

## INTRODUCTION

THE TITLE OF THE BOOK, *How Many Languages Do We Need?*, reflects a difficult choice that was pervasive in many multilingual societies over the course of human history, and still is today. The problem is very much on the agenda of a large number of countries, regions, and international unions that must address various aspects of multilingualism. The desire to avoid an excess of societal fragmentation in our rapidly globalizing environment narrows the focus to a relatively small number of “core” languages. But such restrictions inevitably disenfranchise speakers of “non-core” languages. In this book, we analyze the trade-off between the quest for efficiency that a small number of languages is thought to foster and a reduction in disenfranchisement, which calls for more languages.

Linguistic policies vary across the globe. The European Union adopts the policy of twenty-three official languages,<sup>2</sup> India has instituted the famous “three-language policy,” a variant of which was also considered in Nigeria. The range is wide, and obviously much depends on the way policies are implemented. The EU’s policy has its problems, but has not led to wars. Nor do the 207 languages in Australia, or the 364 languages in the United States. In Sri Lanka, however, two languages were one too many, and thousands of people died as a consequence.

The search for an “optimal” number of languages is implicitly linked to a second question about which languages to choose. Languages differ from each other; some are close, others are distant, but we can easily admit that however we measure distance, Spanish and Italian seem closer than English and Greek. That fact will play an important role in our analysis.

### DIVERSITY COULD BE GOOD, BUT IT IS NOT FREE

Economists are two-handed. One hand immediately recognizes that the diversity of existing cultures and languages, which often cannot be dissociated, is important. Limiting the number of languages creates a

<sup>2</sup>One per country, with the exception of Luxembourg. Some countries—Germany and Austria, for example—share a common language.

disenfranchisement that even developed and democratic countries sometimes cannot support. History, including that of the contemporary era, shows how oppression or suppression of languages or cultures may lead to bloody wars. It is shocking and horrifying to think of the cost of linguistic policies in terms of human lives, but failure to do so ignores the passion and violence generated by the defense of or attack on one's own culture and language. Languages have evolved over the course of human history, sometimes for smooth reasons, at other times for brutal ones. The following few questions (there are many others) are extremely interesting: (1) Why did some languages survive and even grow? (2) Why are some languages spoken by millions or even billions of people, and others by a few hundred or even less? (3) How do languages change, and why (for linguistic reasons such as phonetics or syntax; for imposed reasons such as invasions, migrations, or colonization)? These questions have been dealt with by linguists, historians and archaeologists, and more recently by biologists. We brush up against some in the chapters of the book, but space considerations unfortunately prevented us from a more detailed examination.<sup>3</sup>

The importance people and countries attach to their native language and culture can also be illustrated by the substantial resources devoted to advertising and promoting their culture, language, and literature. Some (Great Britain and its British Council, France and the Alliance Française, the German Goethe Institut, the Italian Società Dante Alighieri, or the Spanish Instituto Cervantes, to cite a few) have institutes in many other countries to teach their language and culture. Countries subsidize translations both into and from their own language.<sup>4</sup>

For many, the protection of linguistic diversity is especially important in our globalized environment, often dominated by English. This issue is discussed later, but here we would like to point out that what seems to be the relentless march of English can breed strong feelings of disenfranchisement. Here is what the American–Chilean literature professor and author Ariel Dorfman (2002, 92) has to say:

<sup>3</sup>The interested reader is referred to chapter 7 of Cavalli-Sforza and Cavalli-Sforza (1995), as well as Cavalli-Sforza (2000) on prehistorical times and ancient human diasporas, Janson (2002) and Ostler (2005) on antiquity and more recent times, and McWhorter (2001) on pidgins and creoles. Renfrew (1987) examines links between archaeological discoveries and languages.

<sup>4</sup>The list of countries that offer subsidies for translations is large. See <http://portal.unesco.org/culture/en/ev.php>.

The ascendancy of English, like so many phenomena associated with globalization, leaves too many invisible losers, too many people silenced. ... Do you come from a place ... that does not control a language that commands respect? Do you reside in a language ... whose existence does not have the kind of value in the marketplace that can get you a good job and help you in [the] everyday struggle to survive?

While one hand supports the virtues of linguistic diversity, the other hand would discreetly point out that they do not come for free. A host of economic studies suggests that too much diversity, whether linguistic, ethnic, religious, cultural, or genetic, breeds institutional wastefulness, bureaucratic inefficiency, and corruption. This so-called fractionalization may reduce political stability and hamper economic growth, as shown by the sad and painful example of postcolonial Africa. Cameroon has 279 languages, the Democratic Republic of Congo has 217, Nigeria 527, Sudan 134, and Tanzania 129. These staggering numbers—especially if they also represent ethnic groups—have often led to the argument that to accelerate economic progress, a country or a region may have to consider limiting the number of languages used for official, commercial, or legal purposes to a manageable and reasonable few.

The costs of linguistic diversity are not always direct and are sometimes the consequence of poor translations and miscommunication. History is full of episodes in which these factors played an essential role in various international conflicts.<sup>5</sup> A well-known example is Article (i) of UN Security Council Resolution 242 of November 22, 1967, which requires the “withdrawal of Israeli armed forces from territories occupied in the recent conflict.” The omission of the definite article before “territories” has been often interpreted to imply that the withdrawal refers to some but not all territories covered by the resolution. This delicate but crucial distinction was lost in the French and Russian versions. Indeed, no definite article exists in Russian, whereas French requires inclusion of the article. The Arabic version includes the article, but Arabic was not an official UN language at the time.

## WHAT THE BOOK IS ABOUT

The purpose of our book is to use economic and to some extent linguistic and sociological reasoning to balance the benefits and costs

<sup>5</sup>See Lewis (2004) for more examples.

of various linguistic situations and policies. While extolling diversity, we must recognize that it may come with institutional wastefulness and inefficiency, corruption, legal and communication barriers, and lack of interest on the part of citizens about what happens in their country or region, or may lead to unrest, riots, and even wars. So also does restricting diversity, which results in disenfranchisement. It is a difficult challenge to decide on a “sensible” number of languages. That number is generally not one. It is probably not forty-two, the answer given by the computer in *The Hitchhiker’s Guide to the Galaxy* to the question, “What is the answer to life, the universe and everything?”<sup>6</sup> And it is certainly not 527, the number of languages spoken in Nigeria today. Our contribution is to show that in the recipe, linguistic distances, which the reader will encounter in many chapters, are an important ingredient.<sup>7</sup>

The two opening chapters discuss the importance people attach to their native language and culture, and describe how linguistic policies have led to the alienation and disenfranchisement of various groups or individuals restricted in their linguistic rights.

Some very basic notions about linguistic and other types of distances are introduced in the next chapter and used throughout the book, especially in chapter 4, which illustrates the importance of linguistic or cultural distances in issues as diverse as bilateral international trade, the choice of immigration destination, translations of literary works, and the voting behavior of countries along linguistic and cultural lines. Smaller distances (or a common language) between countries have a positive impact on their trade. In many cases, immigrants are attracted by countries with which they had former contacts—through colonization, for example—and so gained some exposure to the culture and language. More literary works are translated from source languages (and cultures) that are close to the destination language. And the winners in a popular song contest in Europe are elected by those with whom they share cultural traits, including language.

But languages also evolve over time. In particular, learning foreign languages may alter the linguistic repertoire of various communities.

<sup>6</sup>We owe this reference to Richard B. Thank you, Richard, for this, and for so much more.

<sup>7</sup>Our goal has nothing, or very little, in common with the book by Ariel Rubinstein (2000), *Economics and Language*. Although the title is somewhat similar to ours, Rubinstein is mainly concerned with the links between the formal language of mathematical models and natural language. As important as they are, those issues are far removed from our main interests.

To evaluate the patterns of investment in human capital and private returns from learning foreign languages, in chapter 5 we use the theory of communicative benefits introduced by Nobel Prize winner Reinhard Selten and American linguist Jonathan Pool (1991) and link it to linguistic diversity. Distances again play a prominent role, since the decision to learn a new language strikes a balance between costs (the difficulty of learning it, which correlates with distance) and benefits. Will it pay to learn a language?

The next two chapters address the issues and the consequences of linguistic and ethnolinguistic diversity, fractionalization, and polarization, as well as disenfranchisement. Diversity, fractionalization, polarization, and disenfranchisement indices that measure these phenomena have a long history in linguistics and sociology, starting with the contribution of Joseph Greenberg (1956) and its later extension by Stanley Lieberman (1964), two distinguished representatives in their respective disciplines. Such indices have more recently been used by economists, who have underlined the important role they play in explaining economic growth, redistribution, income inequality, corruption, political stability, and bureaucratic (in)efficiency in many developing countries and regions in which democracy is little more than a buzzword. We also stress the fact that in empirical work, indices that account for linguistic distances perform better than those that do not.

The last chapter is devoted to a case study of linguistic policies in the EU. Linguistic policies should achieve a delicate balance, taking into account efficiency considerations without forgetting the will of the people. We suggest that though the English-only solution may yield greater efficiency and save on costs, it could generate too large a degree of disenfranchisement that leads to less political unity and citizens' loss of interest in a true European Union. We point to several alternative solutions that include the political feasibility of altering the extent of translation to some core languages, the provision of compensating transfers for countries that would be ready to cover their own translation needs, and some fair methods of sharing the global cost of translation and interpretation, which could be of use in other parts of the world.

## SOME HINTS FOR A PIECEMEAL READING

Though we have tried to make the presentation as simple and accessible as possible, it is unavoidable that some chapters of the volume

are more technical than others. Linguistics is a difficult topic, and so are economics and sociology, even when discussed in isolation. Here, all three disciplines are combined. Chapters 1 and 2 are of a purely descriptive nature. Chapter 3, on distances, uses linguistic concepts, and the reader, unless familiar with the field, should devote some time to reading this chapter, which lays out the basic insights used in all the other chapters. Chapter 5 uses game-theoretic concepts, and chapter 6 defines diversity, fractionalization, polarization, and disenfranchisement indices, which need some mathematical formulation. The reader who is not interested in technicalities may skip the first section of chapter 5 and chapter 6. Chapters 4 and 7 are devoted to the many empirical studies whose object is to estimate the impact of linguistic distances and ethnolinguistic diversity on economic outcomes. They include many tables devoted to econometric results, but these results are also discussed in simple terms, and both chapters can thus be read without relying on the detailed tables. The second part of chapter 7 and chapter 8 are devoted to a case study of linguistic policies, and most of it is easy reading. The last part of chapter 8, devoted to showing how the financial burden of the more than one billion euros spent every year by the EU on translation could be shared in a fair (or fairer) way, is a little more demanding.

Having given these warnings, we briefly address the question of the potential readership of the book. Both authors are economists, and it is obvious that their fellow economists who have had some basic training in game theory and econometrics, even if it is somewhat rusty, should be able to read the book without any difficulty. Students with a background in sociology or linguistics will probably face more problems, though they may skip the more technical chapters without losing the flavor of our arguments. A very basic economic training will permit following most of the discussion. The same is true for the lay reader. After all, as economists, we were also—and still are—lay readers in sociology and linguistics but had to grapple with some difficult concepts that we felt were necessary for our thesis.