



Science Panel for the Amazon (SPA)

Working Group IV

PEOPLES OF THE AMAZON

Lead Authors: Simone Athayde and Daniel Larrea

LANGUAGES OF THE AMAZON: DIMENSIONS OF DIVERSITY

Lead Authors of Chapter: Carolina Rodríguez Alza and Hein van der Voort

Contributing Authors: Crevels, Mily and Swanson, Tod Dillon

[Draft version. Please do not cite.]

Chapter 12

LANGUAGES OF THE AMAZON: DIMENSIONS OF DIVERSITY

*van der Voort, Hein*¹; *Rodríguez Alza, Carolina*²; *Swanson, Tod Dillon*³; *Crevels, Mily*⁴

1 Museu Paraense Emílio Goeldi (Brazil)

2 Pontificia Universidad Católica del Perú (Peru)

3 Arizona State University (USA)

4 Universiteit Leiden (the Netherlands)

Chapter 12

ACRONYMS AND ABBREVIATIONS:

DNEIB: National Direction of Intercultural Bilingual Education in Ecuador

MINEDU: Ministry of Education

SIL: Summer Institute of Linguistics

UNESCO: United Nations Educational, Scientific and Cultural Organization

INDEX

1. KEY MESSAGES	i
2. ABSTRACT	II
3. GRAPHICAL ABSTRACT	III
1. INTRODUCTION	1
2. LINGUISTIC DIVERSITY	1
3. THE EMERGENCE OF GENEALOGICAL LANGUAGE DIVERSITY	2
4. LANGUAGE DIVERSIFICATION AND CHANGE THROUGH CONTACT	6
5. LANGUAGE VARIATION	8
6. LANGUAGE VITALITY AND ENDANGERMENT	9
7. OFFICIAL POLICIES SUPPORTING LANGUAGE MAINTENANCE	12
8. DOCUMENTATION	14
9. DRIVERS OF CHANGE: SOME EXAMPLES	14
10. WHAT EXACTLY IS BEING LOST?	21
11. IMPORTANCE OF INDIGENOUS LANGUAGES IN NEW CONTEXTS	23
12. CONCLUSIONS	25
13. RECOMMENDATIONS	26
14. REFERENCES	27
15. CORE LINGUISTIC GLOSSARY	31

Chapter 12

1. KEY MESSAGES

- One of the most important dimensions of the linguistic diversity of the Amazon region is its genealogical diversity. With respect to language families and isolates, Amazonia is one of the richest parts of the world, and this diversity is not coincidentally mirrored by Amazonian biodiversity. Most Amazonian languages are in danger of extinction, whereas few have been sufficiently documented and studied.
- Each language represents the heritage of centuries of cultural and intellectual creativity that holds scientific and cultural value for humanity as a whole. With the loss of each culture and each language, humanity loses yet another alternative and possibly unique way to understand the world.
- All languages and cultures are permanently subject to change, and all are capable of adapting to new circumstances. However, since the arrival of Europeans five centuries ago, the Amazon region has lost 75% of its languages (Aikhenvald 2012, Rodrigues 1993). The disappearance of linguistic diversity in the Amazon, disintegration of Indigenous societies, extinction of biological species, and destruction of Amazonian ecosystems are part of one and the same problem.
- Important components of a solution to the language extinction problem are promotion of bilingualism, recognition of Indigenous rights, the protection of Indigenous lands, and sustainable economic alternatives to uncontrolled deforestation and mineral prospecting.
- The Indigenous peoples themselves are taking advantage of the growing connectivity throughout Amazonia and are developing solutions by exploring new domains for language use such as social media, in which young speakers participate without feeling stigmatized and promote documentation and revitalization of their languages.

Chapter 12

2. ABSTRACT

This chapter is about the extraordinary Indigenous linguistic diversity of the Amazon region. This diversity is presented in terms of its different dimensions: the existence of a relatively large number of languages in the region; how these languages are related among each other, representing an impressive genealogical diversity; its geographical distribution over different Amazonian subregions; the effects of language contact that have resulted in several linguistic areas; the different levels of endangerment and the different social circumstances that contribute to it; and, finally, what is lost when languages disappear. The loss of linguistic diversity entails the disappearance of Indigenous knowledge systems concerning the environment and social organization, and parallels processes of biodiversity loss.

Keywords: Amazonian languages, Language diversity, Language vitality, Endangered languages, Drivers of change

Chapter 12

3. GRAPHICAL ABSTRACT

Map 1. Linguistic diversity of the Amazon

1. INTRODUCTION

This chapter presents the dimensions that make the Amazon region a place of extraordinary linguistic diversity. The first reports by European colonizers, missionaries, travelers, adventurers and scientists mentioned the remarkable multitude of languages spoken by the various peoples of the region. They also highlighted the fact that these languages seemed to be radically different from each other. The number of languages that were spoken at that time far exceeds the over 300 languages that are counted today. These remaining languages are classified in around 50 language families and isolates, that resemble a patchwork quilt when indicated by colors on a map.

Linguistic research has increasingly refined our understanding of this diversity, not only with respect to genealogical classification, traces of contact, and typological characteristics. Languages also differ due to historical, social, and cultural factors. Furthermore, at the present juncture, languages differ conspicuously with regard to levels of vitality. While some languages enjoy a high degree of vitality and may have the support of national and local language policies, others are at serious risk of extinction. Nevertheless, all Amazonian languages can be considered in some degree of danger, due to the pressures of the national and global societies. The ongoing loss of linguistic diversity involves the disappearance of Indigenous knowledge systems concerning the environment and social organization, and parallels processes of biodiversity loss.

2. LINGUISTIC DIVERSITY

In spite of the difficulty to establish the exact number of different languages spoken on the planet, linguists agree that it is at least 6,000. Some of those languages have hundreds of millions of speakers and 20 of those languages are spoken by about half the world's population. This implies that all the other languages are spoken by the other half of humanity. It is furthermore estimated that half of the world's more than 6,000 languages are spoken by not more than 0,2 % of the world's population. Most of these languages are to some degree endangered with extinction (Moseley ed. 2010).

The density of languages is not distributed evenly across the globe. In some regions, few languages are spoken and in other regions, the number of different languages is extreme. As an example, one single Inuit language is spoken, in several different dialects, along the coast of Greenland, down from the northwest, rounding the southern

Chapter 12

tip, up to the east, covering a stretch of 4,000 kilometers. By contrast, in New Guinea, which is about half the size of Greenland, an estimated 1,000 different languages are spoken. In terms of language numbers, New Guinea is extremely diverse.

The Amazon region is also highly linguistically diverse in quantitative terms. It is estimated that over 300 Indigenous languages are spoken in the Amazon today. This number, however, represents what has remained of the over 1,000 languages that were spoken at the time when the European colonizers arrived. Over the past five centuries, exogenous diseases, colonial violence, slavery and dispossession have diminished the original populations and in the process many languages have become extinct. Even though the Indigenous populations of the Amazon have been increasing again during the past 50 years, most of their languages are in danger of extinction.

In order to establish what is lost when languages disappear and what are the causes of this process, we will have to explain the nature of language diversity in the Amazon and where it comes from. In the above paragraphs, we have considered language diversity in terms of numbers of languages. There are also other ways to look at language diversity, which are related to the way in which languages emerge and die out again.

3. THE EMERGENCE OF GENEALOGICAL LANGUAGE DIVERSITY

All living languages change over time and therefore show variation. Language change can be caused by different internal and external factors. Languages change through time, which is why we may have difficulty understanding earlier stages of a language as laid down in written form centuries ago or sometimes even as spoken by our grandparents. Furthermore, when different populations speaking the same language live separately in distant geographical locations, the separate linguistic developments through time give rise to contemporary variations of the same language, known as dialects. If enough time passes, say, a thousand years, the dialects may become so different that they are not mutually intelligible any longer, and can be considered different languages. Because such languages originate from a common ancestor, they are considered genealogically related.

The emergence of new dialects and languages through historical diversification results in language families. A well-known example is the Romance language family, which consists of Spanish, French, Portuguese and other languages, and which developed out

Chapter 12

of an earlier language known as Vulgar Latin. In fact, the Romance languages are part of just one branch of a bigger and older family, called Indo-European, which includes Celtic, Germanic, Slavic, Indo-Iranian and other language families. The hundreds of Indo-European languages are therefore all genealogically related. There are several very big language families in the world, such as the Austronesian family, the Niger-Congo family and the Sino-Tibetan family. Three big language families are widely represented in the Amazon region: Arawakan, Cariban and Tupian.

There are perhaps 250 different language families in the world today, some of which are very small, containing only two or three languages, many of which are found only in South America. Some languages are isolates: they do not belong to any known family and can be considered as single-language families. A European example of a language isolate is Basque, which even after centuries of linguistic research has not been classified in any known family (but see Bakker 2020). There are about 125 isolates in the world, and the Amazon region harbors a disproportionate number of those (Seifart and Hammarström 2018). To explain this high number of isolates represents a challenge for Amazonian linguistics and related areas of research.

Table 1. Some indicators of linguistic diversity¹

	Languages	Families	Isolates
World	6000+	250	125
North America	400	35	20
South America	500	45	40
Amazonia	300+	25	20
New Guinea	1000+	50	20

Table 1 shows that the Amazon region has a relatively low number of languages when compared to some other regions. However, the number of families and isolates represented by those relatively few languages is very high. In terms of genealogical units, the linguistic diversity of the Amazon is quite exceptional. Table 2 looks more in-depth at this diversity, considering each country in the Amazon basin. The numbers

¹ Based on Moseley (ed. 2010), Hammarström et al. (2021), Campbell (ed. 2018) and other general resources.

Chapter 12

shown are rough approximations. Most of the languages belong to one of the major linguistic families: Tupi, Arawak, Carib, Macro-Jê. The literature on these families is vast. For general overviews see, e.g., Campbell and Grondona eds. 2012, Dixon and Aikhenvald eds. 1999, Epps and Michael eds. in prep.

Table 2. Number of languages, families and isolates in the Amazon²

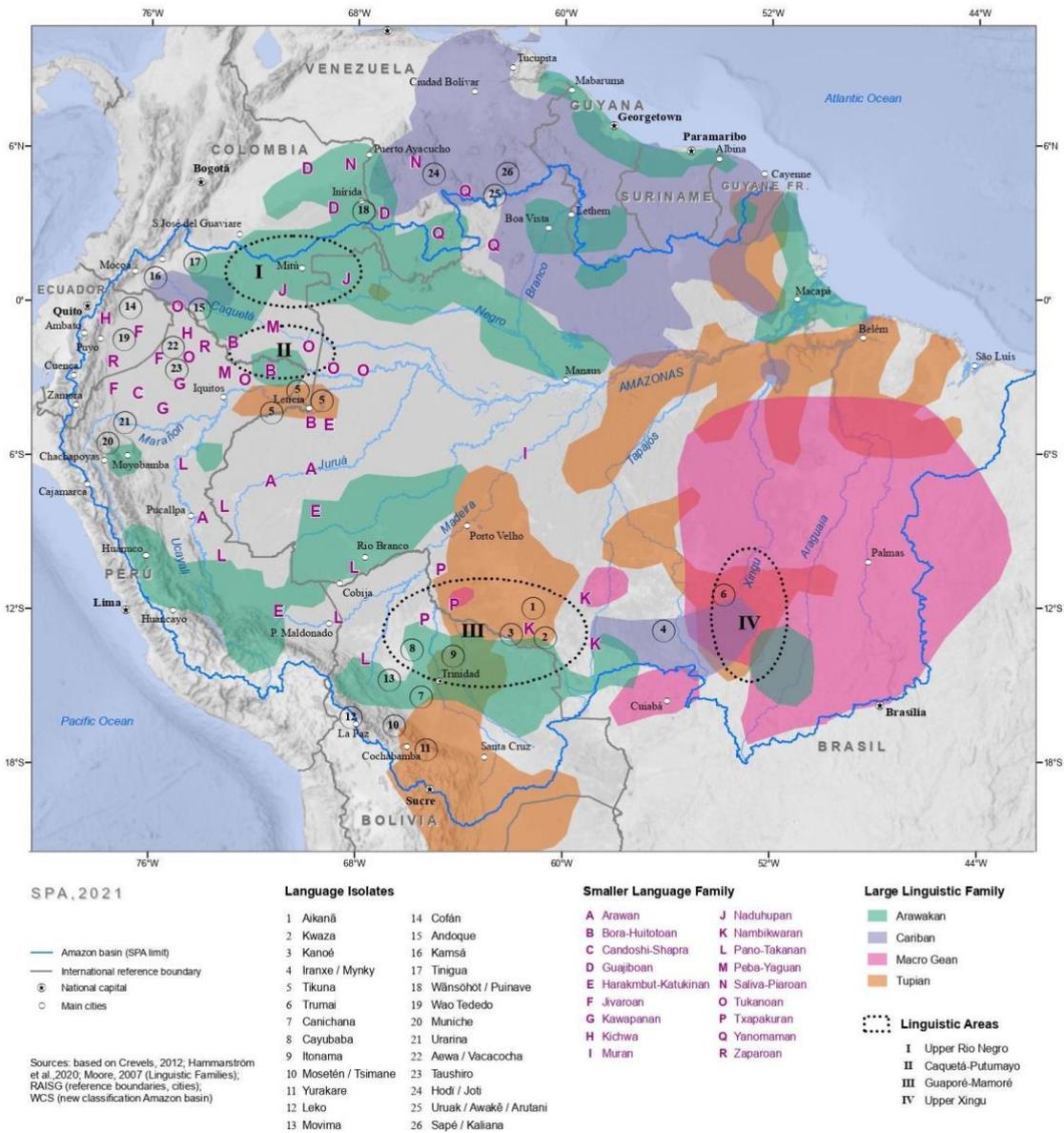
Country/territory	Languages	Families	Isolates
Brazil	120	14	7
Bolivia	34	11	8
Colombia	49	13	6
Ecuador	9	4	2
French Guiana	6	3	-
Peru	48	19	5
Venezuela	37	5	4

The classification of languages into families requires careful historical comparative linguistic research and depends on reliable and well-analyzed descriptive linguistic data. Especially in the Amazon, such data are not always available, and in view of the endangered situation of most Amazonian languages, researchers face a race against the clock. The scientific relevance of the genealogical linguistic diversity of the Amazon has ramifications in other fields of science, such as archaeology. The geographical distribution of language families can be shown on a map by using different colors and can help to reconstruct patterns of prehistoric demography and migrations. Map 1 shows the linguistic diversity of the Amazon.

² Based on Crevels (2012) and Moore (2007).

Chapter 12

LINGUISTIC DIVERSITY OF THE AMAZON



Map 1. Linguistic diversity of the Amazon

Furthermore, the greater the diversity within a language family in a specific region, the more likely it is that language family originated there. Hence, the center of origin of the Tupi language family is estimated to be in the border region of the Brazilian states of Mato Grosso and Rondônia. Classification of languages involves the reconstruction of sound changes and words, such as terms for material and immaterial culture, subsistence technology and features of nature and the landscape. Hence comparative linguistics can teach us not only about where people lived but also about how they lived.

Chapter 12

Comparative linguistics also involves establishing relative time depth between languages of the same family. The historical comparative method can look back in time perhaps up to 7,000 years. Beyond that, languages may have changed so much that it is not possible to establish any family relationship. This is also one of the factors that can explain the existence of language isolates. Another possible explanation of the isolate status of a language is that all other languages of the same family have died out. With over 10 language isolates on the headwaters of the Guaporé and Mamoré rivers, a region the size of Germany, the southwestern Amazon harbors one of the greatest concentrations of linguistic isolates on the planet.

By definition, language isolates do not share a common ancestor with any other known languages and are thus genealogically unique. Consequently, their vocabularies tend to be completely different and they may display structural properties that have never been attested for any other language. On the other hand, the fact that any language, including isolates, do also share properties with other languages may also be the result of language contact, or may point to traits or tendencies that are universal in human language. Therefore, the research of grammatical structures of all languages is not only relevant for the typological study of language, but may also have great significance for the study of cognition and the human brain.

4. LANGUAGE DIVERSIFICATION AND CHANGE THROUGH CONTACT

Languages can change through contact with other languages. Language contact occurs in situations of bi- or multilingualism, or when people who do not speak each other's language are in contact (Thomason 2001; Winford 2003). Prime indicators of language contact are loanwords, but languages can also undergo influence in their sound systems and in their grammar. Due to contact, languages can display specific similarities with other languages even though they are not genealogically related. One of the challenges of comparative linguistics lies in distinguishing the contact signal from the genealogical signal (Campbell 1998). Vestiges of language contact and knowledge about the directionality of linguistic influence can be highly relevant for our understanding of present and past cultural, societal, and trade relationships between populations.

Chapter 12

Language contact can lead to the emergence of new languages. When different groups do not understand each other's languages, they may create a grammatically simplified language with a limited vocabulary, known as a *pidgin*. Pidgin languages are not spoken as a mother tongue and are used in specific contexts, such as for the purpose of trade. In more profound or dramatic situations of intercultural contact, a pidgin language may be the only language available to the new generation and result in a new language that is spoken as a first language. In the context of the Atlantic slave trade many *creole* languages have emerged: languages with a lexicon that tends to originate from the dominant languages involved in the contact and a grammar that cannot be traced back to any specific language, but that may reflect universal traits. An Amazonian example of a creole language is Kheuól, which is based on French lexicon and spoken by the Karipuna do Amapá and the Galibi-Marworno Indigenous peoples (Ferreira and Alleyne 2007).

Another type of new language is an *intertwined* or *bilingual mixed language*. Such a language may arise under rare social circumstances when a new ethnic group emerges out of two different ethnic groups and feels the need to have a language of its own. Such mixed languages tend to be composed of the grammatical and lexical components of the contributing languages. A South American Indigenous example is Island Carib, which is a language with Arawak grammatical structure and Carib lexicon that emerged when Carib speaking men massacred the men of an Arawak speaking group and married their women. Their children acquired the grammar from their mothers and the lexicon from their fathers (Hoff 1994).

Pidgins, creoles and mixed languages cannot be satisfactorily classified in families, because they do not have a clear single ancestor. Creoles and mixed languages are very rare in the Amazon region. However, such languages are spoken natively and undergo processes of linguistic change through time like any other language. Therefore, the possibility cannot be excluded that certain known Amazonian language families or isolates started out as creoles or mixed languages many centuries ago. There exists hardly any documentation and research of Indigenous Amazonian pidgin languages. One explanation for the relative absence of contact-induced new languages in the Amazon combines the enormous language diversity of certain regions with widespread traditions of multilingualism.

Chapter 12

Situations of long term language contact and multilingualism in a specific region can result in the diffusion of lexical, phonological and grammatical traits among languages irrespective of their genealogical classification (Hickey ed. 2017; Matras *et al.* 2006; Muysken ed. 2008). Over time, say, several centuries, the languages involved may come to resemble each other and form a so-called *linguistic area* or *Sprachbund*. A classic example is the Balkans region, where the Slavic, Albanian, Rumanian, Turkish, Romani and Greek languages have certain traits in common that are unknown among other Slavic, Romance and Turkic languages outside the region. The Amazon region contains several linguistic areas, the most famous and striking one being the Upper Rio Negro region where Tucanoan, Arawakan, Naduhup and Kakua-Nukak languages share grammatical traits that are not shared with genealogically related languages outside of the region (Aikhenvald 2002; Epps and Stenzel eds. 2013; Epps and Michael 2017). The dotted circles on Map 1 indicate some Amazonian linguistic areas.

5. LANGUAGE VARIATION

Both historical language change and contact-induced language change are kinds of linguistic variation. In fact, variability is an important characteristic of any language. What is usually called a “language” is not a clearly definable entity. A living language may vary through time, by region, across social strata, according to occupation, gender or age, depending on audience, etc. The documentation and description of big European languages, such as Spanish, English or German, covers hundreds of years of social, regional and other kinds of variation. The study of these languages occupies large portions of archives and libraries, and results in many new books and digital projects each year. The contrast with Amazonian languages could not be bigger. We are lucky if an Amazonian language can boast of a single comprehensive grammatical description, and many Amazonian languages are underdocumented. Nevertheless, the Amazonian languages are as rich and variable as any other language, and fortunately the documentation and study of dialectal variation, speech styles, specialized language use and verbal art are beginning to get the attention they need (e.g. Beier *et al.* 2002; Hildebrandt *et al.* 2017).

Some concrete examples: The Hup (Naduhup) language of the Brazilian-Colombian border has three dialect areas where pronunciation, the meaning of words and grammar may differ. And the Mondé (Tupian) languages of the Zoro, Cinta Larga, Gavião and

Chapter 12

Aruá ethnic groups of Brazil are in fact different dialects of the same language. They are mutually intelligible, even though each group may insist that the other group “speaks differently”. Several Amazonian languages have separate speech varieties for men and women. In Kukama-Kukamiria (possibly creolized Tupi-Guaranian) of Peru and Colombia, for example, men and women use different personal pronouns. Many Indigenous groups, for example the Yanomami of Brazil and Venezuela, the Kalapalo (Cariban) of Brazil, and the Nanti (Arawakan) of Peru, perform ceremonial dialogues in greeting rituals, storytelling, news reports and other special occasions. These are just a few examples of language variation in the Amazon region. One of the first signs of language endangerment is loss of such variation. The further a population shifts to another language, or the more its social customs are under outside pressure, the less possibilities and opportunities there will be for dialectal, social, or other variation in the original language.

6. LANGUAGE VITALITY AND ENDANGERMENT

As mentioned above, many Amazonian languages have become extinct during the past few centuries. Languages can become obsolete and disappear in different ways. This may happen when languages change in a gradual historical process. Alternatively, people may abandon their native language and switch to another existing language, usually for economic, political or other reasons. Languages may also become extinct when their speakers die out, for example, due to natural disasters or due to genocidal practice.

The emergence and extinction of languages can be regarded as a natural process that has always existed. However, since the onset of the European colonial expansion in the 15th century the cycle has been definitively broken and many more languages are becoming extinct than new languages emerge; during the last century this process has even been accelerated. This has led to a dramatic decline of language diversity and of the immaterial cultural and historical heritage contained in it.

Nevertheless, many languages survive today in the Amazon Basin. Up to 200 isolated, or recently contacted, Indigenous groups (IACHR 2013; Loebens and Neves eds. 2011; Ricardo and Gongora eds. 2019) continue to speak their languages. Amazonian Indigenous groups struggle to maintain their languages inside as well as outside of their own territories. In cities, for example, the national language is dominant and the use of

Chapter 12

Indigenous languages is often stigmatized. The development of language policies may counteract prejudice and support the use of Indigenous languages as a fundamental right. Such policies can encourage people to speak their local language. However, socioeconomic factors may diminish the impact of such policies.

There are different proposals to measure the degree of language endangerment or vitality (Wurm ed. 1996; Krauss 2007; Brenzinger 2008; Moseley 2009; Lewis and Simons 2010; Campbell 2017; Hammarström *et al.* 2018; Lee and Van Way 2018). Most of them have created categories for the different degrees of endangerment, such as vital, vulnerable, in serious danger, critically endangered. The assessment of endangerment for each of the 2,464 languages included in the UNESCO *Atlas of the world's endangered languages* (Moseley ed. 2010) has been based on nine evaluative factors of linguistic vitality. These factors, listed in Table 3, were established by an UNESCO (2003) ad hoc expert group of linguists.

Table 3. Evaluative factors for language vitality (UNESCO 2003)

Factor 1	Intergenerational language transmission
Factor 2	Absolute number of speakers
Factor 3	Proportion of speakers within the total population
Factor 4	Shifts in domains of language use
Factor 5	Response to new domains and media
Factor 6	Availability of materials for language education and literacy
Factor 7	Governmental and institutional language attitudes and policies including official status and use
Factor 8	Community members' attitudes towards their own language
Factor 9	Type and quality of documentation

Chapter 12

Speakers numbers (Factor 2) and their proportion with respect to the total population (Factor 3), are important criteria for evaluating language vitality. Unfortunately, these numbers are often not clearly specified, which may lead to confusion and unreliable figures as observed by Moore (2007). The Yawalapiti people of Brazil comprise 262 individuals, whereas the Ocaina people of Peru number only 150. However, the Yawalapiti language has 5 speakers at the most (Troncarelli 2021), whereas about 50 persons speak the Ocaina language (Crevels 2012). This means that only 2% of the Yawalapiti population speak the language, whereas 33% of the Ocaina population speak the language.

Besides speaker numbers, one must also look at other factors. Transmission of the language between the generations (Factor 1) is a crucial factor. If the majority of speakers are limited to the older generations, that is a sign that children are not learning the language anymore. Even if a language still has thousands of speakers, when it is not transmitted to the next generations, its days are counted.

Amazonian populations have always been part of extensive social networks. Coexistence and sharing of social activities, such as rituals, festivities, intermarriage, etc., have encouraged people to learn more than one language. The Colombian “People of the Center” represent a cultural complex in which seven ethnolinguistic groups converge, speaking different languages from three linguistic families, and one isolate: Murui-Muina, Ocaina and Nonuya (Witotoan), Bora-Miraña, Muinane (Boran), Resígaro (Arawakan) and Andoque (isolate). Despite the linguistic differences, communication is possible thanks to a common socio-cultural background underlying the oral traditions (mythical heroes, similar discursive genres). In healing ceremonies or festivals, for example, each community uses its own language; the success of communication lies in mutual knowledge, active or passive, partially supported by inter-ethnic marriages and alliances. The increasing contact with Western society has also motivated people to learn national languages, such as Spanish or Portuguese. Nevertheless, part of a population is still monolingual in an Indigenous language, especially those belonging to older generations. Young people and adults are often bilingual or even multilingual.

Despite the multilingualism that characterizes many Amazonian populations, Indigenous languages are progressively used in fewer domains (Factor 4). Depending

Chapter 12

on the particular context, this can be due to a language ideology that associates Indigenous languages with a low educational level, poverty or rurality, and national languages with social, cultural and economic development. This fosters discrimination and shaming of local language speakers, leading them to avoid speaking their language in public, for example. Furthermore, the dominant linguistic domains of work opportunities and socioeconomic advancement motivate the shift to a national or global language. For either of these reasons, speaking one or several Indigenous languages is not seen as an advantage (Factor 8), and those languages may lose domains of use.

7. OFFICIAL POLICIES SUPPORTING LANGUAGE MAINTENANCE

Governments tend to have different policies, depending on whether they consider language diversity as a problem or as a right (Factor 7). In Bolivia Indigenous languages are officially recognized at national level through article 2 of the Constitution. Likewise, according to the Peruvian and Colombian Constitutions, languages are officially recognized in the territories where they are spoken. Other countries such as Ecuador and Venezuela state in their Constitutions that Indigenous languages are official for the groups who speak them. Only in Bolivia the use of at least two languages in its government activities is required by law. While one of them must be Spanish, the other can be an Indigenous language according to convenience. In other Amazonian countries, the use of Indigenous languages is officially recognized only where they are predominant. In the Brazilian municipality of São Gabriel da Cachoeira, the Nheengatú, Baniwa and Tukano languages have co-official status.

As table 4 shows, some Amazonian countries have developed additional laws with regard to Indigenous languages. Brazil includes the constitutional right to maintain native languages and has a language policy in its education law. In recent years, Ecuador opened the debate around the relevance of having a national language policy. Furthermore, Indigenous organizations around the Amazon have undertaken initiatives to further the recognition of their languages as part of Indigenous rights. In Peru, the Autonomous Territorial Government of the Wampis Nations declared the necessity of continuing to transmit the Wampis language and to guarantee education in it. Despite such advances, Indigenous language speakers continue to face severe difficulties in using their language in public places or when trying to access government services.

Chapter 12

Table 4. Language policy for Indigenous languages

Country	Title	Year
Bolivia	Constitution	2009
	General law of linguistic rights and policies (N° 269)	2012
Brazil	Constitution	1988
	Education Guidelines and Bases Law (N° 9.394/96)	1996
Colombia	Constitution	1991
	Law of languages (N° 1381)	2010
Ecuador	Constitution	2008
Peru	Constitution	1993
	Law that regulates the use, preservation, development, recovery, promotion and dissemination of the original languages of the Peru (N° 29735)	2011
Venezuela	Constitution	1999
	Law of Indigenous languages	2008

Indigenous language teaching at schools is one of the language maintenance strategies that is supported by policies in some countries. Around the mid-20th century, Amazonian states began to develop bilingual education plans with the participation of the evangelical Summer Institute of Linguistics (SIL). After official agreements with the states and education ministries, SIL missionary linguists were deployed throughout several countries and established bases close to Indigenous lands. One of their methods was the formation of Indigenous teachers in order to open schools in communities and to start teaching in their own language as well as in the national one. Later, educational sectors of the different Amazonian countries assumed responsibility for Indigenous education and the creation of pedagogical materials. For example, in Ecuador a bilingual intercultural education system (DNEIB) was created in 1988. And the Peruvian government has proposed to extend bilingual intercultural education to high schools in its plan towards 2021. Other maintenance strategies concern translation and interpreting services by the government, as in Peru since 2012. Furthermore, the official TV media produced a news program featuring Ashaninka speaking in the Indigenous language.

Chapter 12

8. DOCUMENTATION

All Amazonian languages continue to be endangered to some degree. Therefore, professional language documentation and description are of utmost importance (Factor 9). A language description should consist at least of a comprehensive grammar, dictionary and collection of texts. Following the 1990s international alarm about the global language extinction crisis, linguists have stepped up efforts to document languages and by the turn of the century documentation had become a subdiscipline of linguistics. This was furthermore encouraged by the digital revolution that created the internet and that enabled high quality audiovisual registration, using highly portable field equipment available at relatively low cost. Modern linguistic documentation consists of creating a comprehensive permanent archival record of a language as used in different social and cultural contexts, representing as wide as possible a range of different varieties and types of discourse (Gippert *et al.* 2006; Woodbury 2003). During the past decades various local and international language and culture documentation programs have supported projects in the Amazon, and a considerable number of languages possess substantial audiovisual records in properly catalogued online digital archives in Europe, the United States and Brazil. Such material can be used as the basis for pedagogical material and has the potential to feed language revitalization efforts. Some of the complex issues involved in Indigenous language archives include online accessibility, differential rights to usage, and questions of privacy (Seyfeddinipur *et al.* 2019). In spite of these developments the majority of Amazonian languages still lack adequate description and documentation, whereas this is often one of the principal demands of Indigenous groups with regard to language (Galucio *et al.* 2018). As experience shows, documentation tends to be desperately sought after once a language has disappeared. One of the possible solutions would be to create regional documentation centers and language archives, where Indigenous peoples can develop their own documentation initiatives.

9. DRIVERS OF CHANGE: SOME EXAMPLES

Although change is natural, the Amazon region is losing linguistic diversity at an alarming rate that appears only to increase. To understand how the drivers of this change operate it is useful to recall that language vitality requires a critical mass of speakers living in the same area, and that this population must have confidence that their language has a future, that it will be a productive medium of their children's

Chapter 12

livelihood and as well as their social well-being. Drivers of change are factors that may threaten these conditions.

Christian missionary movements, epidemics and a succession of extraction booms (*cascarilla*, quinine, rubber, wild animal skins, petroleum and mining) have been the major drivers of language loss. Three religious movements in particular stand out for the extent of their impact: the catholic Jesuits (1600-1767), the catholic Salesians (1880-present), and the protestant Summer Institute of Linguistics / Wycliffe Bible Translators (1945-1970). Despite differences, these two groups were similar in that both had well developed language policies, pan-Amazonian strategies, functioned as (quasi-)government institutions, and were motivated by Christian zeal. Significantly both were also eventually expelled from the region because their sway over the native population exceeded or rivaled that of the state.

In 1668, Bishop Alonzo de la Peña Montenegro established language policy for missionary priests working throughout the Kingdom of Quito which at that time included all Spanish claims in the Amazon in a massive work entitled *Itinerario para Parrachos de Indios*. Although his writings most directly concern what is now Ecuador and Peru they had implications for this broader region under his jurisdiction. In this work the bishop ruled that all missionary priests must learn an Indigenous language. (De La Peña Montenegro 1668: 21). At the same time, he recognized that in some missions there were too many languages for a single priest to learn. He cites San Jose de Avila on a tributary of the Río Napo where eight different languages were spoken. Since it would be impossible to learn all of these he ruled that a regional language should be selected and taught to the speakers of smaller languages (De La Peña Montenegro 1668: 32).

The Jesuits' selection of which language to use was based in part on a moral hierarchy grounded in their beliefs about the origins of linguistic diversity. According to Father Bernardo Recio a first division into 60 primary languages "was ordered by God Our Lord for the good of the human race" at the tower of Babel. These languages correspond to the agrarian civilizations organized into villages governed by reason and natural law which the Jesuits sought to create in their reductions as precursors to a converted Christian society. One of these languages, according to Recio, is the "language of the Inca" which in the dialect of Quito is called "Quichua". Quichua, he writes, "is

Chapter 12

genuinely, and of itself a language, and as a root and fount of many languages one may suppose that it was among the sixty-two of the tower of Babel” (Recio [1773] 1947: 413-414)³. Although Kichwa was only the language of missions in certain areas of the western Amazon, Recio’s exalted opinion of this language is indicative of broader Jesuit attitudes toward the trade languages they selected. By contrast, what Recio calls “the very strange division of the gentile languages” into those spoken by the smaller groups of Amazonian peoples, were not in his opinion, the work of God, but rather degenerations inspired by the devil, or as he puts it, that “enemy of the human race to make the remedy of their health [the preaching of the gospel] more difficult and even impossible” (Recio [1773] 1947: 465) As such, these languages were not believed to be capable of rational civilized or moral communication and were thus not to be preserved. For their own good it was morally permissible to capture the speakers of these languages and teach them the rational moral language of the mission.

Indigenous Amazonians did not of course change languages just to please the Jesuits. The process was complex. Missionary journals from this period portray a region undergoing great mobility with speakers of one language often moving into the territory of another group to escape epidemics or slave raiders, sometimes displacing groups who had lived there earlier. Population collapse combined with mobility likely led to marriage between people who spoke separate smaller languages but shared a trade language in common. Although data is limited it seems clear that the colonial disruption of the Jesuit period led to the loss of many smaller languages. Of the eight languages Peña Montenegro knew were present at the seventeenth century mission of Avila, only Kichwa remained by the nineteenth century. In all of this the Jesuit mission infrastructure played a role in determining which languages survived and came to be seen as more civilized or Christian languages. It is important to note that the beneficiary of this reduction of diversity was not Spanish or Portuguese but rather regional native trade languages as well as an increase in bilingual ability in these languages. In 1767 The Jesuits were expelled from the Spanish and Portuguese colonies and the missions fell into neglect.

³ “Quichua” is the colonial spelling used by Recio for the language now officially written “Kichwa” in Ecuador.

Chapter 12

In the 1880s, the Rubber Boom, which affected so many other aspects of Amazonian life also had a major impact resulting in the expansion of some languages and the extinction or isolation of many others. The great international demand for rubber promoted the inclusion of an increasing Indigenous labor force. Many Indigenous people were congregated in rubber settlements where they lived in a precarious situation of overcrowding and poor sanitation. The foremen raided Indigenous communities and kidnapped young people who grew up working on the rubber settlements. Other Indigenous people came to the rubber factories through the indebtedness variously called *habilitación*, *repartos*, or *endeude*. This consisted of a debt that could never be paid off. Tired of the violent treatment, many Indigenous people fled to the forest and became isolated again. Other Indigenous people died from the precarious conditions where they lived and the physical violence. In this way Indigenous people, *fratrias*, *moieties*, and *clans* were decimated - or physically eliminated, e.g. the Nonuya and Tinigua in Colombia - thus compromising the system of marriage alliances and the transmission of languages.

Although the Jesuits had been expelled, other catholic missions continued, sometimes with devastating effects on Indigenous cultures and societies. By the end of the 19th century, mission villages were established in the Rio Negro region. Local Indigenous groups fleeing from the abuse in the rubber extraction were enticed or forced to relocate on the missions, where they were forbidden to maintain their religious and cultural traditions. Based on published sources as well as personal interviews, Epps (2005) relates how the Salesian missions gained increasing control of the region during the first half of the 20th century. One of the first strategies used to destroy Indigenous lifestyle was to eradicate the communal houses, demonizing those as dirty, promiscuous and infernal. They furthermore campaigned to ridicule and defame shamanic practices and actively destroyed ritual objects and ceremonial musical instruments. They replaced Indigenous traditions with catholic rituals and doctrines. Initially the Salesians approached the Indigenous languages with disdain, but they later saw that the use of a local language would be advantageous, and promoted the Tukano language, which then gained prestige and dominance in the region. One of the most devastating and well-tried tactics used against Indigenous language and culture were the mission boarding schools, where the younger generations were separated and alienated from their families and

Chapter 12

culture, received corporal punishment for speaking their native language and were indoctrinated with mission culture and religion (Epps 2005).

As the twentieth century progressed a significant driver of linguistic and cultural changes was the accelerating connectivity of the previously isolated whitewater regions such as the headwaters of tributaries in the western Amazon where the greatest concentration of language families and language isolates lie. In the absence of roads and airstrips the rugged geography of these areas had created refuge zones limiting contact not only with the state but also between Indigenous languages. Developments around World War II began to break this isolation. In the 1930s, to meet the heightened demands for the war for example, Standard Oil in Peru and Royal Dutch Shell in Ecuador built roads and airstrips to facilitate extraction in the heart of areas where uncontacted groups lived. A similar dynamic occurred in other countries. The need for Indigenous labor in these extraction industries brought previously isolated groups speaking Indigenous languages into a common workforce.

In the period immediately following World War II, the Summer Institute of Linguistics (SIL or ILV by its acronym in Spanish) formed contracts with the ministries of education in various Amazonian countries (Peru 1945, Ecuador 1952, Bolivia 1955, Brazil 1956, Colombia 1962, Surinam 1967) (CEAS 1979). Their mission was to systematically develop orthographies for every Amazonian language, translate the Bible into each of these languages, and teach Indigenous peoples to read them. To do so they created large North American base camps at Yarinacocha in Peru, Limoncocha in Ecuador, Loma Linda in Colombia, Porto Velho in Brazil, and Tumi Chucua in Bolivia. Native consultants from many small languages were brought to live in residence at these bases for the academic year. During the summer months the SIL linguists would then go to live in the consultants' communities where these informants were from. To facilitate travel between the Indigenous group and the base camp they created airstrips in those remote locations. This strategy greatly increased communications between language groups at the bases as well as with the state.

SIL's language policy differed from that of the Jesuits in significant ways. Drawing on Martin Luther and John Wycliffe's arguments for translating the Bible into German and English they argued that the Bible could be translated into any language without losing any significant meaning. In practice this meant that, unlike the Jesuits who ascribed

Chapter 12

higher moral value to regional languages, they saw all languages as morally neutral and interchangeable structures. In fact, they seemed to prioritize the most remote or even the uncontacted Amazonian languages such as their most famous mission among the Wao Tededo (Waorani) in Ecuador (Long 2019).

Furthermore, SIL was religiously motivated to create literate readers in each Amazonian language. This meant that they created not only dictionaries and grammars but also native language didactic materials for grades 1-6. They also used their Amazonian bases to train the first bilingual school teachers in many of the Amazonian languages, all this outside the community context. The legacy of SIL for Indigenous languages was mixed. On the one hand the visibility and prestige of the smaller languages was raised. SIL's contracts with the ministries of education gave these language groups a more direct contact with the state which likely slowed their assimilation in favor of the larger regional languages that had previously served as intermediaries. By systematically creating scripts that resembled Spanish and Portuguese they facilitated bilingual integration to the Spanish or Portuguese language of the state. In doing so, however, they also left behind a persistent controversy between these older scripts that resembled those of the Iberian languages and scripts adopted by the more recent Indigenous movements which stressed difference. SIL surveys of Amazonian language diversity increased the number of recognized languages and dialects. They also created the Ethnologue (Eberhard *et al.* 2021), which many rely on for statistics on the variety and vitality of Amazonian languages. At the same time SIL is a conservative North American missionary organization dedicated to undermining traditional Indigenous ceremonial practices, declaring them demonic and converting Indigenous groups still living in voluntary isolation. Because these practices were eventually seen as incompatible with serving as an arm of the Ministry of Education in a lay state, SIL lost their contracts across the region by the 1980s.

As communication with remote language areas opened up in the first half of the twentieth century, speakers from these smaller languages gradually became more integrated as voting members of the state. Service in the national military brought young men from these different language groups into sustained contact with each other and helped to forge a common linguistic identity as, for instance, Peruvians, Brazilians or Ecuadorians who spoke the language of the state. For young women during this period it was often marriage to a mestizo man or the experience of working as a live-in

Chapter 12

domestic servant in a regional town that provided sustained contact with the national language.

In these new contexts the parents of the contemporary generation often experienced serious language discrimination causing them to encourage their children to speak Spanish or Portuguese to avoid suffering what they had suffered. The languages of the state were not the only beneficiaries of language discrimination. Accelerating connectivity also created hierarchies between native languages. Smaller more recently contacted languages were often seen as backward or savage when compared to the larger more cosmopolitan languages of the missions such as Kichwa or *Língua Geral*. As a result, smaller native languages lost speakers to larger native languages and these to the languages of the state.

Perhaps the greatest driver of language loss, however, is a change in the type of employment young people aspire to. Because land loss, deforestation, and the depletion of game animals have made sustaining a family in their Indigenous territory more difficult, many seek jobs outside their territories, often seasonal work in oilfields, as in Ecuador, or other kinds of extraction or in agriculture. For administrative jobs, formal education is required and although governments throughout the Amazon have committed to providing native language education, serious difficulties remain. For example, many native communities are too small to meet the threshold of the number of children required to make a school economically or administratively viable and there is often a scarcity of qualified teachers willing to serve in remote areas. As a result, many families in Ecuador, Brazil and elsewhere send their children to regional high schools where the language of instruction is Portuguese or Spanish. As a result, these languages tend to become the preferred means of social communication between teenagers as well as exemplifying the kind of educated speech most likely to lead to the desired employment. When combined, these linguistic domains represent what many speakers perceive as the language of a good future. The children who attend these high schools speak better Spanish or Portuguese and may get better jobs than do their cousins who remained in their communities without attending high school. Too often, however, the expectation of a better future turns out to be a mirage. Many Indigenous young people who have completed high school are unable to continue further education due to poverty, substandard high schools, discrimination and a general lack of scholarships. Many become Spanish or Portuguese language dominant without receiving the

Chapter 12

advantages of the desired employment in the national or global marketplace. As a result, some feel alienated from the urban centers to which they migrate without a viable path for permanent return to their communities of origin.

In contrast to the increasing prestige of global languages the native languages become increasingly associated with domains of use perceived as having a more limited future. For example, girls may associate their native language with being an expert manioc gardener or chicha maker. Men associate their native language with being an expert hunter. Although these skills used to make a person highly desirable, the livelihood they provided has become less sustainable. As a result, increasing numbers of young people aspire to marry someone with a high school or college degree proficient in the language of professional employment.

10. WHAT EXACTLY IS BEING LOST?

It is easy to underestimate the extent of language loss because it occurs not only in numbers of speakers, but also less visibly in the functions, domains and ways in which the languages are used. What is being lost? The broader work of SPA examines the threats to the biodiversity of the region as a whole. The loss of language diversity is interconnected with environmental destruction and the broader loss of species in the micro-environments where the languages are spoken. Amazonians often identify their languages as the speech of a particular place such as “the speech of Pastaza River people.” Within this river basin speakers may further break down their language as the speech of a more minor tributary. This tributary language is believed to be the speech not only of people but of the local plants and animals thought to have spoken this language before acquiring their animal bodies. Hence local plants, and animals are included in the language of the place as audience, interlocutors, tropes, and metaphors (Swanson and Reddekop 2017). Ritual songs are sung to manioc plants, peccaries, or woolly monkeys. Humorous word plays imitate their sounds. Sound symbolic and evidential markers are used to evoke their presence in conversation. Bird songs, wind, and water carry love songs from wives to husbands over distances. Even where environments are similar the distinct languages of neighboring tributaries engage this environment differently. As deforestation and local extinction of animals increases, the places become impoverished and the forms of speech that engaged them disappear.

Chapter 12

Similarly, when the languages disappear so does a whole history of human cultural engagement with these places.

A clear example is the loss of species names. These names vary greatly from one river to another and carry a wealth of knowledge. For example, bird names are often onomatopoeic representations of the sound these species first uttered on being transformed from a previously human state. When the names are lost so is the reference to their origin stories and history. These names also carry with them systems of biological relation and classification (Berlin, 2014). In some languages plants have animal names that evoke symbiotic relations or complex behavioral qualities used in healing. For example, one of the anthurium species is called ‘trumpeter leaf’ in Kichwa, because it resembles the tail of a trumpeter bird raised in its marching gait. Because the bird steps high as it marches, the leaf is applied as a poultice to cure the legs of children with difficulty in walking. Through the poultice the bird behavior is transferred to the child not only through the similarity in the leaf but also through the species name. When the plant species name is lost, so is the behavioral analogy to the bird as well as its use in medicine. Related to these losses is the distinctive Amazonian relation to nature embedded in the native languages. For example, while the native languages use the same terms to portray animal and human bodies, European languages embed ideas of human superiority to nature by using separate terms to distinguish the cultural quality of the human body (hands, fingernails) from those that name the bestial bodies (e.g. English: paws, claws; Spanish: patas, garras) of animals (Nuckolls and Swanson 2017: 71). When a European language replaces a native language the distinctive relation to nature it carried is lost as well. So embedded are Amazonian languages in their micro-environments that the loss of species impoverishes language diversity and vice versa. Another area of loss are the place names of rivers and mountains which carry with them a long history of local geographical knowledge.

Another important area of loss is the language of social relations. Amazonian languages also helped to maintain social order and cohesion through the use of kinship terms, evidential markers that recognize the speech of others, suffixes that express emotional delicacy, politeness, and endearment. As the social environment came to include more complex relations to unrelated citizens of the state, this language of tenderness previously used in public discourse to a mostly related audience came to sound inappropriate and became diminished and disappeared. With the loss of such ways of

Chapter 12

expression, entire systems of conviviality that developed over centuries are lost (Gow 2000). Finally, contact with other languages may influence not only the vocabulary, but also the grammar and sound system of a language. Consequently, the Indigenous languages may nowadays lose some of their most distinctive features through Spanish or Portuguese influence. For example, the Amazonian language Kichwa tends to favor verbs and adverbs more than nouns. Although Kichwa uses a small set of verb roots, this is amplified by an impressive range of sound symbolic ideophones and gestures that further qualify the events expressed by verbs (Nuckolls 1996). This gives the language a highly developed capacity for evocation, ambiguity, subtlety, multivalence, and nuanced use of perspective. At the same time, although it has impressive grammatical possibilities for the nominalization of verbs, it lacks the abstract nouns now common in technical, scientific, and business discourse; as well as the broad range of illocutionary verbs such as ‘threaten,’ ‘promise,’ ‘order,’ ‘conclude,’ which facilitate precise legal and technical communication in European languages (Nuckolls and Swanson 2018: 179). Through sustained contact with European language education, the native language of especially younger speakers may suffer the loss of certain specific phonological distinctions such as tone and laryngealization, and grammatical distinctions like evidentials and perspectival markers. For example, the elaborate noun case system used by older Wao Tededo (isolate) speakers in Ecuador is rapidly disappearing in the speech of younger people. Younger people accustomed to writing are also much less likely to use the gestures and ideophones that characterized the story telling of their elders.

11. IMPORTANCE OF INDIGENOUS LANGUAGES IN NEW CONTEXTS

Among the many drivers of language change there are also some that favor the flourishing of native languages. In recent years, the Amazon has seen a surge of connectivity through social media, particularly Facebook and WhatsApp. Many high school and young adult members of even more remote groups now have accounts. In fact, it may be that the more isolated the communities, the more avidly young people seek the connectivity that these media afford. While social media are certainly creating a flood of messages in the national languages they also provide a new forum for native languages. Whereas migration drives language loss by taking away a public domain where an Indigenous language can be dominant and free of discrimination, social media counter this trend by creating a new private space that may connect communities of speakers without fear of discrimination. Furthermore, because social media are informal

Chapter 12

and not used by older monolinguals, Indigenous language speakers text each other without having to worry about mixing in Spanish or Portuguese or even switch to these languages in mid-sentence.

Another driver of language change countered by social media is the hegemony of the national languages in broadcasting news, arts, entertainment, and sports. While cost and government licensing controls previously limited native access to the airwaves, native broadcasters are now flourishing on social media avoiding these controls. Most Amazonian countries now have networks of native language communicators active on social media in even the smaller languages like Wao Tededo, Secoya, or Kofán in Ecuador. In some cases, these may be informal but also include more formal institutional voices such as the communication directors of the Indigenous Nations or organizations. A Shipibo migrant, for example, can now tune in to a variety of Facebook offerings featuring local sports news, church services, community meetings, ceremonies and traditional music all streamed in Shipibo through the *Red de comunicadores indígenas del Perú, filial Ucayali* with names like *Shipibo Communications, Radio TV digital Shipibo*. Furthermore, pan-Indigenous activists in the western Amazon now typically have Facebook friends from Brazilian groups as far away as the Xingu. Hence, they are aware of native language pride and revitalization featured on Facebook across the Amazon. To some degree social media are also countering the loss of older forms of language. Just as there are now citizen scientists recording biological species counts on cell phones, there are also young citizen documenters recording their grandparents' origin stories, songs or other forms of ritual speech with cell phones and posting them to YouTube, Vimeo or Facebook. Although inadequate for documentation and the creation of a lasting record, cell phone recording and posting may raise awareness of endangered forms of speech among other young activists who may follow the example. Finally, the internet opens up important new avenues for Indigenous language education in the territories, limiting migration. For example, smaller schools may use distance education. Native language YouTube videos recorded by elders in neighboring communities can be used in classes where the teacher may have limited knowledge of the local language.

Chapter 12

Thus, although most drivers of change associated with modernity work to decrease language diversity, there is hope that others may counter these forces by providing new avenues for its preservation and revitalization.

12. CONCLUSIONS

This chapter presented some of the amazing diversity of Amazonian languages, their vitality as well as their vulnerability to loss. Most of the Amazonian linguistic diversity is concentrated in the west with fewer language families in the east. Coincidentally or not this difference corresponds roughly to geological divisions between the western Amazon with much younger Andean alluvial soils with greater biodiversity and the eastern Amazon with much older weathered soils and less biodiversity. Correlations between biological and linguistic diversity are discussed in chapter 10.4.

Linguistic diversity of the Amazon is highly endangered with extinction, perhaps even more so than biodiversity. The accelerated disappearance of languages can be attributed to five centuries of colonization by Europeans and their descendants, who brought disease, poverty, violence and genocide upon the local populations. After the 1970s the effects of globalization were added to the general decline of linguistic diversity.

Each language represents the heritage of centuries of cultural and intellectual creativity that holds scientific and cultural value for humanity as a whole. With the loss of each culture and each language, humanity loses yet another alternative and possibly unique way to understand the world around us. The survival of a language is interdependent with the integrity of its community of speakers, which again is often tied to the legal and ecological protection of their lands. With the loss of a language the sense of being a distinct people with the right to a territory is often weakened. It is hard to overestimate what is lost as an Amazonian language disappears.

To counter these losses Indigenous peoples are calling on linguists to help them document and codify their languages by audiovisual registration, creating orthographies and compiling dictionaries. Furthermore, Indigenous organizations throughout the region have pressured their governments to guarantee rights and formal recognition of their languages and to establish bilingual education programs. This has resulted in substantial progress in gaining legal status and bilingual education rights, especially for the larger languages. Sobering challenges remain, however. Often the political solutions

Chapter 12

remain mostly on paper, with initiatives to protect the Indigenous languages greatly underfunded and understaffed.

13. RECOMMENDATIONS

In order to turn the tide on the disappearance of Amazonian language diversity, the factors that endanger its survival should be confronted. This section contains a number of recommendations that are directly or indirectly beneficial to language maintenance in the Amazon.

- Reliable national censuses on languages, population and speaker numbers, proficiency levels and sociolinguistic situation, carried out by professional linguists, can help governments know which languages exist and what is their situation. Such knowledge is essential for public policies and awareness campaigns.
- Indigenous communities should be consulted about their priorities with regard to language policies, and their demands should be met.
- Bi- or multilingualism should be valued rather than considered an obstacle, both by society at large and by Indigenous communities themselves. One does not have to abandon one's native language in order to learn a national language.
- Indigenous education should be improved and high-quality educational material in Indigenous languages should be developed.
- The professional study and documentation of Indigenous languages should be supported by governments, because the results of such work also form a necessary basis for the development of adequate educational material and improve the chances for successful public policies with regard to languages.
- Indigenous territories must be protected against ecological degradation and the presence of outsiders should have the informed consent of their populations.
- Unsustainable development should be avoided and economic alternatives should be offered instead.
- Isolated Indigenous populations should not be contacted unless they themselves take the initiative to contact.
- Indigenous languages, cultures, religions and other aspects of Indigenous life should be respected by the society in general. This requires adequate educational curricula, awareness campaigns, and replacing stereotypes and myths by reliable

Chapter 12

information, among the general population. Only a public informed about diversity and its advantages is in a position to value, defend, and help preserve it.

14. REFERENCES

- Aikhenvald AY. 2012. *Language contact in Amazonia*. Oxford University Press.
- Aikhenvald AY. 2002. *Language contact in Amazonia*. Oxford University Press.
- Bakker P. 2020. *Advances in Proto-Basque Reconstruction with Evidence for the Proto-Indo-European-Euskarian Hypothesis* Blevins, Juliette. 2018. Routledge. 426 pages| 50 B/W Illus. ISBN: 978-0-4295-0591-1. *Fontes linguae Vascon Stud Doc* 52: 563–94.
- Beier C, Michael L, and Sherzer J. 2002. *Discourse Forms and Processes in Indigenous Lowland South America: An Areal-Typological Perspective*. *Annu Rev Anthropol* 31.
- Berlin B. 2014 [1992]. *Ethnobiological Classification*. Princeton University Press.
- Brenzinger M, Dwyer AM, Graaf T, *et al.* 2003. *Vitalidad y peligro de desaparición de las lenguas*.
- Brenzinger M. 2008. *Language endangerment throughout the world*. In: Brenzinger M (Ed). *Language diversity endangered*. Berlin: De Gruyter Mouton.
- Campbell L. 2017. *On how and why languages become endangered: Reply to Mufwene*. *Language (Baltim)* 93: e224--e233.
- Campbell L. 1998. *Historical linguistics: An introduction*. Edinburgh: Edinburgh University Press.
- Campbell L. 2018. *Language Isolates* (L Campbell, Ed). Routledge.
- Campbell L and Grondona VM. 2012. *The Indigenous languages of South America : a comprehensive guide*. In: Campbell L, Grondona VM (Eds). *The Indigenous Languages of South America*. Berlin ; De Gruyter Mouton.
- Colegio de Etnólogos y Antropólogos Sociales AC (CEAS). 1979. *Dominación ideológica y ciencia social: el I.L.V. en México*. Declaración José C. Mariátegui.
- Crevels M. 2012. *Language endangerment in South America: The clock is ticking*. In: Campbell L, Grondona V (Eds). *The Indigenous Languages of South America*. De Gruyter Mouton.
- Dixon RM and Aikhenvald AY. 1999. *The amazonian languages* (AY Dixon, R. M., & Aikhenvald, Ed). Cambridge University Press.
- Ennis G. 2019. *Remediating Endangerment: Radio and the Animation of Memory in the Western Amazon*.

Chapter 12

- Epps P. 2005. The areal linguistics of Amazonia. The role of missionaries. In: Wohlgenuth J, Dirksmeyer T (Eds). *Bedrohte Vielfalt: Aspekte des Sprach(en)tods / Aspects of language death*. Berlin: Weißensee Verlag.
- Epps P and Michael L. In preparation. *Amazonian languages: An international handbook* (P Epps and M Lev, Eds). De Gruyter Mouton.
- Epps P and Michael L. 2017. *The Areal Linguistics of Amazonia*. In: Hickey R (Ed). *The Cambridge Handbook of Areal Linguistics*. Cambridge: Cambridge University Press.
- Epps P and Stenzel K. 2013. *Upper Rio Negro: Cultural and Linguistic Interaction in Northwestern Amazonia* (Patience Epps and Kristine Stenzel, Eds). Rio de Janeiro: Museu do Índio – FUNAI, Museu Nacional.
- Ferreira J-AS and Alleyne MC. 2007. Comparative perspectives on the origins, development and structure of Amazonian (Karipúna) French Creole. In: *Synchronic and diachronic perspectives on contact languages*.
- Galucio AV, Moore D, and Voort H van der. 2018. O patrimônio linguístico no Brasil: novas perspectivas e abordagens no planejamento e gestão de uma política da diversidade linguística. *Rev do patrimônio histórico e artístico Nac* **38**: 194–219.
- Gippert J, Himmelmann NP, and Mosel U (Eds). 2006. *Essentials of Language Documentation*. Berlin, New York: Mouton de Gruyter.
- Gow P. 2000. Helpless--the affective preconditions of Piro social life. *Anthropol love Aesthet conviviality Nativ Amaz*: 46–63.
- Grzech K, Schwarz A, and Ennis G. 2019. Divided we stand, unified we fall? The impact of standardisation on oral language varieties: a case study of Amazonian Kichwa. *Rev Lleng i Dret*: 123–45.
- Hale K, Krauss M, Watahomigie LJ, *et al.* 1992. *Endangered Languages*. *Language (Baltim)* **68**: 1.
- Hammarström H, Castermans T, Forkel R, *et al.* 2018. Simultaneous visualization of language endangerment and language description.
- Hammarström H, Forkel R, Haspelmath M, and Bank S. 2021. *Glottolog 4.4*.
- Hickey R. 2017. *The Cambridge handbook of areal linguistics*. Cambridge: Cambridge University Press.
- Hildebrandt KA and Hu S. 2017. *Documenting Variation in Endangered Languages*.
- Hoff B. 1994. Island Carib, an Arawakan language which incorporated a lexical register of Cariban origin, used to address men. In: *Mixed languages: 15 case studies in language intertwining*. Amsterdam. IFOTT.
- IACHR Inter-American Commission on Human Rights. 2013. *Pueblos indígenas en aislamiento voluntario y contacto inicial en las Américas: Recomendaciones para el pleno respeto a sus derechos humanos*. IWGIA, Grupo Internacional de Trabajo sobre Asuntos Indígenas.

Chapter 12

- Krauss M. 2007. Chapter 1. Classification and Terminology for Degrees of Language Endangerment. In: Brenzinger M (Ed). *Language Diversity Endangered*. New York: De Gruyter Mouton.
- Lee NH and Way JR Van. 2018. The language endangerment index. *Cat world's Endanger Lang*: 66–78.
- Lewis MP and Simons GF. 2010. Assessing endangerment: expanding Fishman's GIDS. *Rev Roum Linguist* **55**: 103–20.
- Loebens GF and Oliveira Neves LJ. 2011. Povos indígenas isolados na Amazônia: A luta pela sobrevivência. Manaus: EDUA / CIMI.
- Long KT. 2019. *God in the Rainforest: A Tale of Martyrdom and Redemption in Amazonian Ecuador*. Oxford University Press.
- Matras Y, April M, and Nigel V. *Linguistic areas: Convergence in historical and typological perspective*. Palgrave MacMillan.
- Moore D. 2008. Chapter 3. Endangered Languages of Lowland Tropical South America. In: Brenzinger M (Ed). *Language Diversity Endangered*. De Gruyter Mouton.
- Moseley C. 2009. Each language is a unique world of thought. *Let's Talk, UNESCO Cour*.
- Moseley C. 2010. *Atlas of the World's Languages in Danger*. Unesco.
- Muysken P. 2008. *From linguistic areas to areal linguistics*. John Benjamins.
- Nuckolls J. *Quechua realwords: An audiovisual corpus of expressive Quechua ideophones*<http://quechuarealwords.byu.edu/> %0A%0A. Viewed
- Nuckolls JB. 1996. *Sounds like life: Sound-symbolic grammar, performance, and cognition in Pastaza Quechua*. Oxford University Press on Demand.
- Nuckolls J and Swanson T. 2018. *Respectable uncertainty and pathetic truth in Amazonian Quichua-speaking culture*. Oxford University Press.
- Peña Montenegro A de la. 1968. *Itinerario para parrochos de indios*. Ioseph Fernandez de Buendía.
- Recio B. 1947[1773] *Compendiosa relación de la cristiandad de Quito*. Consejo Superior de Investigaciones Científicas Instituto Santo Toribio de Mogrovejo.
- Ricardo FP and Gongora MF. 2019. *Cercos e resistências: povos indígenas isolados na Amazônia brasileira*. São Paulo: Instituto Socioambiental.
- Rodrigues DA. 1993. Línguas indígenas: 500 anos de descobertas e perdas. In: *DELTA: Documentação e Estudos em Linguística Teórica e Aplicada*. 9 (1)
- Seifart F and Hammarström H. 2018. *Language Isolates in South America*. In: *Language Isolates*. Routledge.

Chapter 12

- Seyfeddinipur M, Ameka F, Bolton L, *et al.* 2019. Public access to research data in language documentation: Challenges and possible strategies. *Lang Doc Conserv* **13**: 545–63.
- Swanson TD and Reddekop J. 2017. Looking Like the Land: Beauty and Aesthetics in Amazonian Quichua Philosophy and Practice. *J Am Acad Relig*: lfw086.
- Thomason SG. 2001. Language contact: An introduction. *Edinburgh Univ Press*.
- UNESCO. 2003. Vitalidad y peligro de desaparición de las lenguas. In: Reunión Internacional de Expertos sobre el programa de la UNESCO “Salvaguardia de las Lenguas en Peligro.”
- Winford D. 2003. An introduction to contact linguistics. Wiley-Blackwell.
- Woodbury AC. 2003. Defining documentary linguistics. *Lang Doc Descr* **1**: 35–51.
- Wurm SA. 2001 [1996].. Atlas of the world’s languages in danger of disappearing. Paris: UNESCO Publishing.

Chapter 12

15. CORE LINGUISTIC GLOSSARY

<i>Areal diffusion</i>	The adoption (diffusion) of lexical or structural features across several not necessarily related languages in a specific geographical region.
<i>Bilingualism</i>	Having a high or native command of two languages. Command of two or more languages is often called multilingualism.
<i>Creole language</i>	A new language that has emerged in a situation of contact between groups who do not speak each other's languages. A creole language is spoken natively and therefore has the same range of applicability for communication and expression as any other language. A creole language may, or may not, be the result of pidgin nativization. A creole language usually contains lexical elements derived from one of the languages of the different groups in contact, but cannot be classified into a specific family.
<i>Dialect</i>	A variety of a language that is mutually intelligible with another variety of the same language, without previous acquaintance. Dialects emerge when populations speaking the same language split up and live geographically separated from each other for a sufficient amount of time for their language to develop separate varieties.
<i>Domain</i>	The social context of language use. A language may be used in various social domains, such as the family context, the company of friends, school, religion, official situations, mass media, etc. A language may possess different registers for different domains.
<i>First language</i>	Language acquired natively by a child during the critical early phase of learning (up to about 12 years). Also called mother tongue, a child's first language is usually acquired from parents and other family members. If a child grows up with

Chapter 12

two or more languages simultaneously, it may acquire more than one language natively.

Historical linguistics The study of language change over time. Aided by specific comparative methods, language families can be identified, relative time depths between family members (sister languages) can be estimated, and aspects of prehistory can be reconstructed.

Language

A structured system usually involving sound, vision and touch, that has been developed, used and acquired natively by humans for the efficient communication of information, the utterance of thoughts and feelings, and the expression of individual and collective identity. Languages may be spoken orally, signed, written or even whistled.

Language contact Whenever several languages are used in communication between speakers of different languages, language contact occurs. This may cause minor or major changes in the participating languages at any level (words, sounds, grammar, meaning, usage, etc.). In certain situations, language contact may lead to the emergence of new languages (pidgins, creoles, mixed languages), or to the disappearance of languages, usually through language shift.

Language family A set of languages that are genealogically related through shared ancestry. The classification of languages into families is the focus of the field of historical linguistics.

Language isolate A language that is not genealogically related to any other known language or language family. A language isolate can emerge when it is the single remaining member of a family, or when its family membership is of such early date that no similarity with other languages is

Chapter 12

discernible any longer. Note that a language isolate is not necessarily spoken by an isolated population.

Language typology The comparative study of languages from the point of view of their structural properties (e.g. word order, affixing, grammatical categories), rather than on the basis of their genealogical relationships.

Language shift The collective abandoning of the native language of a minority or subjugated group in favor of a different language, spoken by a majority or in other ways dominant group, usually for reasons of economic or social advantage, but also often enforced by the dominant group.

Language variation Also linguistic variability. The phenomenon that a language is not a single entity, but that it changes and varies through time, by region, across social strata, according to occupation, gender or age, depending on audience, medium of communication, situation, and speaker. Language variation finds expression in different dialects, speech styles, social registers, medical and other jargons, youth slang, ritual or other forms of a language, including individual styles.

Lingua franca A common language of wide communication used between groups that speak different languages. At least one of the groups may speak the language as a first language, but not necessarily.

Linguistic area Also called *Sprachbund*. A geographical region where languages that belong to different families have been in contact for a sufficiently long period in order to adopt specific lexical, phonological, or structural features from one another, which are not shared with languages of the same families outside of the region.

Mixed language A new language that has emerged out of the contact between two groups who did not speak each other's languages, which led to the formation of a new ethnic

Chapter 12

group. A mixed language is spoken natively and usually contains lexical and/or grammatical components of both of the original languages in contact, but it cannot be classified as a member of the family of either one of those.

Multilingualism Having a high or native command of more than one language. Also the use of two or more languages by a group of speakers.

Pidgin language A language with limited grammatical and lexical resources that is used in a specific setting of regular contact (e.g., trade) between groups who do not speak each other's languages. A pidgin language is structured, hence possesses norms of correctness, but is not spoken natively. A pidgin language usually contains lexical elements derived from the languages of the different groups in contact.

Register Language variety used in a specific social domain. A language may have separate registers for use in different or social settings, such as when conversing with friends, communicating with authorities, speaking to an audience, etc.

Second language One or more languages not acquired natively, but spoken in addition to one's native language.