

Humboldt-Universität zu Berlin

REAL-Arbeitsbericht Nr. 15-6

Economics of language policy: Introduction

MICHELE GAZZOLA and BENGT-ARNE WICKSTRÖM

Updated: 2016-11-18

REAL

Research group "Economics and Language" Forschungsgruppe »Ökonomie und Sprache«

Economics of language policy: Introduction^{*}

MICHELE GAZZOLA^a and BENGT-ARNE WICKSTRÖM^b

^aHumboldt-Universität zu Berlin ^bAndrássy-Universität Budapest

^{*}Part of this work has been carried out in the Research group "Economics and language" in Berlin, with which both authors are associated. The group is receiving funding from the European Union's Seventh Framework Program (Project MIME – grant agreement 613344). This support is gratefully acknowledged.

This essay has been published as:

GAZZOLA, MICHELE and BENGT-ARNE WICKSTRÖM (2016). "Introduction". In: *The economics of language policy*. Edited by MICHELE GAZZOLA and BENGT-ARNE WICKSTRÖM. Cambridge: MIT Press: 1–18.

Economics and Language Policy

In the last decades the world has experienced several major changes that had an impact on linguistic diversity, and on the way language is perceived by individuals. Increasing international economic integration (sometimes referred to as "globalization") has emphasized the need for companies to look beyond their national borders and domestic markets and the necessity of new international rules to guide this process. The World Trade Organization, for example, was founded in 1995. Supranational political integration has become stronger. At the European level, the Treaty of Maastricht, signed in 1992, followed by other agreements, has deepened the process of European integration, increased the importance of the European Union, improved the mobility of labor in the continent, and led to the monetary union of several European states. On the top of that, three EU enlargements (2004, 2007, and 2013) have almost doubled the number of member states in less than ten years, and increased the EU population by about 30 percent.

Mobility and migration flows have become more intense. For example, between 1980 and 2013 the percentage of immigrants on the total population of the United States rose from 6.2 to 13.1 percent;1 at the international level the number of students in tertiary education enrolled outside their country of citizenship increased from 0.8 million in 1975 to 4.5 million in 2012 (Bonino, Ciaramella, and Corno 2010). In Europe, the Schengen Agreement signed in 1995 led to the creation of Europe's borderless area in which EU citizens can freely move and live. In 2012, according to official Eurostat data, the EU foreign population, that is, people residing in a EU member state with citizenship of a non–EU member state, was 20.7 million, representing 4.1 percent of the total European population.

Since the end of the cold war, many ethnic minorities have been involved in processes of revitalizing their local identities and traditions, occasionally as a reaction to globalization itself. This has entailed an increase in the demand of political autonomy, which in some cases led to political independence (e.g., the states of the former Soviet Union or Yugoslavia) or a quest for such an independence (e.g., Catalonia and Scotland). More recently, with major technological advances in t information and communication technologies (ICT), cross-border communication has become easier than ever.

As a result of these trends the occasions of contact and therefore of potential conflict (Nelde 1987) between languages have increased, and the range of problems raised by the diversity of languages in international economic and political integration processes calls upon new solutions to manage linguistic diversity. Hence the range of issues at stake does not include only habitual questions such as the relationship between language, culture and identity. It includes recent topical issues such as transnational labor mobility, trade, internationalization of higher education and access to scientific knowledge, social inclusion of migrants, companies' international competitiveness, and democratic control of supranational organizations such as the European Union or multilingual countries such as India or South Africa.

Many of the phenomena presented have a linguistic dimension, but they are essentially political, economic, and social in their nature. Hence the type and the complexity of the issues at hand require an interdisciplinary approach; economics can provide useful inputs in this respect. Yet, on the one hand, economists often tend to work in isolation, in the sense that they are relatively little open to contributions from other disciplines. Language, in particular, is not seen as an important or fundamental variable in explaining human behavior; at best, it is simple communication tool. On the other hand, as Ricento (2006b) notes,

sociolinguists and applied linguists have little training in the social sciences, and sometimes formal modeling and/or empirical analysis describing or explaining language behavior are viewed, in some quarters of the discipline, as too reductionist.

The purpose of this book is to contribute to the interdisciplinary research on languages in society and to strengthen intellectual exchanges among social scientists and applied linguists. The concept of *language policy* (or *language planning*)2 offers a possible common framework among disciplines and a shared research area for linguists, economists, and social scientists in general. Language policies are increasingly acknowledged as being a necessary component of many decisions taken in several policy areas. Let us mention some examples: language policy in education affects the supply of linguistic skills available in a given labor market, and it can influence workers' transitional mobility decisions; language policies adopted by universities condition the access to knowledge for students; by giving official status to some languages and not to others, national and international organizations can reduce or improve the capabilities of citizens to exert democratic control over such organizations; language planning at the state level can modify the rights of ethnic minorities; inequalities related to translation requirements for patents or trademarks can create inequalities as regards the costs faced by companies; this in turn may bias competition.

Hence the type and the range of questions raised by some of the trends discussed above call upon innovative, efficient, and fair language policies to manage linguistic diversity at several levels, and therefore upon interdisciplinary research to support decision-making. It should be noted that the potential contribution of economics and policy analysis to the study, the design and the evaluation of language policies was already clear to sociolinguists in the 1970s, but the role of economics in language planning remained marginal for roughly twenty years.3 All this began to change in the 1990s, when a growing number of social scientists

started to be more often involved in research on language in society and in the economy, and where different applied linguists felt the need for new inputs from the social sciences. As a result, an interdisciplinary dialogue started, and this book aims at promoting such a dialogue. By interdisciplinary dialogue, we mean an academic debate in which scholars are truly open to methodological approaches and theoretical constructs from other disciplines, and in which they are ready to use the result of this exchange to broaden and enrich their own work.

The contributions to this book are the result of a workshop on "The Economics of Language Policy" organized as part of the CESifo Venice Summer Institute at Venice International University on July 26-27, 2013.4 The workshop brought together economists with sociolinguists, political scientists, and sociologists, as well as scientists from other disciplines, but without removing the focus of the workshop on economics. The conference enabled a scientific exchange on language-policy issues from different methodological perspectives, furthering the development of the field of economics and language and strengthening its theoretical and empirical connections to research on language policy and planning. The result is a book that covers several subjects of interest to economists, to social scientists in general, and to scholars in language policy and planning alike. The book also touches different geographical areas, including Europe, some African countries, India, Canada, Kazakhstan, Indonesia, as well as some Central American countries. The book therefore encompasses an accessible guide to and an analytical bibliography of the economics of language, and several contributions increase the stock of knowledge upon which language policies can be designed and implemented. In order to make the empirical analyses or theoretical models in this book as accessible as possible to scholars from different academic traditions, in different chapters the authors included intuitive explanations of the results .

This book differs from other recent books in language economics in many respects. First, it covers different topics, and therefore it does not focus on specific issues such as the contribution of language skills to added value creation in the economy (Grin, Sfreddo, and Vaillancourt 2010), the relationships between language policy and technological innovation (Gazzola 2014), or the impact of language planning on linguistic disenfranchisement (Ginsburgh and Weber 2011).

Second, it deliberately does not cover (or cover only partially) subjects that are already discussed in depth elsewhere. The origin of linguistic diversity, its measurement, evolution, and effects on economic outcomes are discussed in depth in different chapters of a book edited by Ginsburgh and Weber (2016, forthcoming). Two interesting books (Chiswick and Miller 2007 and Callahan and Gándara 2014) collect a wide range of empirical results on the effects of language skills and bilingualism on the labor market, in particular, in North America. Among the topics discussed in these two books, we should mention the determinants of the acquisition of proficiency in the official language of the host country by immigrants, the relationships between the language of indigenous minorities, the demand for language skills in the labor market, and finally the effects of acquiring host country language proficiency in labor market activities, in consumption activities, in housing and in other spheres of life.

Last, this book is also different from some recent collective contributions addressing issues that may have an economic relevance or an affinity with economic research, but that remain in essence anchored in sociolinguistics and political sciences with very few contributions from economists. There are different examples in that respect. The relationship between language and poverty is addressed in Harbert (2008), the political economy of English as a global language is the central subject in a book edited by Ricento (2015), and the

study of the connections between language policy and politics is the leitmotiv in many chapter of the book edited by Sonntag and Cardinal (2015).

How This Book Is Organized

A Map and a Compass of Language Economics

The two chapters in part I provide a guide to the research area called "language economics" or "economics of languages," with a focus on the economics of language policies. In chapter 1, François Grin presents a broad-based overview of language economics and he proposes a theory-based typology of research. This chapter provides a mental map of language economics, that is, a systematic classification of contributions aimed at orienting the reader in this research area. It highlights the connections between economics and language policy, by focusing on the selection, design, and evaluation of language policies. This chapter also addresses the question of interdisciplinarity in language policy and planning research, and it shows how economics and sociolinguistics can mutually benefit one from the other. A set of research priorities in language economics are identified.

The second chapter is a necessary complement of the first one. In chapter 2, Michele Gazzola, François Grin, and Bengt-Arne Wickström complete the mental map with a bibliography of more than 300 contributions to language economics. This is not a review of the literature, but a systematic attempt to classify the relevant literature according to the subject discussed and in relation to other contributions in this area. Chapters 1 and 2 therefore should be read together; the mental map is provided to familiarize the reader with the bibliography. The list of papers in each category is preceded by a concise introduction presenting the subject matter.

The subsequent chapters contribute to the advance of language economics in some of the research areas identified in the mental map. Other chapters present a sociolinguistic and political perspective on languages in the economy.

Linguistic Diversity, Welfare, and Language Policies

The chapters in part II address the question of the relationships between linguistic diversity and individual and societal welfare. As these chapters discuss, languages and language policies are linked to welfare in different ways. For example, linguistic diversity can contribute to fragmentation and segmentation of our societies; this, in turn, can have an impact on different economic variables such as economic growth and public good provision. Linguistic diversity can be managed through language policies, for example, by giving official status to one or more languages. Such language policies bring about costs and benefits of material and symbolic nature, both for individuals and society as a whole that must be identified and estimated. Finally, linguistic diversity can be linked to the welfare (or "utility" in economists' vernacular) of individuals also at the micro level. In multilingual contexts, individuals must make choices regarding which language to use and for which purposes. Such choices influence the well-being of individuals, and this in turn has an impact on the dynamics of language usage within society itself.

Chapter 3 is devoted to the analysis of different forms of measurement of linguistic diversity. The approach developed by Victor Ginsburgh and Shlomo Weber expands the existing measurements of diversity that traditionally focus on the size or the number of different groups of speakers. The authors convincingly argue that the notion of distance or dissimilarity should be included in future research in order to properly identify different groups of speakers. This chapter proposes different indicators to measure dissimilarity

between languages based on the notions of "fractionalization" and "polarization." It gives some examples of the relationship between, on the one hand, the indexes of linguistic fractionalization or polarization and, on the other hand, different economic and sociological outcomes such as growth, the quality of government, public good provision, and redistribution. Hence indexes of linguistic diversity can contribute to our understanding of the connections between languages and welfare. The authors conclude the chapter with an indepth discussion of the advantages and disadvantages different public policies of linguistic standardization that different countries undertook in the past to reduce some of the negative aspects of linguistic fractionalization. In the authors' terminology, linguistic standardization means a mix of status, corpus and acquisition planning that aims at reducing the number of the languages to be used for official purposes. The most important disadvantage of linguistic standardization is the feeling of disenfranchisement of some populations or groups. Language policy therefore requires a careful analysis of the trade-off between the benefits of standardization and the costs of disenfranchisement. Ginsburgh and Weber discuss the example of the European Union to illustrate such a trade-off.

Maxime Leblanc Desgagné and François Vaillancourt in chapter 4 examine the distribution of the financial costs and benefits of federal French language services in Canada, compared to a situation where services are offered only in English (the question of symbolic costs and benefits therefore is not addressed here). More specifically, the authors estimate the marginal cost of providing public services as a result of the official language policy. As English is the majority language in Canada, this means estimating the costs of providing public services in French. Benefits are defined in terms of cost savings for French-speaking Canadians, that is, savings derived from the fact that the official bilingual policy allows Francophones to access the services of the federal government in French rather than in

English. Finally, the authors examine how these costs and benefits are distributed using the methodology of incidence analysis to attribute the tax burden of the various federal taxes and spending programs. The results are broken down by income deciles. Results reveal that language intensive services benefits for Francophones increase with income peaking in the tenth decile because the better-off are more likely to consume cultural and other services. In other words, poorer households pay more than the value they attach to the services obtained. The authors note also that the English-speaking majority in practice contribute to the funding of language services that are mostly consumed by better off francophone households. This chapter provides an illuminating description of some of the connections between language planning and individuals' welfare, and how language policy impacts on the distribution of resources in society.

The economic value of "reciprocal bilingualism" is the subject of chapter 5. By reciprocal bilingualism Ramon Caminal means the promotion of bilingualism among members of two speech communities, such as a majority and a minority. Generally speaking, members of minorities are more likely to be proficient in the majority language in countries that do not apply a strict linguistic territoriality principle and where linguistic communities are not separated by well-defined linguistic boundaries. In bilingual societies minority speakers are usually proficient in the majority language, and therefore the ability to communicate is not at stake. The point of departure of Caminal's analysis therefore is the following questions: In such contexts, does it make sense to promote the learning of a minority language among members of the majority speech community? Would these additional skills not be redundant? Using an elegant formal model, Caminal shows that policies aiming at teaching the minority language to members of the majority, if learning costs are not too high, are likely to generate significant welfare gains by diminishing

economic and social segmentation between the two communities. As individuals have linguistic preferences about which language to use, the propensity to cooperate increases if both parties can use the language of the other. According to the author therefore policies aimed at promoting reciprocal bilingualism can be justified on the basis of collective welfare reasons without the need to appeal to the symbolic reasons (which, of course, are also important). Such policies nevertheless might not draw sufficient support from the speakers of the two communities because welfare gains tend to be unevenly distributed. This raises again the question of fairness in language policy and planning.

In chapter 6, José-Ramón Uriarte and Stefan Sperlich develop a game theory model explaining the actual social use bilingual people make of a minority language. In this model, agents interact with anonymous communication partners or interlocutors. This implies that agents do not know the language skills of their communication partners before starting a conversation with them. In the game theory's terminology, language skills are "private information" and player is unaware of the "linguistic type" of an interaction partner; that is, the players do not know whether their partners are bilingual or monolingual. As a result bilinguals face a linguistic coordination problem. The outcome of the high number of interactions in society contributes to the establishment of conventions, which in the long-term influence the frequency of use of a language in society and therefore its vitality. The authors show that the evolutionary stable choice (or "strategy" in game theory terms) tends to favor the use of the majority language in contacts with strangers even among speakers of the minority language, which then results in a suboptimal use of the minority language.

Chapter 7 deals with the relationship between language skills and the feeling of national identification. The focus here is not on a well-defined economic variable such as income or growth, but on an essentially cultural variable as identity. Developing a feeling of

collective identity can be viewed as a form of immaterial capital (or "cultural capital") that can contribute to the well-being or welfare of a community. In this chapter, Katalin Buzási presents the results of a study on the impact of language skills on national identification (as opposed to ethnic identification) in different Sub-Saharan countries. Using data from the Afrobarometer Survey, the author shows that speaking more than two languages increases the chances of identifying in national terms rather than in ethnic (or tribal) terms. In other words, multilingual citizens are more committed to the nation. In former French African colonies, there is a positive relationship between feelings of national identification and the probability of having some language in common, a variable captured by the "index of communication potential" (IPC), which is defined as the probability that an individual can communicate with another randomly selected person within the society. Note that there is a connection between this chapter and chapter 3 by Ginsburgh and Weber on the measurement of linguistic fragmentation and its socioeconomic outcomes.

Language as Human Capital

Part III includes the contributions that discuss relationships between linguistic skills and labor income (and more precisely earning differentials), one of the classic subjects in the economics of languages. Language skill, in addition to being an ethnic attribute, can be viewed as a form of human capital that can generate a positive effect on individual's income. The study of such a relationship represents without a doubt the largest part of the literature in language economics, as is shown in chapter 2. Surprisingly, papers on language and earnings are rarely mentioned by scholars in language policy and planning. One reason may be that they are written by economists for economists and that the emphasis is put on econometric methodological problems, such as endogeneity, rather than on the sociolinguist interpretation

of the results and on their relevance for language policy and planning. Nevertheless, this literature contains many interesting results on the market value of languages and discrimination patterns that can provide very useful input for the design and evaluation of language policies, as well as for the study of speakers' representations about which languages are (or are going to become) useful in the economy; this in turn can influence language dynamics.

Chapter 8 focuses on the economic value of English and other languages in the Montreal labor market. Using micro data from the Canadian Census published in 2006, Gilles Grenier and Serge Nadeau explore the determinants and the economic value of the use (as distinct from simple knowledge) of different languages in the workplace in Montreal, officially a French-speaking city. The authors define indexes to measure the use of French, English, and other languages in the workplace, and they relate these indexes to the income of individuals belonging to three different groups, that is, native speakers of French, English, or other languages. Results reveal that for native speakers of French, the gains from using English are large. Further the higher the frequency of use of English (i.e., 75 percent of the working time), the higher is the gain. For English native speakers, gains accruing from using French are generally low. Surprisingly, such gains tend to be higher when French is not used very often in the workplace (i.e., 25 percent of the working time). The payoff of using one Canadian official language in the workplace (either English or French) is positive and high. These results are compared with other studies that examine the relationships between earning differentials in the labor market and knowledge (as opposed to use) of a second language. Results show that the knowledge and the use of a second language are two separate things. More specifically, in the labor market in Montreal, English is very often necessary in order to be successful in the labor market whereas French is only an asset.

Alisher Aldashev and Alexander Danzer (chapter 9) investigate the private economic return of Russian in the labor market in Kazakhstan, a country where Russian used to be main official language before the fall of USSR. After the independence, the status of Kazakh was increased, but the Russian language still enjoys a high social status, in particular, in urban areas and in business activities. Hence Kazakhstan offers an interesting context to examine the relationship between linguistic skills and earning differentials. Surprisingly, empirical evidence finds a negative effect of bilingualism on earnings, at least in some in some regions of Kazakhstan. In other words, those who know Kazakh and Russian have lower earnings than monolinguals. According to the authors, however, this effect is not due to ethnic discrimination; rather, it is linked to the way individuals assess their proficiency in Russian relative to their peers. More specifically, bilinguals who declare themselves to be proficient (or fluent) in Russian in comparison with monolingual native speakers of Kazakh are less likely to be truly proficient in Russian, whereas this is not the case for those who assess their degree of proficiency with respect to truly native speakers of Russian. Putting it differently, by choosing a wrong term of comparison, some native speakers of Kazakh overestimate their knowledge of the Russian language. The authors conclude that the negative effect on earning of knowing two languages is indeed a wage penalty for not being really fluent in Russian, the language of the business in Kazakhstan. This chapter provides a sociolinguistic explanation of an economic outcome, and it shows thereby that the economics of languages is not just about formal models or sheer numbers but rather an interdisciplinary research area in which contributions from sociolinguistics are highly relevant and can contribute to the understanding of economic phenomena.

Trade and Mobility

Two chapters in part IV are devoted to the mobility of people and goods. This is a very interesting topic in language economics that would deserve more attention. Globalization underlines the importance of languages as necessary tools to communicate with consumers and providers beyond regional and national borders, and this can provide strong reasons to invest in private or public language learning. At the same time international processes of political integration, such as those occurring at the EU level, and migration flows have become more intense. As a result mobility has increased dramatically. Some people migrate to settle in a new country, but other people such as students and workers often move from one country to another just for a few years or even months. The linguistic dimension of these phenomena requires more investigation. For this reason the results presented in the next two chapters are very much welcome.

Using data on the study of foreign languages during compulsory education in different European countries, Ainhoa Aparicio Fenoll and Zoe Kuehn in chapter 10 investigate whether and how much language proficiency determines migration flows across Europe. Speaking a foreign language reduces migration costs, that is, economic and social costs associated with moving in a new region or country. Learning a foreign language during the compulsory education therefore can contribute to reducing migration costs, especially for young people. The authors compare migration decisions of individuals from different groups within countries as well as across countries. Results show that those who learn and speak the official language of a country as a foreign language are five times more likely to move to that country. Viewed from a macroeconomic perspective, chapter 10 provides evidence that learning foreign languages can contribute to intra-European mobility of labor and therefore to a reduction of the unemployment rate in the EU. It should be noted that this process is a by-

product of language acquisition planning in various EU countries. As some languages are more frequently taught than others, language policy indirectly benefit the labor market in some language regions or countries much more than in others.

Chapter 11 presents a study on the relationship between languages and international trade patterns. Peter Egger and Andrea Lassmann develop a formal model in which different measures of linguistic communality among countries are used as one of the determinants of trade patterns. By measures of linguistic communality, the authors mean, among other things, the fact that two or more countries share a common official language, or a common native language or a common spoken language (which is not necessarily official or native). The model is subsequently tested using data from the World Bank. Results show a positive and quantitatively important effect of having a common language on aggregate product overlap of goods exported or imported between pair of countries, that is, the set of product varieties that is traded reciprocally between two countries. Further the authors show that having a common spoken language turns out to be nearly twice as important, in terms of resulting economic effects, as sharing a common native language (the latter is generally associated with cultural proximity). In other words, sharing a common communication tool has a larger positive impact on trade than sharing similar cultural traits as captured by the variable "sharing a common native language." Since a shared commonly spoken language is something that can be the target of specific language policies, notably via language learning or acquisition planning, the results of this chapter have interesting policy implications.

Globalization, Inequality, and Politics

Part V contains four chapters written by noneconomists who eloquently talk with economists, using sometime economic notions and concepts, regarding the value of diversity, its benefits

and costs, its relationship to welfare and inequality. For this reason, these chapters could have been included in other parts of this book, for example, chapter 13 on linguistic diversity, environmental sustainability, and economic growth could fit well also in Part II. Nonetheless, the decision was taken to collect them together to emphasize several important issues related to linguistic diversity that sometimes economists tend to underestimate or overlook by placing too much emphasis on the instrumental function of languages. The subjects discussed vary from author to author; nevertheless, these chapters share some common features; that is, they stress the centrality of concepts such as inequality and power (and therefore politics) in language matters, and they argue against the simplistic view of languages as perfect substitutable communication tools. The contributions in this part of the book remind us that it is not possible to separate languages from their speakers and therefore from the real environmental contexts and social ties in which such speakers live. In other words, languages should not been viewed as neutral or value-free tools because they are embedded in political and social relationships. Hence language policies and language dynamic in general can contribute to the entrenchment of existing inequalities (or, alternatively, to overcoming such inequalities), influencing the distribution of power among different actors and to hampering (or, alternatively improving) the living conditions of people. Theoretical contributions that ignore these aspects are less likely to be relevant for policy-making.

In chapter 12, Stephen May explores some aspects of the relationship between globalization and language dynamics by critically assessing the linguistic implications of the opposition between the concept of "global" and "local." The former is increasingly considered as being correlated to international mobility, dynamism, and better opportunities, whereas the latter is often associated with static, closed and inhibiting environments. English is often seen as a central element of globalization, cosmopolitanism, transnational identities,

and social mobility, whereas minority and internationally lesser-used languages are sometimes viewed as an obstacle for those who wish to have access to the benefits of globalization. For this reason some authors suggest to facilitate the transition toward a global diglossia in which English would play the role of the language of wider international connectedness, relegating other languages to the modest role of tools for local purposes. May problematizes this widespread position showing its conceptual limitations. Different authors fail to address the historical nature of language dynamics, and therefore they ignore the question of power and inequality connected to such dynamics. Accepting a naïve conceptualization of English as a monolithic entity putting everyone on the same foot is risky because we cannot disregard the practical relevance of the sociolinguistic concept of linguistic variety. For example, being a rich native British speaker abroad, say, in Spain, cannot be viewed as equivalent to being a poor African-born speaker of English who migrated to that country. Speaking English as such therefore does not mean that much if we do not clarify who speaks this language with which accent and where. In addition he criticizes the overelaboration of the links between language and mobility, and the ill-advised recommendations on education policies usually linked to them. Finally, the negative and oppositional juxtaposition of local and global identities are examined and proved to be wrong.

In chapter 13, Suzanne Romaine discusses the links between linguistic diversity, environmental sustainability, and economic growth. She shows that there is a certain overlap between the territories with a high biodiversity and the territories where cultural-linguistic diversity is high. Further these geographical areas tend to be economically poor. Linguistic diversity, biodiversity, and poverty tend to concentrate in some hotspots, namely Mesoamerica, Guinean forests of West Africa, Himalaya, Indo-Burma, and the East

Melanesian Islands. Nevertheless, it would be misleading to conclude that a higher linguistic diversity is the cause of poverty. The reasons behind low economic development must be sought elsewhere. Romaine argues that economic growth in the hotspots should go hand in hand with the protection and promotion of biodiversity and linguistic diversity. An increase in the socioeconomic well-being of indigenous populations could be achieved if such population were allowed to preserve their traditional cultural and economic activities, which usually are intertwined with traditional knowledge and therefore transmitted with local languages. On the contrary, assimilation to the dominant culture and language creates cultural alienation, it undermines the social cohesion of indigenous populations, and it promotes the abandonment of traditional economic activities that are usually linked to a deep knowledge and respect of the natural environment in which such activities are embedded.

Lauren Zent illustrates in chapter 14 what adverse effects language policies can have if they are not implemented with adequate resources. She examines the unexpected effects of the "rush to English" in Indonesia. The policy goal of the government is to secure national identity through Indonesian as a language of instruction and to teach English as a foreign language in order to participate in globalization. However, the government lacks adequate resources to implement such a language policy, and therefore English is not taught effectively in the public school system. As a result an adequate knowledge spreads only among those who already have the resources to privately learn or improve it. English therefore becomes an indicator of social status, and it gradually contributes to entrenching social cleavages rather than opening up the doors of globalization to everyone. This in turn further strengthens the perception that English is what one needs to reach a higher social status. In other words, it is not English that's the only thing that matters; it is everything else that occurs along with English that makes English and access to it important. The Indonesian example shows that

language per se does not necessarily bring social advantages; rather what matters is the way in which language policies are designed and implemented in practice.

In chapter 15, Selma Sonntag explores the linguistic dimension of the evolution of tension between India's democratic politics and the market. Since the beginning of the economic liberalization in 1991, English has increasingly been used in the Indian economic system, although Indian vernacular languages (or, more precisely, India's major regional languages) predominate in the political area at the local levels. This has added a linguistic dimension to the Indian class and caste chasm, as elites tend to know English more often and better than the masses. However, Sonntag argues, the expansion of the domestic market has augmented the demand for (and therefore the supply of) products in the local language, and this boosts the use and the presence of the vernacular in the economy. This could turn out to be a counteracting force to the spread of English as the main language of the economy in India. This example shows that globalization does not necessarily have to entail dire consequences for linguistic diversity. Sonntag's analysis critically discusses the simplistic view that languages in the market are perfect substitutes: because consumers have linguistic preferences, the linguistic features of goods and services must be taken into account in the study of consumer demand.

Conclusions

A first general message of this book is that the application of economic theories and research methods to the study of languages in society and multilingualism can be stimulating and bring about several insights. As languages are inextricably embedded in social interactions, an adequate knowledge of socioeconomic phenomena and of the relationship to language and communication may enhance our understanding of language behavior and language change.

In this book, several aspects of such relationships are analyzed, notably: the impact of language diversity on economic outcomes, the distributive effects of official languages policy, the consequences of social bilingualism on individuals' welfare, the effect of individuals' strategic linguistic choices on the aggregate language dynamics, the link between language knowledge and national or ethic identification, the effect of language use and language skills on labor income, and the consequences of having a common language on trade patterns and on a population's mobility decisions. Linguists and language policy scholars may benefit from becoming more aware of the potential relevance and import of formal models and quantitative analysis to the study of languages in society. Although purely descriptive studies and ad hoc case studies often are very interesting and generate new ideas, sometimes they lack an adequate level of generality and reproducibility both in the results obtained and the methods used.

At the same time, efforts from economists and other social sciences to overcome disciplinary isolation could be strengthened to pursue a fruitful interdisciplinary dialogue with other scholars, and in particular, with sociolinguists and applied linguists. This requires intense conceptual work and a sound understanding of complex variables such as language. This book provides some examples of subjects that require more attention from economists, such as the relationship between language and unequal power, the connections between linguistic diversity and poverty, and the role of ideology and politics in language policy and planning.

Language policy can be a suitable common ground of interdisciplinary research. In order to understand existing language policies (either explicit or implicit) and to design and evaluate new policies, we need to take into account both patterns of language use, and a

people's linguistic attitudes, ideologies, on the one hand, and notions such as costs, benefits, incentives, and welfare, on the other hand.

Acknowledgments

We, the editors, would like to use the opportunity to thank all the authors contributing to this book. The process leading up to the final product has been longer than we originally expected, and we are very grateful to the authors for their patience and preparedness to rework their contributions several times in response to the suggestions of the discussants and referees as well as the editors. In this connection, we also like to express our gratitude to the discussants and referees, namely, Jan Fidrmuc, Federico Gobbo, Walter Krämer, and Laura Onofri, who all contributed substantially to the quality of the book. Our special thanks go to CESIfo in Munich, especially to Katja Gramann and Michael Stimmelmayr, for the financial and perfect organizational support in preparing and carrying out the Workshop, making it so interesting and pleasant.

Part of the work on this book has been carried out at Humboldt-Universität zu Berlin in its Research group on economics and language, where Michele Gazzola is a staff researcher and Bengt-Arne Wickström a frequent visitor. The members of the group received funding from the European Union's Seventh Framework Programme (Project MIME—grant agreement 613344),the Research Executive Agency of the European Commission (Project LAPO—grant agreement PIEF-GA-2012–327225) and the Swiss National Science Foundation (project PBGEP1-145655) This support is gratefully acknowledged.

Notes

1. Source: Migration Policy Institute. "Immigrant" includes naturalized citizens, lawful permanent residents, refugees and asylees, persons on certain temporary visas, and the unauthorized.

2. Both the term language policy and language planning are employed. In recent years, researchers tend to use the encompassing term "language policy and planning". For an introduction to this research area , see, for example, Johnson (2013), Spolsky (2012), and Ricento (2006a).

3. See Grin (2003) and Gazzola (2014) for an historical overview.

4. The editors received 44 full papers, which were subsequently cross-reviewed. Besides the presentations of the three keynote speakers, eleven were selected for the program. As many of the proposed contributions were of exceptional quality, it was difficult to select the best. Beside the intrinsic quality of the papers, other important criteria taken into account were the interdisciplinary nature of the contribution, and the need to have a symposium covering different topics and geographical areas. As travel costs of all contributing participants were paid, the symposium became a truly international event not limited only to European participants.

References

Bonino, Dario, Alberto Ciaramella, and Fulvio Corno. 2010. Review of the state-of-the-art in patent information and forthcoming evolutions in intelligent patent informatics. *World Patent Information* **32**: 30–38.

Callahan, Rebecca M., and Patricia C. Gándara, eds. 2014. *The Bilingual Advantage: Language, Literacy and the US Labor Market*. Bristol: Multilingual Matters.

Chiswick, Barry R., and Paul W. Miller. 2007. *The Economics of Language: International Analyses*. New York: Routledge.

Gazzola, Michele. 2014. *The Evaluation of Language Regimes. Theory and Application to Multilingual Patent Organisations*. Amsterdam: John Benjamins.

Ginsburgh, Victor, and Shlomo Weber. 2011. *How Many Languages Do We Need? The Economics of Linguistic Diversity*. Princeton: Princeton University Press.

Ginsburgh, Victor, and Shlomo Weber. 2016. *The Palgrave Handbook of Economics and Language*. Houndmills: Palgrave-Macmillan.

Grin, François. 2003. Language Planning and Economics. *Current Issues in Language Planning* **4** (1): 1–66.

Grin, François, Claudio Sfreddo, and François Vaillancourt. 2010. *The Economics of the Multilingual Workplace*. London: Routledge.

Harbert, Wayne, ed. 2008. Language and Poverty. Clevedon: Multilingual Matters.

Johnson, David Cassels. 2013. Language Policy. Houndmills: Palgrave Macmillan.

Nelde, Peter. 1987. Language contact means language conflict. *Journal of Multilingual and Multicultural Development* **8**: 33–42.

Ricento, Thomas, ed. 2006a. *An Introduction to Language Policy. Theory and Method.* Oxford: Blackwell.

Ricento, Thomas, ed. 2006b. Language policy: Theory and practice: An introduction. In *An Introduction to Language Policy: Theory and Method*, 10–23. Oxford: Blackwell.

Ricento, Thomas, ed. 2015. *Language Policy and Political Economy: English in a Global Context*. Oxford: Oxford University Press.

Sonntag, Selma K., and Linda Cardinal. 2015. State traditions and language regimes: Conceptualizing language policy choices. In Linda Cardinal and Selma K. Sonntag, eds., *State Traditions and Language Regimes*, 3–26. Montreal: McGill-Queen's University Press.

Spolsky, Bernard, ed. 2012. *The Cambridge Handbook of Language Policy*. Cambridge: Cambridge University Press.