‘speaker’ is somewhat vague, but the following estimates (see also Gordon 2005) show the relative positions of the world’s top ten languages, all of which have over 130 million speakers:
Table 1: Top 10 languages in terms of speaker numbers

<table>
<thead>
<tr>
<th>Language</th>
<th>1st language speakers</th>
<th>All speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandarin Chinese</td>
<td>1.10 billion</td>
<td>1.12 billion</td>
</tr>
<tr>
<td>English</td>
<td>330 million</td>
<td>480 million</td>
</tr>
<tr>
<td>Spanish</td>
<td>300 million</td>
<td>320 million</td>
</tr>
<tr>
<td>Russian</td>
<td>260 million</td>
<td>285 million</td>
</tr>
<tr>
<td>French</td>
<td>75 million</td>
<td>265 million</td>
</tr>
<tr>
<td>Hindi/Urdu</td>
<td>250 million</td>
<td>250 million</td>
</tr>
<tr>
<td>Arabic</td>
<td>200 million</td>
<td>221 million</td>
</tr>
<tr>
<td>Portuguese</td>
<td>160 million</td>
<td>188 million</td>
</tr>
<tr>
<td>Bengali</td>
<td>185 million</td>
<td>185 million</td>
</tr>
<tr>
<td>Japanese</td>
<td>125 million</td>
<td>133 million</td>
</tr>
</tbody>
</table>

Some languages, such as Spanish, Russian, French, and Arabic can be considered multinational since they are used and officially recognised in a number of countries; English is a truly global language now present across the world and increasing both in use and prestige. The top 10 languages are spoken by 40% of the world’s population, and the top 20 are spoken by half of the people on Earth. In fact, 96% of the world’s population speaks just 4% of the 6,700 languages, which means that only 4% of the world’s population maintains 96% of its linguistic diversity. There are thus a few very large languages with many millions of speakers, and very many small languages with a few thousand, or a few hundred speakers (and in the case of indigenous languages in Australia and north America dozens of languages spoken by just a handful of people each, or in some instances, by just one person). The geographical distribution of languages is also quite skewed, with the richest diversity in
Africa, South and South-East Asia, and Latin America, as shown in Table 2 (based on Gordon 2005).

**Table 2. Distribution of indigenous languages by area**

<table>
<thead>
<tr>
<th>Area</th>
<th>Languages</th>
<th>Count</th>
<th>Percent</th>
<th>Number of Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>2,000</td>
<td>30.3</td>
<td>675,887,158</td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>2,200</td>
<td>32.8</td>
<td>3,489,897,147</td>
<td></td>
</tr>
<tr>
<td>Americas</td>
<td>1,000</td>
<td>14.5</td>
<td>47,559,381</td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>200</td>
<td>3.5</td>
<td>1,504,393,183</td>
<td></td>
</tr>
<tr>
<td>Pacific</td>
<td>1,300</td>
<td>19.0</td>
<td>6,124,341</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>6,700</td>
<td>100</td>
<td>5,723,861,210</td>
<td></td>
</tr>
</tbody>
</table>

Probably the most linguistically diverse places in the world are to be found in the Pacific: the island of Papua New Guinea with a population of 3 million has 1,100 languages, while Vanuatu’s 100,000 people speak 120 languages (this being the greatest density of languages per head of any country).

Economic, political, social and cultural power is also in the hands of the speakers of the large languages, while the many thousands of small languages are marginalised and under pressure from the larger ones. In the past 60 years, from the end of the Second World War onwards, there has been radical reduction in speaker numbers of smaller indigenous languages, especially in Australia and the Americas. In addition, speaker communities show increasing age profiles where older people continue to speak the languages but younger ones do not and have shifted towards the few larger multinational languages. Sometimes this takes place rapidly, over a generation or two, often via a period of unstable multilingualism. Sometimes the language shift is gradual, but inexorable, and occurs over several generations.

Beginning in 1990 linguists such as Michael Krauss of the Alaska Native Language Centre rang alarm bells, pointing out that in the 21st century up to 90% of human languages would become extinct. Krauss’ predictions are perhaps extreme, however most scholars now agree that at least half of the world’s linguistic diversity will disappear over the next 100 years: this means a loss of 3,000+ languages forever. At this rate we arrive at Dalby’s estimate of one language lost each 14 days, a figure far in excess of predictions of loss of species diversity for endangered plants and animals.
It is possible to identify a number of factors involved in this loss of language diversity and to develop a typology of speaker communities. An important factor is *intergenerational language transmission*, that is, whether or not children are learning the language from their parents and care-givers. A not uncommon situation is for parents to speak a heritage language among themselves in private and to converse with their children in a large language of wider communication that is socially, politically and economically dominant (this may be a multinational language such as Spanish or French, but it can also be a dominant regional language such as Wolof, Hausa or Swahili, to mention some African examples). Low transmission leads to language shift towards the dominant tongue. A second factor is *percentage of speakers* among the total population, that is, not the total number of people speaking a language but the proportion of a given community who continue to use it. Language loss is associated with reducing proportions of the population using the language. Note that small languages with even 500 or 1,000 speakers (as in the Asia-Pacific region) are not currently undergoing shift because virtually all the community uses them on a daily basis while other larger languages such as Quechua (which has millions of speakers in South America) are being lost as increasing numbers of younger people are dominant or monolingual in Spanish.

A third parameter is *domains and functions of use*, that is, the contexts and situations where the language is regularly used. Some languages are restricted just to the family domain for personal communication between friends and relatives (with a dominant language being used outside the house), while other languages show a wider range of contexts and uses, including education, religion, trade and business, and government. Constriction of domains and functions can lead to language loss, particularly when dominant languages begin to encroach into the domains previously reserved for use of smaller languages as a result of young people switching to the spreading language and bringing it with them into the social and family sphere.

A fourth and very important parameter is the *attitudes and language ideology* of the community, and of their neighbours. An ideology that values multilingualism and variety is less likely to lead to language loss than one that sees monolingualism as normal and multilingualism as problematic or threatening (to local or national social and political cohesion). *Speaker evaluation* of their language is another factor: communities who positively value their language as an expression of their culture and identity are typically less likely to give it up than those who negatively evaluate their way of speaking and stigmatisé it
as an unwritten (or even unwriteable), a ‘dialect’ rather than a full language, ugly, or not worthy of learning by outsiders.

Examination of these factors enables us to develop a typology of language situations. Some languages can be described as viable, safe, or strong languages, that is, those which are spoken by all age groups, with a very wide distribution in the community, with high intergenerational transmission, actively supported and positively evaluated. The top 4% of the world’s languages mentioned above are clearly in this category. A second group are endangered languages, typically spoken by socially and economically disadvantaged populations, under pressure from a larger language, used by a reducing proportion of the population, and usually not being intergenerationally transmitted, that is adults are not passing them on to children in large numbers. Endangered languages are under threat of loss unless their current contexts of use and acquisition change.

A third category are moribund languages, namely those no longer being learnt by children at all, used by reducing numbers of older speakers with very little social function in highly restricted domains. Moribund languages die as the remaining speakers age and pass on. Finally there are extinct languages with no native speakers and no usage. Among the indigenous languages of Australia, for example, over 60% are now extinct (with another 35% moribund and just 5% viable).

Within speaker communities there are several types of speakers that can be identified. Fluent speakers control a wide range of styles and have extensive vocabulary and lexicon – they can say anything they want to appropriately in any context. For endangered and moribund languages we also often find semi-speakers who have partial control over the language and show gaps in their knowledge of the grammar, lexicon and usage. They may be able to understand fluent speakers perfectly but are themselves limited in their active competence. Finally, we can encounter rememberers who do not use the language actively and can recall words or expressions used by an older generation of fluent or semi-speakers who they heard using the language when they were children. Rememberers often are unable to form grammatical sentences in the language or to recall more than a handful of everyday words. As languages change their status over time from safe to endangered to moribund to extinct we typically find reductions in fluent speaker numbers, increasing semi-speakers and finally only rememberers.
We may ask: why are languages becoming endangered? Why do speakers not use them any more? There are two major reasons: *external* and *internal* causes. External causes are outside the control of the community themselves and are typically associated with military, religious, political, cultural, economic or social and educational subjugation arising from colonialist policies (understanding colonies in the broadest sense) of outside powers, as well as internal colonialist government policies aimed at suppressing linguistic diversity. There are also external causes such as physical and medical catastrophes which result in population loss, like the tsunami that hit the north coast of Papua New Guinea on 17th July 1998 and wiped out villages around Sissano lagoon, or HIV AIDS which is decimating populations in Africa. These latter causes are much rarer than subjugation however. Internal causes are those triggered by the community’s negative evaluation of their language and culture (often arising itself from external subjugation) and positive valuation of some other language which appears to be a key to access to wider opportunities; together these result in lack of transmission to the younger generation. The combination of external and internal causes is leading to language loss globally. Historically speaking, this is not a new development; languages have been lost throughout history, and probably during prehistoric times as well. For example, in 100 BC there were dozens of languages spoken around the Mediterranean that rapidly disappeared with the spread of Latin and Greek promoted by the Roman Empire, such as Etruscan, Oscan, Elymaic, Venetic and Dacian (see Dalby 2002). For most of these only fragmentary records remain. The difference now is that in the late 20th and early 21st centuries new phenomena have emerged, including the development of nation states with monolingual ideologies, and global communications and interconnections which mean that the process of language loss is taking place all over the world at a pace never seen before.

Should this rapid loss of linguistic diversity be a cause for concern? For many people, especially those living in countries which promote monolingualism, the answer is no. Language diversity is seen as a problem creating divisions and conflict: the fewer languages the better. Unfortunately, this view is both naïve and has many counterexamples: all sides in the troubles in northern Ireland spoke English, as did the combatants in the American Civil War. Speaking the same language does not guarantee communication and peace. In addition, all languages are subject to change over time so that two populations originally speaking the same language but geographically separated and with different histories can even over a few generations see their ways of speaking diverge to the point of unintelligibility. Difficulties of
communication between British, American and Australian English speakers, for example, are symptomatic of the inexorable divergence that time brings (not to mention Indian English, Singapore English or Jamaican English where influences from other local languages and colonial histories are apparent).

An alternative view is that we should care because linguistic diversity is a good thing, just as environmentalists argue for ecological diversity. It is not clear however that there are direct parallels between plant and animal species on the one hand and languages on the other: language is culturally not genetically acquired and humans can be multilingual (whereas species identity is unique). A stronger argument is that for many communities languages express identity. Language is not just about communication: we need languages to talk to and trade with our neighbours, but equally importantly we use language to express our identity, to express who we are, to differentiate ourselves from our neighbours, and to group ourselves with the people that we consider to be part of us. The emergence of three separate languages in former Yugoslavia (Bosnian, Serbian and Croatian) in place of Serbo-Croatian is a reflection of this issue of identity along with a number of other social and political factors.

In addition, languages are important as repositories of history and culture. Every language and every speaker community in the world has oral history and oral culture: songs and stories, mythology, records of the ancestors, stories of where people came from, how they came to be, how they live their lives, what their world is. Language encodes and carries this knowledge. If it is lost, if the language disappears, so too is culture, history and knowledge lost (this argument is promoted strongly by Unesco and other international bodies under the banner of ‘intangible cultural heritage’). We can also argue that linguistic diversity is important because language is part of human knowledge. Each language represents a different way of viewing the world, each is a different way of thinking about and talking about the world. This is evident in the problems with translation between different languages, and difficulties with matching words, idioms and expressions between languages. Linguists additionally would argue that linguistic diversity is important scientifically since languages are the stuff upon which our understanding of pronunciation, grammar and vocabulary is based, and ultimately, what it is that makes humans unique as the only species that uses language. Since most languages have not been documented, let alone well described, it is essential that the problem of language loss be addressed from a linguistic perspective.

So is it a hopeless situation with 50% or more of the world’s languages disappearing because of language shift? There is growing evidence that the answer is no because language
shift can be reversed. For example, the 2001 Welsh language census shows a rise in the number of speakers compared to 10 years previously, especially in southern Wales. In addition the number of children speaking Welsh today is higher than it has been for a generation because of the spread of bilingual education and other support measures; the raising of Welsh political and cultural consciousness has meant that the language has undergone a resurgence. A second example is Maori of New Zealand which has seen an increase in speaker numbers via *kohanga reo* ‘language nest’ pre-schools which bring fluent Maori speaking grandparents into contact with child learners in a Maori-only environment. Children of the language nests established 20 years ago are now undertaking Maori medium education at tertiary level. A similar model has been adopted for reintroduction of Hawaiian, which had almost disappeared as a spoken language but is now seeing increased speaker numbers, especially among those learning it as a second language. Similar examples of revival and revitalisation can be given around the world (see Abley 2003 for other instances); we return to this topic below.

If we decide that for all those reasons that survival of languages is important and we want to keep languages being spoken and used, what can we do about it? People outside of communities where languages are under threat can work in a number of areas: language documentation, language protection, and language support, including *revitalisation* (giving vitality back to languages by extending the domains and functions where they are used). This work must be carried out in a collaborative and respectful manner with members of the speaker communities if they choose to do so. Some communities will respond that they want to give up their language and past and to assimilate to the dominant society and culture, but others may be keen to try and maintain their cultures and languages. We need to understand the patterns of use and attitudes because those are so important in determining whether languages will manage to continue, as well as to provide reliable and comprehensible information for intervention strategies.

Language documentation involves collecting linguistic, socio-linguistic and cultural data, including audio, video and text materials to create a corpus which can then serve as a resource to be used educators and others. It is also important to collect information about the social, cultural and political environment of the community, in order to understand the processes of language shift. Documentation should be properly archived with a trusted language repository, along with relevant metadata (such as who is speaking, when, where, how, under what circumstances, for what purpose) so that materials are widely accessible.
both currently and into the future. Professional language archives are now being established in a number of locations around the world (see www.delaman.org for a list).

Outsiders can also be involved in community education, helping communities to understand the circumstances of their language. Very frequently we find in threatened language situations that a particular family group or community does not understand the broader perspective of the trajectory of their language. It is important to make our research materials available to the community and not just to an academic linguistic audience. We also need to provide research training and teacher training opportunities to members of the communities so that skills can be transferred and community members will have the required expertise to act on their wish to see the language continue to be used. There can also be involvement in policy issues to help support the survival of languages by monitoring regional and national language policies, providing institutional support for training and policy development, supporting students to work on languages, providing technical and other facilities, carrying out research, and helping with the production of books and other materials.

Economic and political support is also important because there is a direct relationship between economic, political and health survival and the retention of language and culture. Poverty, poor health, discrimination and lack of political power are among the conditions that give rise to language and cultural shift and language loss. Attacking the root causes of the shift supports communities who want to retain their languages and cultures but who feel they can not because of pressures on young people such as migration to urban centres for work, education, health and political reasons. This is particularly the case in Africa and Asia where we find the massive linguistic diversity mentioned above. Publicity is also a significant challenge. By disseminating information about all aspects of the problem as widely as possible both within the speaker communities themselves and outside we can raise awareness of endangered languages inside and outside communities where they are spoken through all the available channels (see the list of Further Reading for some examples).

The last five years have seen a number of significant developments on all these fronts, including major initiatives in language documentation, policy making, international publicity, and language support, as well as emergence of grass-roots programmes. In 2000 the Volkswagen Stiftung initiated its DoBeS (Dokumentation der bedrohte Sprachen ‘documentation of endangered languages’) project and currently supports 40 teams of researchers across the world documenting, archiving and supporting endangered languages. Map 1 shows the research sites of the DoBeS project teams. In 2002 the Lisbet Rausing
Charitable Fund through a benefaction of £20million established an Endangered Languages Project at the School of Oriental and African Studies in London (see www.hrelp.org) that is currently funding 70 research project teams across the world. Map 2 shows the main locations where work is progressing. In addition, there is an Academic Programme at SOAS which trains post-graduate students in language documentation and support, and an Archiving Programme that is establishing a major digital archive repository of all the materials collected by the researchers and students. The SOAS project also publishes books, multimedia CD-ROMs, and trains and supports a wide range of researchers, students and community members. Other initiatives include the Documentation of Endangered Languages project of the National Science Foundation and the National Endowment for the Humanities in the United States, the Endangered Languages programme of the Netherlands Scientific Organisation, the Endangered Languages Fund (based in the US), the Foundation for Endangered Languages (based in the UK), and Unesco through its intangible cultural heritage and education work.

Scores of grass-roots community-based initiatives have also appeared in recent years, including many which draw upon the Maori and Hawaiian models, as well as master-apprentice schemes that team a fluent native speaker together with a younger language learner (see, for example, babel.uoregon.edu/nili/). Information technology is increasingly playing a role in these initiatives, with growing use of multimedia. In Australia, Aboriginal language centres that are run and operated by indigenous people are a major force in language documentation and support, especially in remote areas, while Tribal Colleges in the US and Canada take an active role in language education. Information sharing through regular workshops (such as the Breath of Life workshops in California) is also a feature of this kind of language documentation and revitalisation.

A case study from Australia that I have been involved with for over 30 years can illustrate how collaboration between outside specialists and community members can play a role in language survival. The Gamilaraay and Yuwaalaraay languages were traditionally spoken in the north-west of New South Wales, over a vast territory (see Map 3). In the 1850’s when Europeans began to settle in this region they were the main languages of the Aboriginal population, however by 1900 the language was in retreat. The Gamilaraay and Yuwaalaraay were driven off their land and exterminated, shot and poisoned. Their water holes and camping grounds were fouled, they died from infectious diseases brought by the settlers against which they had no immunity such as influenza, smallpox and venereal disease.
Reserves were established and the remnant populations forced together to live in squalid conditions where only English was allowed as the language in public. Children were taken from their parents and put into dormitories in schools away from the reservations under a policy of assimilation, resulting in what is now known as ‘the stolen generations’. These policies only ended in the 1970’s.

By the 1950’s, 100 years after first contact, Gamilaraay and Yuwaalaraay were private languages used only by old people in houses and in camps, while young people were all speaking English. When I first started working in this area in 1972, I encountered only semi-speakers and rememberers, and no fluent speakers remained. Most people with some knowledge of the language could only recall expressions their parents and grandparents had used. By combining their knowledge with recordings made in 1955 by Professor Stephen Wurm with the last fluent speakers, and early settler and missionary writings, it has been possible to document the core vocabulary and grammar of these languages (see Ash, Giacon and Lissarrague 2003).

In 1988 the bicentennial of the settlement of Australia prompted a major national discussion about the settlement process and the loss of Aboriginal languages and cultures. In 1992 the High Court Mabo judgement overturned the fiction that Australia was *terra nullius* ‘unoccupied land’ when claimed by the British Crown, and led to the restoration of some land rights to indigenous people. On the 10th December 1992 Prime Minister Paul Keating admitted: “We took the traditional lands and smashed the traditional way of life. We brought the disasters. The alcohol. We committed the murders. We took the children from their mothers. We practised discrimination and exclusion.” Interest in language and culture also accompanied these changed sentiments; a small dictionary of Gamilaraay that I published in 1992 was reprinted four times, such was the demand for copies. In 1993 I worked with the local Gamilaraay man, late Bill Reid, to develop materials and publicise language issues, and in 1995 David Nathan and I developed an online dictionary and thesaurus of Gamilaraay which was the first fully hypertext bilingual dictionary on the internet. This was launched after extensive community consultation and support and has been widely used. By 1994 local linguist John Giacon had helped to establish a language programme in primary school and adult education evening classes, and community-initiated meetings began to be held. In 2002-2003 a stream of language support materials was published including books and CDs with titles like *Gamilaraay-Yuwaalaraay Guwaaldanha Ngiyani* (we are speaking Gamilaraay-Yuwaalaraay), *Yaama Maliyaa* (Hello Friend), and *Yugal* (Gamilaraay and Yuwaalaraay...
Songs). The last of these includes pop music sung in the indigenous languages. Merchandise such as T-shirts with Gamilaraay words on them, and signage in schools was developed, extending the domains of the language and bringing it out into the public arena. After extensive lobbying, the New South Wales government approved teaching of Gamilaraay and Yuwaalaraay as Language Other Than English curriculum in primary and secondary schools, and in 2004 provided a significant injection of funds to develop more materials and curriculum. This recognition has assigned significant status to both the languages and the educational programmes.

Today Gamilaraay and Yuwaalaraay are in use in a school context, and have developed important iconic functions such as for music, greetings, and speech making at public events. Whether usage extends further remains to be seen, but it is clear that after a long period of neglect and almost certain death, the languages have undergone revival as a result of outside support, grass roots activity and official recognition.

There remain a number of urgent challenges for work on endangered languages. Recruitment, training and capacity building for language documentation and support are major obstacles to be overcome. SOAS has the only programme in the United Kingdom dedicated to training students for this kind of work, teaching them the methods of recording material in the field, analysing it, using computer software, producing multimedia CD-ROMs and websites, and so on. We currently have 25 students involved in the programme, but there are at least 3,000 languages that are in need of support. We need more such programmes internationally. Also, in my view, progress can be made only through community involvement, and achieving the right balance between knowledge and skills in multidisciplinary teams involving outsiders, insiders, community activists, government workers, anthropologists, linguists, scientists, and information technology specialists. We also need to further theorise documentation and language maintenance principles that have been emerging over the past ten year in order to better understand the theory and practice of these new areas. Finally, there is an urgent need to communicate with the linguistic community and the wider world about the state of languages and their futures. Unfortunately, one of the most difficult challenges for our work is the academic linguistic community, which has focussed on big languages, and on publishing books and articles that count towards research assessment and promotion, while multimedia and community-based projects count for little. It is imperative that judgements about what is considered important change before it is too late to act.
Finally, there is the task of raising consciousness among the general public and in endangered language communities, combatting the notion that monolingualism is a ‘natural state of affairs’ and that the world would be better off if only everyone else spoke the same. Multilingualism should be seen as a boon, not a problem. Speaking a language of wider communication can be achieved by adding to one’s linguistic repertoire, not by subtraction. It is only through progress on these measures that language endangerment can be confronted and we can assure the survival of languages.

**Further Reading**

There are a number of introductory books on endangered languages written for a general audience, and valuable materials available on the internet. The following is a selection.


**Gamilaraay materials**


Kamilaroi/Gamilaraay internet dictionary
http://coombs.anu.edu.au/WWWVLPages/AborigPages/LANG/GAMDICTION/GAMDICTION.HTM
Map 1: DoBeS projects
Map 2: ELDP-funded projects
Map 3: Location of Gamilaraay and Yuwaalaraay