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The world's languages in crisis: A 20-year update

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"The world's languages in crisis" (Krauss 1992), the great linguistic call to arms in the face of the looming language endangerment crisis, was first delivered in an Endangered Languages Symposium at the 1991 annual meeting of the Linguistic Society of America. Using the best available sources, he surveyed the global situation and estimated that only 10% of languages seem safe in the long term, up to 50% may already be moribund, and the remainder are in danger of becoming moribund by the end of this century. Twenty years later, better information is available. In this paper we use information from the latest edition of the Ethnologue (Lewis 2009), plus information being gathered for the next edition, to offer an update to the global statistics on language viability. Specifically the data for this study come from our work to estimate the level of every language on earth on the EGIDS or Expanded Graded Intergenerational Disruption Scale (Lewis and Simons 2010). Our finding is that at one extreme more than 70% of languages are extinct or moribund in Australia, Canada, and the United States, but at the other extreme less than 10% of languages are extinct or moribund in sub-Saharan Africa. Overall we find that 19% of the world's living languages are no longer being learned by children. We hypothesize that these radically different language endangerment outcomes are explained by Mufwene's (2002) observations concerning the effects of settlement colonization versus exploitation colonization on language ecologies. We also speculate that urbanization may have effects like settlement colonization and may thus pose the next great threat to minority languages.

1. Introduction

In 1991, Michael Krauss and others participated in a symposium on endangered languages at the annual meeting of the Linguistic Society of America. The compilation of the presentations at that symposium was published a year later in the journal of the society and constituted a call to arms for the linguistics

community in the face of the looming language endangerment crisis. Krauss (1992) has been the most cited of those who participated in the symposium and the striking warning regarding the potential demise of 90% of the world's extant languages has been referred to repeatedly though not always accurately. Using the statistics provided by the 11th edition of the *Ethnologue* (Grimes 1988) which Krauss identified as "by far the best single source available", along with corroborating "guesses" of others with whom he consulted, Krauss estimated in 1991 that only 10% of the world's languages were safe for the longer term, that 50% might, at that time, be already moribund, and that the remainder might also become moribund by the end of the 21st century.

Since that time, linguists, anthropologists, language activists, and speaker communities themselves have become increasingly focused on the issue of language endangerment. As the organizers of a recent conference on language endangerment, FEL XV, in Quito, Ecuador, have observed, "Language endangerment is now accepted as an important issue of our times..." (Haboud and Ostler 2011:vi). Numerous publications on the topic have been produced and awareness of the potential for the catastrophic loss of linguistic diversity has reached new heights sparking considerable interest not only among scholars and practitioners but among the broader public as well.

Krauss noted in his LSA presentation that "statistics on language viability are very hard to come by" (Krauss 1992:4) and in many respects that continues to be the case 20 years later. In the intervening years *Ethnologue* has continued to collect and publish data on language vitality, much of which is dated and somewhat idiosyncratic in nature. In the most recent edition of *Ethnologue* (Lewis 2009), serious efforts were made to adjust the categorization scheme used in order to recognize the advent of language revitalization efforts by including a new vitality category, "Dormant", in addition to the previously used Active, Nearly Extinct, Second Language Only, and Extinct labels. This was a small step towards being able to report more accurately the state of vitality of the languages of the world. Nevertheless, the statistical profile of language vitality remained difficult to specify with any certainty because of the reporting delays inherent in the research and data gathering processes, but more significantly because of the lack of a feasible common metric with sufficient precision and granularity by which to assess vitality and endangerment (see for example, Lewis 2006, 2008).

In the next edition of *Ethnologue* (17th edition, forthcoming in 2013), we will make significant strides in addressing the lack of statistics on language vitality by, for the first time, providing an estimate of relative safety versus endangerment for every language on earth. This advance is made possible by the introduction and large-scale implementation of the Expanded Graded Intergenerational Disruption Scale (EGIDS) (Lewis and Simons 2010).

2. Methodology

2.1 Expanded Graded Intergenerational Disruption Scale (EGIDS)

The EGIDS builds on the Graded Intergenerational Disruption Scale (GIDS), an 8-level scale that Fishman (1991) developed in order to describe and explain stages in reversing language shift as efforts are made to turn threatened languages into safe ones. The GIDS is well elaborated on the safe end of the scale but has only two levels on the endangered end. By contrast, the Language Vitality and Endangerment (LVE) scale developed by the UNESCO Experts Meeting on Safeguarding Endangered Languages (Brenzinger et al. 2003) identifies four levels of endangerment, but does not distinguish different levels on the safe end of the scale. We have developed the EGIDS by harmonizing the GIDS and the LVE, the two most broadly implemented and widely known vitality measures, to form a 13-level scale which recognizes more comprehensively different degrees of vitality over the entire range of the vitality-endangerment continuum.

The basic premise of GIDS is that language shift (ending in language death) happens as a language loses functions in society. To reverse language shift, the community must work to bring those functions back. To guard against future shift, the community can work to add new functions that further strengthen the position of the language. The bulk of Fishman's book consists of case studies describing situations in which this has happened. The magnitude of the numbers in the scale notwithstanding, it has been conventional to view the strongest languages (those with the least disruption and thus the lowest numbers) as being at the top of the scale and the weakest languages (those with the highest levels of intergenerational disruption) as being at the bottom (e.g., Fishman 2001:466). Thus the basic premise of GIDs can be visually summarized as shown in Figure 1.

Insert Figure 1 about here

The *Ethnologue* (Lewis 2009) is a comprehensive catalog of all known living and recently extinct languages of the world. It gives a basic description of the location and situation of every language listed. In planning for the next edition we wanted to provide an estimate for each language as to where it stands on the GIDS scale. When planning for this, however, we encountered the following issues:

- In order to have a level for every language, we needed to add extinct languages at the bottom of the scale, and in so doing we wanted to keep the *Ethnologue* distinction between dormant languages (which have no fluent speakers but still have an identificational function within an ethnic community) and truly extinct languages (which have no function within any living ethnic community).
- We observed that in this age of globalization, even official national languages are beginning to feel threatened by the languages of globalization; note, for example, the response of language planners in Sweden in the face of increasing widespread English use (Hult 2005). We have thus added a new level for international languages at the top of the scale.
- Language endangerment is a huge issue in the world today, but GIDS distinguishes only two levels of endangerment: level 7 in which there is active use of the language but only among adults and level 8 in which the only remaining speakers are "socially isolated old folks" (Fishman 1991:88). We felt that the users of *Ethnologue* would be better served by a scale that harmonized with the four levels of endangerment recognized in the UNESCO *Atlas of the World's Languages*

in Danger (Moseley 2010) which is largely based on UNESCO's vitality assessment framework, Linguistic Vitality and Endangerment (Brenzinger et al. 2003).

• We wanted to add names for the levels, rather than referring to them only by number.

The result is a 13-level scale that we have dubbed EGIDS, for Expanded GIDS (Lewis and Simons 2010). Figure 2 shows the entire scale with a definition for each level. It should be noted that while the scale shown in figure 2 is congruent with the originally published version, it is not identical; we have been refining the names and definitions of the levels in response to feedback received from users of the scale. In particular, the labels for levels 2 and 3 have been changed in order to align better with the terminology for those language functions identified by William Stewart (1968). The final column of the table gives the corresponding category from the UNESCO language vitality and endangerment (LVE) scale (Brenzinger et al. 2003).

Insert Figure 2 about here

We have retained Fishman's numbering for levels that have an equivalent in GIDS and have used *a* and *b* modifiers to indicate where we have split his levels. Many have suggested that the levels should simply be renumbered from 1 to 13. However, we feel that it is important to preserve the underlying numbering scheme of the GIDS for the sake of compatibility with twenty years of prior scholarship and for the face validity that is inherent in following an established standard.

2.2 Generating an EGIDS estimate for every language

We have come up with an initial EGIDS estimates for each of the 7,370 languages (living and extinct) now tracked in the *Ethnologue* database. An initial estimate for every language was made based on information already available in *Ethnologue* (Lewis 2009) and then augmented by data from the *Atlas of the World's Languages in Danger* (Moseley 2010). These estimates were then submitted for review and

correction to the *Ethnologue*'s network of field contributors. This section describes the methodology in greater detail.

The initial EGIDS evaluation was done by inspecting the *Ethnologue* database. In doing this evaluation a distinction was made between indicators that a language may be safe (that is, levels 6a and higher) versus indicators that a language is threatened or endangered (that is, levels 6b and lower). Where both kinds of indicators are present, we gave highest priority to the indicators of threat or endangerment. For instance, a language with published literature was assigned to level 6b rather than 5 if a significant proportion of children are not learning the language. The indicators of threat and endangerment were as follows:

- If the percentage of the ethnic population who are speakers of the language is less than 20%, the language was assigned EGIDS level 7; if more than 20% but less than 80%, then EGIDS 6b was assigned.
- If the description of reported L1 use begins with the words "Moderate" or contains the word "vigorous", but that is qualified in some way (e.g. "in some", "in many", "most", "in a few", "among adults"), the language was assigned EGIDS level 6b.
- For over 1,700 languages there is a statement of speaker age range. These comments were translated to the most likely EGIDS equivalent; for instance, "All ages" to EGIDS 6a, "Some children" to EGIDS 6b, "Adults only" to EGIDS 7, "Speakers 50 and older" to EGIDS 8a, and "Elderly only" to EGIDS 8b.
- The *Ethnologue*'s general vitality categories, "Nearly Extinct", "Second Language Only", and "Extinct" were mapped to EGIDS 8b, EGIDS 9, and EGIDS 10 respectively. This resulted in a few anomalous cases, such as the liturgical languages, Latin, Old Church Slavonic, etc., which required case by case evaluations.

The following are the indicators that were used to assign languages to one of the safe levels of 6a or above. When more than one of these indicators was found in an *Ethnologue* entry, then the level assigned was the highest for which there was an indicator.

- If the percentage of the ethnic population who are speakers of the language is at least 90%, the language was assigned EGIDS level 6a.
- If the description of reported L1 use begins with the words "Vigorous", "Vital", "Good vitality" or "Very high", the language was assigned EGIDS level 6a.
- If it is reported that Language Development includes "Newspapers" or "Magazines" or "Textbooks", then the language was assigned EGIDS level 4. If these are lacking, but other forms of literature are reported (such as Bible translations), then the language was assigned EGIDS level 5.
- If it is reported that the language is in general use in schools or taught as a subject in elementary or secondary education, the language was assigned EGIDS level 4.
- If the language is reported to function as an official national language, it was assigned EGIDS level 1. If the language is reported to function as an official language at a lower geopolitical level, it was assigned EGIDS level 2. Languages reported to function as trade languages were assigned EGIDS level 3, and languages reported to have official recognition as languages of literacy were assigned EGIDS level 4.
- The six official languages of the UN (Arabic, Chinese, English, French, Russian, Spanish) were assigned EGIDS level 0.

If the reporting of L1 language use in the previous editions of *Ethnologue* already included an estimate of the language's vitality using Fishman's GIDS, these evaluations were taken as the

corresponding EGIDS evaluation. Where EGIDS makes a more precise evaluation than the GIDS (e.g., 6a/6b or 8a/8b), these were reviewed and updated.

When the above process yielded no indicators for a given language, we consulted UNESCO's *Atlas of the World's Languages in Danger* (Moseley 2010) to see if the language was identified in that work as being in danger. If it was, we followed the assessment in the *Atlas* to give an initial estimate of the EGIDS level by mapping Threatened to level 6b, Definitely Endangered to level 7, Severely Endangered to level 8a, Critically Endangered to level 8b, and Extinct to level 10.

After the above steps, approximately one-third of the languages still remained with no estimate of the EGIDS level. In these cases we assigned EGIDS level 6a (Vigorous Oral Use) as the default. This follows Fishman's (1991:92) assertion that "the lion's share" of the world's languages are at GIDS 6. This conservative approach undoubtedly paints a rosier picture than is actually the case. In particular, we suspect that many of the languages that have defaulted to 6a would more properly be assigned to 6b, but we are lacking the information to make that distinction. However, we have every expectation and hope that where the evaluations are significantly in error, corrections will be forthcoming as part of an ongoing process of review. Indeed, in a few cases, our country reviewers have observed that 6b would be a more fitting default in that country, so we have made that adjustment.

As the final step in our process, the results of these investigations were sent to the network of *Ethnologue* contributors and collaborators around the world along with guidelines for determining an EGIDS level. Forty-three correspondents, each of whom helps to monitor one or more countries of the world, were asked to review the proposed EGIDS estimates for their countries of focus and to make corrections based on their local and more detailed knowledge. At the time of writing, data have been returned for 84% of the languages tracked by *Ethnologue* and the corrections have been entered into the database. Though the review is not yet completed, the analysis presented here is based on the entire database using our initial estimates for the 16% of languages for which review is still pending.

A final note on methodology is in order. The unit of reporting in *Ethnologue* is the "language in country". That is, each entry in the *Ethnologue* describes the situation of a given language in a particular country. Thus our estimates of the EGIDS level for a language are on a country by country basis. It is these country-specific estimates that are being reviewed and corrected. For the analysis below, we are reporting the EGIDS level for the language as a whole. Our method for this is not to take an average of all countries, but to report the highest level (that is, most safe) for any country. The logic here is that if the EGIDS level of a language is taken as a predictor of its likely longevity, then its longevity will be determined by where it is the strongest.

3. Results

3.1 A preliminary analysis of the state of the world's languages

The data we have collected represent the first fully comprehensive quantitative analysis of the state of vitality of the world's languages. While much of these data should be considered preliminary, the profiles of language vitality that emerge from this analysis can provide us, for the first time, with a baseline from which trends and patterns can be traced over time as the use of the EGIDS as a metric of ethnolinguistic vitality continues and is refined. Analyses such as that done by Krauss in 1991 were necessarily sketchy and impressionistic because the state of our knowledge at that time, even using "the best source available" was not adequate to the task. We have much greater confidence that the EGIDS can serve as a tool that is feasible to use on a global scale and that provides a better level of granularity and precision than other options that have been developed to date.

3.2 Global results

We start by looking at the global statistics for the distribution of the world's languages by EGIDS levels. Figure 3 shows a histogram of how the languages are distributed by level.

Insert Figure 3 about here

Table 1 shows the numbers that lie behind the graph, both as counts and percentages. The total number of languages (7,370) represents all the living languages listed in the 2012 update of the ISO 639-3 standard (ISO 2007), plus the languages listed in the standard that have gone extinct since 1950.

Insert Table 1 about here

The most striking feature of this distribution is the preponderance of languages at EGIDS level 6a. Globally, 3,004 of the languages of the world are characterized by vigorous oral use. This confirms, in large measure, Fishman's assertion concerning "the lion's share" of languages, though we must keep in mind that the conservative policies and procedures we've adopted also bias the results towards EGIDS level 6a. Nevertheless, with these statistics in place as a baseline, we are in a better position to see if Fishman's claim holds true as further investigation refines and improves the evaluations.

When the EGIDS level 6a count is combined with the languages at higher, stronger levels (EGIDS 0 - 5), we see that 4,867 of the 7,370 languages of the world (66%) are still being passed on to the next generation in a sustainable way. In the discussion which follows, we refer to this group of languages as "vital" languages. In contrast, 1,342 (18%) of the languages of the world are "in trouble" (EGIDS 6b, 7). In these languages the norm of complete intergenerational transmission is no longer in effect, but members of the child-bearing generation are still fully proficient in the language so that it would still be possible for a successful revitalization effort to restore intergenerational transmission. Finally, an additional 1,161 (16%) of languages are "dead or dying" (EGIDS 8a – 10) since it is too late to restore natural parent-to-child transmission.

Among the dead and dying languages are 353 (5%) that have been identified as having lost all living speakers and ceasing to serve as a language of identity for an ethnic community (EGIDS 10) in the last six decades. The loss of linguistic diversity represented by the loss of these individual languages is even more staggering if viewed from the perspective of language families. Whalen and Simons (2012)

show that with the loss of these languages, we have lost 15% of the linguistic stocks (the largest subgroups of related languages that are reconstructable) that had at least one living member in 1950.

Alarmingly, 2,150 (29%) living languages all around the world are currently at some stage in the process of language loss (EGIDS 6b - 9). That is more than the number of languages (1,863, 25%) that have experienced enough language development (EGIDS 0 - 5) to rise above the default stage of vigorous oral use (EGIDS 6a).

3.3 Results by geographical regions

The above global statistics give a sense of the scale of the language endangerment crisis, but they mask the fact that the situation may differ radically from one part of the world to another. To better give a sense of what is happening throughout the world, we present results from our EGIDS survey for each of the 22 geographical regions into which the United Nations divides the world for the purposes of its reporting (United Nations Statistics Division 2011). Each language occurs only once in the regional statistics. Thus when a language is used in multiple regions, we have counted it with the region in which its primary country (as identified in the *Ethnologue*) is located.

Table 2 provides data on the number of languages in each region according to the three summary categories of "Vital" (EGIDS 0 - 6a), "In Trouble" (EGIDS 6b - 7), and "Dead or Dying" (EGIDS 8a - 10). The areas are ranked from most to least by the number of dead or dying languages. The top of the table thus shows the regions that have been most heavily impacted by the language endangerment crisis.

Insert Table 2 about here

Heading the list is Australia and New Zealand with 216 dead and dying languages. Next come South America (200), Northern America (160), South-Eastern Asia (129), and Melanesia (80). (Northern America, as distinct from North America, comprises just Canada and the United States.) With 785 out of the total of 1,161, these five regions account for over two-thirds of the dead and dying languages in the world.

Table 3 presents the same data in a different way. The counts are converted to percentages and the regions are ranked from most to least by the percentage of vital languages. In this listing, Northern America assumes the bottom position with only 6% vital languages. Then come Australia and New Zealand (14%) and South America (39%). These three regions also have the highest percentages of dead and dying languages (61%, 70%, and 38%, respectively).

Insert Table 3 about here

Topping the list in table 3 as the part of the world least impacted by language endangerment is sub-Saharan Africa in which the three regions of Western, Eastern and Middle Africa all have more than 80% of their languages in the vital category. Interestingly Melanesia (which ranked fifth in terms of most dead and dying languages) ranks fourth in this list with 80% vital languages, due to the large number of vital languages in Papua New Guinea.

Tables 2 and 3 make it clear that the language endangerment story is very different in different parts of the world. In Australia and the Americas, the crisis has been running its course with devastating consequences, while in sub-Saharan Africa it has yet to hit the radar screen as a crisis. Throughout Asia, Europe, and other regions of the Pacific the situation is between these extremes, but tends much more toward the vital than the dying.

4. Discussion

4.1 Krauss's warning: Is it coming true?

Our findings show that Krauss's estimate in 1992 that 50% of languages were doomed or dying was too dire. With very incomplete data, he sought to estimate the percentage of languages that were no longer

being passed down from parents to their children. He noted that "the Grimeses themselves [editors of the *Ethnologue* at that time] might agree that as many as 20% of the world's languages are already moribund. However, two other linguists with wide experience have both independently guessed, along with me, that the total may be more like 50%" (Krauss 1992:6). Twenty years later we have, for the first time, vitality estimates for all the world's languages. Our finding is that out of 7,017 living languages, 1,310 (or 19%) are not being learned by children (EGIDS 7 - 9).

His predictions were certainly on track in those regions where language shift and loss are most extreme. Working with the data he had, and from his experience largely in Northern America, Krauss's pessimistic predictions are understandable. Indeed, our current data indicate that 79% of the languages of Northern America are either already extinct or are moribund (EGIDS 7 - 10), as are 74% in Australia and New Zealand. Three other regions approach the 50% level: South America (47%), Polynesia (47%), and Western Asia (41%).

For the other 16 regions in the world, the proportion of languages that are already extinct or moribund ranges from 31% down to 8%. The language ecologies in other parts of the world are considerably different from the situations in the Americas and Australia. This in no way diminishes the relevance of Krauss's warning since there are minority languages under threat in all parts of the world. However, on a global scale the threat does not yet reach the level suggested by Krauss. The greater scope and refinement provided by the global EGIDS data gives us a more nuanced understanding and, hopefully, the ability to respond to each situation more strategically and appropriately.

4.2 Mufwene's colonization types: A possible explanation

Extrapolating from what was already evident in Australia and the Americas, Krauss considered it to be "a plausible calculation that—at the rate things are going—the coming century will see either the death or the doom of 90% of mankind's languages" (Krauss 1992:7). But the global evidence does not seem to be bearing this out. Was it a plausible extrapolation? We believe that the work of Salikoko Mufwene offers an explanation as to why it was not.

Mufwene (2002) has proposed that the outcomes of language contact correspond in great measure to the pattern of colonization which was predominant in that part of the world. He has identified three colonization types: trade, exploitation, and settlement. His proposal, very briefly stated, is that "Each colonisation style has determined particular patterns of interaction between the colonisers and the indigenous populations as well as the particular kind of economic structure that is now in place" (Mufwene 2002:168). In terms of the dynamics of language maintenance and shift, Mufwene asserts that "European colonial languages have endangered other languages, or driven them to extinction, typically in settlement colonies, not in exploitation nor in trade colonies." (Mufwene 2002:168)

Mufwene identifies trade contact as the earliest colonization type to emerge. In this pattern of contact, there was occasional language contact as ships periodically called in at ports of call to collect trade goods. Contact languages emerged for conducting business, but contact was not prolonged and did not lead to language shift. "No significant language loss has so far been associated with trade colonisation, even when trade was abused to enslave and deport some of the indigenous populations." (Mufwene 2002:169)

In contrast to trade colonization, exploitation colonization involved prolonged language contact and thus had very different results. Exploitation colonies involved on-going residence by Europeans in plantations or trading centers, but they did not come in large numbers nor did they settle permanently. As Mufwene explains it:

Very few colonisers planned or decided to build new homes in the exploitation colonies. As the term exploitation colony suggests, these colonies were intended to be exploited for the enrichment of the European metropole. (Mufwene 2002:171)

The outcome of this kind of contact has resulted more often in the maintenance and retention of local languages and the addition of the colonizers language as a second language in the repertoire of those who were colonized.

Settlement colonization involved even deeper contact and more profound language shift. In settlement colonies, Europeans came in large numbers, bringing their families to establish a new life in a new land. Mufwene describes these language contact dynamics in this way: "The nature of regular interactions among different populations in these new [settlement] colonies often led to protracted competition and selection among the languages and dialects they brought with them, leading to shifts from some to others and to the loss of several of them, as well as to the emergence of new language varieties typically lexified by European languages." (Mufwene 2002:169)

The marked pattern of language shift that has become the predominant explanation of language endangerment is the after effect of the settlement pattern of colonization:

Especially noteworthy about settlement colonies is the fact that they gradually produced local or regional monolingualism, favouring the language of the colonising nation but dooming to extinction the languages brought by the Africans (who were first to lose theirs, as explained below) and Europeans originating from countries other than the colonising one (the case of Gaelic/Irish, German, Italian, French, Dutch and Swedish in North America, except in Quebec and Ontario). Native Americans lost their languages either because they were decimated by diseases and wars, or because they were forced to relocate to places where they could not continue to speak their languages, or because they eventually got to function in the new, European-style economic world order which imposed a new language of business and industry. Unlike trade colonies, settlement colonies everywhere gradually evolved to some form of economic (and social) integration that has endangered languages other than those of the colonising European nation, or one adopted by it. (Mufwene 2002:169)

On general inspection of the results in tables 2 and 3, Mufwene's proposal seems quite plausible. The places where language loss has been the most profound—Australia, Canada, and the United States are also places where virtually all of the land was settled by the colonizers, thus displacing the indigenous inhabitants. By contrast, the regions of sub-Saharan Africa and Melanesia, where language loss has been minimal by comparison, were not settled by the colonizers, but were only exploited for the benefit of the home country. Thus it is plausible, and is being argued by some (Bagamba and Boone 2011, Landweer 2012, Landweer and Unseth 2012), that in these regions we would not expect to see the kind of language loss predicted by Krauss, since his prediction is based on an extrapolation of the outcome in regions that were dominated by settlement colonization. A correlation analysis of the colonization patterns that were typical of particular regions or countries with the profile of current EGIDS estimates for the languages in each context could be done to develop concrete evidence that could support Mufwene's hypotheses.

4.3 Urbanization: The next big threat?

Global politics have changed dramatically over the past century with the result that settlement colonization no longer poses much threat of causing new language endangerment in the future. But that is not to say that minority languages are now safe. They are facing a very real threat in this century from a fourth pattern of economic contact with the external world, namely, urbanization. For this reason, linguists should still be giving heed to the warning given by Krauss.

The dynamics of extended contact in urban settings seem similar to those described by Mufwene for the settlement colonization pattern. We would thus expect similar outcomes. Interestingly, the power dynamics and the process of contact in urbanization is the reverse of what it is for settlement. In settlement colonization, more powerful outsiders moved in and pushed local residents off their land against their will. In urbanization, the less powerful are willingly leaving their ancestral territories and being pulled into urban centers where they are brought into extensive contact not only with the more powerful but with many others who are equally disempowered. The need to acquire proficiency in the dominant languages of the urban centers is posing a new threat to the vitality of minority languages as large numbers of people are moving from rural to urban areas. Given the UN estimate that from 2007 to 2050 the global proportion of urban population will increase from 49% to 70% (United Nations 2008), we can anticipate that the pressures on minority language speakers toward language shift will only increase in the coming decades. It would behoove the linguistics community to give more attention to understanding the mechanisms of language maintenance versus language loss in the context of urbanization.

5. Conclusions

Krauss's "call to arms" in 1992 has mobilized many both inside and outside of minority language communities to engage in activities aimed at preserving endangered languages and cultures. Krauss's analysis, based on the best evidence available at the time, has been shown to be largely accurate for the parts of the world he and his correspondents were most familiar with (Northern America and Australia), but overall represents an overly pessimistic representation of the state of the languages of the world based on our analysis 20 years later.

The development and global implementation of the Expanded Graded Intergenerational Disruption Scale (EGIDS) enables us to have a much better view of the endangerment situation. While the areas of greatest language endangerment remain, the global analysis reveals that there are parts of the world in which language maintenance is far more prevalent than language loss.

This analysis has enabled us to confirm that, as Fishman predicted, the largest number, fully twothirds, of the languages of the world are safely maintained in everyday oral use in their communities (EGIDS 6a) or are at a stronger level of development and recognition (EGIDS 0 - 5). Nevertheless, the statistics also reveal that 29% of the world's languages are in some stage of loss or shift (EGIDS 6b - 9). Most tellingly, this is more languages than the 25% that are in some stage of development beyond oral use alone (EGIDS 0 - 5).

This analysis is preliminary since it is based on early results from our first attempt to estimate the status of every language on earth for inclusion in the next edition of *Ethnologue*. However, we trust that the results are adequate to begin serving as a baseline for future studies. As additional data on undocumented languages are gathered and as the existing EGIDS estimates are refined and improved, we expect that a much sharper image of the state of the world's languages will emerge. This improved understanding has potential to serve both scholars and members of endangered language communities alike.

References

- Bagamba, Araali & Douglas Boone. 2011. Challenges to applying the EGIDS in north-eastern Democratic Republic of Congo. Paper presented at American Association for Applied Linguistics, Annual Meeting. Chicago, IL.
- Brenzinger, Matthias, Akira Yamamoto, Noriko Aikawa, Dimitri Koundiouba, Anahit Minasyan,
 Arienne Dwyer, Colette Grinevald, Michael Krauss, Osahito Miyaoka, Osamu Sakiyama, Rieks
 Smeets & Ofelia Zepeda. 2003. Language vitality and endangerment. Paris: UNESCO Ad Hoc
 Expert Group Meeting on Endangered Languages

Fishman, Joshua A. 1991. Reversing language shift. Clevedon, UK: Multilingual Matters Ltd.

- Fishman, Joshua A. (ed.) 2001. Can threatened languages be saved? Reversing language shift, revisited:A 21st century perspective. Multilingual Matters 116. Clevedon, UK: Multilingual Matters Ltd.
- Grimes, Barbara F. (ed.) 1988. Ethnologue: Languages of the world, 11th edn. Dallas, Texas: SIL International.
- Haboud, Marleen & Nicholas Ostler (eds.) 2011. Endangered Languages: Voices and Images. Foundation for Endangered Languages XV Annual International Conference. Pontificia Universidad Católica del Ecuador, Quito, Ecuador.
- Hult, Francis M. 2005. A case of prestige and status planning: Swedish and English in Sweden. Current Issues in Language Planning. 6(1). 73–79.

```
ISO. 2007. ISO 639-3:2007: Codes for the representation of names of languages — Part 3: Alpha-3 code
for comprehensive coverage of languages.
http://www.iso.org/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=39534.
Registration authority: http://www.sil.org/iso639-3/ (15 April, 2012).
```

Krauss, Michael. 1992. The world's languages in crisis. Language. 68(1). 4–10.

- Landweer, M. Lynn. 2012. Methods of language endangerment research: a perspective from Melanesia. International Journal of the Sociology of Language. 214(2012). 153--178.
- Landweer, M. Lynn & Peter Unseth. 2012. An introduction to language use in Melanesia. International Journal of the Sociology of Language. 214(2012). 1–3.
- Lewis, M. Paul. 2006. Towards a categorization of endangerment of the world's languages. http://www.sil.org/silewp/abstract.asp?ref=2006-002.
- Lewis, M. Paul. 2008. Evaluating endangerment: Proposed metadata and implementation. In King, Kendall, Natalie Schilling-Estes, Lyn Fogle, Jia Lou & Barbara Soukup (eds.), Sustaining linguistic diversity: Endangered and minority languages and language varieties 35–49.
 Washington, DC: Georgetown University Press.
- Lewis, M. Paul (ed.) 2009. Ethnologue: Languages of the world, 16th edn. Dallas: SIL International.
- Lewis, M. Paul & Gary F. Simons. 2010. Assessing endangerment: Expanding Fishman's GIDS. Revue Roumaine de Linguistique. 55(2). 103–120. http://www.lingv.ro/resources/scm_images/RRL-02-2010-Lewis.pdf.
- Moseley, Christopher. 2010. Atlas of the world's languages in danger, 3rd edn. Paris: UNESCO Publishing.
- Mufwene, Salikoko S. 2002. Colonisation, globalisation, and the future of languages in the twenty-first century. vol. 4. IJMS: International Journal on Multicultural Societies. 162–193.
- Stewart, William A. 1968. A sociolinguistic typology for describing national multilingualism. In Fishman, Joshua A. (ed.), Readings in the Sociology of Language. 530–553. The Hague: Mouton.

- United Nations. 2008. World Urbanization Prospects. The 2007 Revision. New York. http://www.un.org/esa/population/publications/wup2007/2007WUP_ExecSum_web.pdf (20 April 2012).
- United Nations Statistics Division. 2011. Composition of macro geographical (continental) regions, geographical sub-regions, and selected economic and other groupings. http://unstats.un.org/unsd/methods/m49/m49regin.htm (19 April, 2012).

Whalen, Douglas. H. & Gary F. Simons. 2012. Endangered language families. Language. 88(1). 155–173.

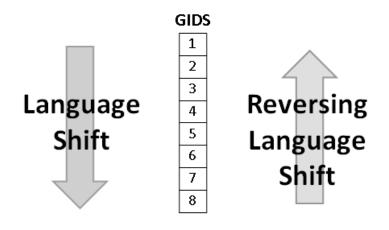


Figure 1: The basic premise of GIDS (Fishman 1991)

Level	Label	Description	UNESCO
0	International	The language is widely used between nations in trade, knowledge exchange, and international policy.	Safe
1	National	The language is used in education, work, mass media, and government at the nationwide level.	Safe
2	Provincial	The language is used in education, work, mass media, and government within official administrative subdivisions of a nation.	Safe
3	Wider Communication	The language is widely used in work and mass media without official status to transcend language differences across a region.	Safe
4	Educational	The language is in vigorous oral use and this is reinforced by sustainable transmission of literacy in the language in formal education.	Safe
5	Developing	The language is vigorous and is being used in written form in parts of the community though literacy is not yet sustainable.	Safe
ба	Vigorous	The language is used orally by all generations and the situation is sustainable.	Safe
6b	Threatened	The language is still used orally within all generations but there is a significant threat to sustainability because at least one of the conditions for sustainable oral use is lacking.	Vulnerable
7	Shifting	The child-bearing generation can use the language among themselves but they do not normally transmit it to their children.	Definitely Endangered
8a	Moribund	The only remaining active speakers of the language are members of the grandparent generation.	Severely Endangered
8b	Nearly Extinct	The only remaining speakers of the language are elderly and have little opportunity to use the language.	Critically Endangered
9	Dormant	There are no fully proficient speakers, but some symbolic use remains as a reminder of heritage identity for an ethnic community.	Extinct
10	Extinct	No one retains a sense of ethnic identity associated with the language, even for symbolic purposes.	Extinct

Figure 2: Expanded Graded Intergenerational Disruption Scale

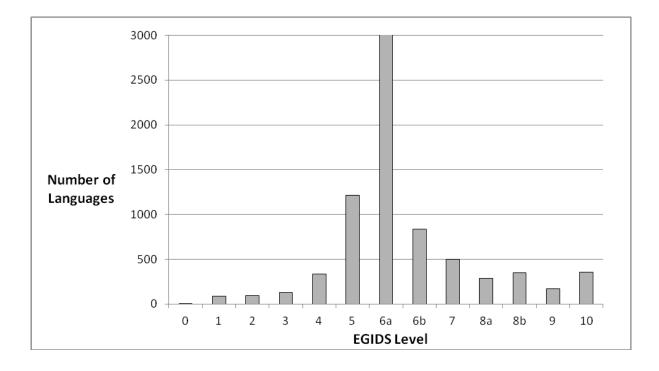


Figure 3: Global distribution of languages by EGIDS level

EGIDS Level	Languages	Per cent
0 (International)	6	0.1%
1 (National)	87	1.2%
2 (Provincial)	95	1.3%
3 (Wider communication)	129	1.8%
4 (Educational)	334	4.5%
5 (Developing)	1212	16.4%
6a (Vigorous)	3004	40.8%
6b (Threatened)	840	11.4%
7 (Shifting)	502	6.8%
8a (Moribund)	284	3.9%
8b (Nearly extinct)	352	4.8%
9 (Dormant)	172	2.3%
10 (Extinct)	353	4.8%
Total	7370	100%

 Table 1: Global distribution of languages by EGIDS level

Region	Total Languages	Vital	In Trouble	Dead or Dying
Australia and New Zealand	307	43	48	216
South America	523	205	118	200
Northern America	264	17	87	160
South-Eastern Asia	1,276	781	366	129
Melanesia	1,068	854	134	80
Western Africa	889	795	35	59
Middle Africa	690	560	72	58
Central America	331	216	71	44
Southern Asia	679	514	122	43
Eastern Asia	286	138	113	35
Eastern Europe	122	65	24	33
Northern Africa	153	100	23	30
Eastern Africa	387	316	52	19
Western Asia	92	45	32	15
Southern Africa	52	39	3	10
Southern Europe	65	46	11	8
Northern Europe	50	37	6	7
Western Europe	53	40	7	6
Caribbean	23	18	1	4
Micronesia	27	20	4	3
Central Asia	14	9	3	2
Polynesia	19	9	10	0
Totals	7,370	4,867	1,342	1,161

Table 2: Geographic regions by number of dead or dying languages (most to least)

Region	% Vital	% In Trouble	% Dead or Dying
Western Africa	89%	4%	7%
Eastern Africa	82%	13%	5%
Middle Africa	81%	10%	8%
Melanesia	80%	13%	7%
Caribbean	78%	4%	17%
Southern Asia	76%	18%	6%
Western Europe	75%	13%	11%
Southern Africa	75%	6%	19%
Micronesia	74%	15%	11%
Northern Europe	74%	12%	14%
Southern Europe	71%	17%	12%
Northern Africa	65%	15%	20%
Central America	65%	21%	13%
Central Asia	64%	21%	14%
South-Eastern Asia	61%	29%	10%
Eastern Europe	53%	20%	27%
Western Asia	49%	35%	16%
Eastern Asia	48%	40%	12%
Polynesia	47%	53%	0%
South America	39%	23%	38%
Australia and New Zealand	14%	16%	70%
Northern America	6%	33%	61%

Table 3: Geographic regions by percentage of vital languages (most to least)