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# Translation and Language Policy in the Dynamics of Multilingualism

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# Translation and Language Policy in the Dynamics of Multilingualism

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#### ABSTRACT

Many of Joshua Fishman's major contributions to our understanding of language in society stress the importance of dynamics, which draws our attention to the complex interplay of micro-, meso- and macro-level factors from which an integrated pattern emerges. Our understanding of language dynamics, therefore, should encompass processes unfolding at various levels. It should also strive to provide accounts that can at the same time do justice to the interactions between these levels and deliver an analysis broad enough to constitute a sensible basis for language policy. Such concerns, illustrated in particular by Joshua Fishman's work on *Reversing Language Shift*, can also help us to develop a broad view of the conditions that can make language policy successful. In this paper, I propose to revisit this question by focusing on the role of translation.

Translation can be positioned with respect to language dynamics and policy both as a conduit of language policies and as a condition for the success of the latter. Whereas translation studies often approach translation as a self-contained process, it does not appear in a vacuum, but emerges from multilingual contexts and is therefore dependent on the latter. It follows that in the long term, the demand for translation services should not be taken for granted, and that its partial dependence on favorable language policies should be acknowledged. At the same time, translation contributes to the maintenance of linguistic diversity, as well as of societal multilingualism which turn out to be, reciprocally, dependent upon the very practice of translation. This examination confirms the ongoing soundness of the fundamentals of Fishman's approach to "language-in-society". A focus on translation also helps to assess some currently popular criticism addressed at core notions of the classical sociolinguistics that Joshua Fishman has helped to develop and disseminate. A case in point is the very notion of multilingualism, which is being called into question by the current popularity of notions such as "English as a lingua franca" and "languaging". The very existence of translation as a social, economic and political practice, however, suggests that societal multilingualism cannot satisfactorily be described without resorting to classical sociolinguistic concepts like ("named") languages, mother tongue and domain. In fact, such concepts are crucial to successful policies and, hence, to the maintenance of the linguistic human rights to which Fishman's work has made such essential contributions.

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#### **KEYWORDS:**

Multilingualism, linguistic diversity, language dynamics, language policy, translator training.

#### 1. Introduction: translation as Cinderella?

In a multilingual world, translation is arguably indispensable, but in much of the academic discourse about multilingualism and language policy, its role tends to be overlooked. Issues such as foreign language learning, language rights, minority language protection and promotion, language use in contexts of mobility and migration, multilingualism in the classroom, the use of a *lingua franca*, etc., are typically handled with barely a reference to the existence, let alone the functions of translation. When translation is mentioned at all, it is often treated as merely residual.

Of course, the picture is not one of complete neglect. Influential thinkers like George Steiner (1975) and Umberto Eco (1994) have repositioned translation as an intellectual adventure in the fullest sense of the term. Major international institutions, for example the European Union, regularly express their awareness of the contribution of translation (e.g. European Commission, 2010). Nevertheless, these positive signs barely hide what remains a dominant pattern in which translation – and more generally language services – are relegated to ancillary positions in accounts multilingualism and language policy. Translation sometimes evokes the image of a Cinderella confined to humble domestic chores while her elder sisters, that is, communication strategies like "lingua franca" and second/foreign language learning, enjoy all the attention and visibility.

This situation arguably reflects an inadequate appreciation, in the public at large as well as among specialists of language, of the true import of translation. My central claim, therefore, is that translation deserves more attention, and that the apparently common assumption that translation essentially boils down to a set of techniques needs to be fundamentally challenged. This concerns not only the issue of how to achieve quality and reliability in process through which meaning in one language is transposed into another, but also the broader functions of translation as a component of language policy, which I address in Section 2. I then examine the interconnection between language policy and language dynamics (Section 3) with a focus on the specific role of translation in this interconnection (Section 4). At the same time, some segments of the translation profession itself are partly to blame for the lack of recognition that affects their trade. The inadequate understanding of the role of translation is arguably also a victim of an added complication, embodied in the current vogue, in sociolinguistics, of some analytically debatable concepts. This applies in particular to notions such as "languaging" and "lingua franca". To the extent that such notions present themselves as embodying a full-fledged (and novel) conception of language and multilingualism, the question of their implications for translation does arise. As we shall see, these implications are

likely to be negative, not just because they tend to reinforce the marginalization of translation, but also because they may ultimately detract from our understanding of real-world multilingualism. The reference to translation is particularly helpful for exposing these failings. These points are discussed in Section 5 of this paper. Section 6 concludes.

### 2. (Re)claiming the roles of translation

Textbooks usually present translation as an activity which is largely abstracted from its macro-social, demolinguistic and geopolitical context and, by way of consequence, from language dynamics. Of course, translation theorists are careful to underline the indispensable character of cultural competence for quality translation, thus at the same time contextualizing translation. However, the focus usually remains on the very specific activity of translating texts from language B to language A, including in more historical accounts of the emergence of translation studies (e.g. Gentzler, 1993; Pergnier, 1993; Anderman and Rogers, 2008; Guidère, 2008). The broader perspectives afforded by recent developments in the sociology of translation also leave out, in the main, some crucial questions regarding the social conditions surrounding the activity of translation (Inghilleri, 2005; Wolf and Fukari, 2008).

However, these approaches usually make strong assumptions regarding the contexts in which translation occurs. More precisely, they take for granted the notion that translation activities *must* occur or — putting it in economic terms that a *demand* for translation necessarily exists, and that *supply* simply has to meet demand, which incidentally implies that the role of the translator is largely that of a *follower*. There are exceptions, of course: in the polysystems theory developed by Even-Zohar (1990), for example, translation is viewed as part and parcel of an interlocking of literary systems, where translations from B to A will carry different socio-cultural implications depending on the "standing", as it were, of A-language literary creation. Translations from *B* will occupy more space in the *A*-language literary system if the latter is young (or emergent), or peripheral, or in crisis. On this view, translation is directly enmeshed in larger-scale language dynamics. More recently, several contributions in Munday (2007) have described how the very existence of translation and its modalities influence social reality, and Ost (2009) has stressed the essence of translation as embedded in multilingualism, particularly in connection with language policies (see in particular Chap. 10).

The fact that multilingualism is dynamic, that languages spread and decline as a result of the complex interplay of a large number of factors, is one central to sociolinguistics and the sociology of language, and Joshua Fishman's work probably offers some of the most eloquent illustrations of this awareness. The latter, however, remains relatively unusual, or at least marginal in translation studies. Putting it differently, it is as if translation, though epistemologically situated, were, save for a few exceptions, phenomenologically isolated, or as if there were

not much of a "before" or an "after" to translation in a narrow sense. There is no doubt that the study of the translation process per se, even without explicit link-up to the social, political, economic context that motivates it, constitutes a rich field of study on an intellectually rewarding and multi-faceted area of human activity, but this does not tell us why translation occurs at all. Again, it is apparently assumed that the world is multilingual and that therefore translation is needed. However, even in a multilingual world, there are many ways to communicate in which the need for translation is reduced or even eliminated altogether. The most obvious strategy for dispensing with translation is large-scale foreign language learning. Consider a region, perhaps even a group of countries, in which three languages in total are used, say X, Y and Z. Each person has one of these three languages as a first language.<sup>2</sup> If everyone learns only one other (or "foreign") language (that is, any one of the two languages other than his first language), any randomly selected pair of speakers will always have at least one language in common. Of course, we may want to consider more complex cases, in which there are more than three languages (say 24, which is the number of official languages of the EU as of early 2016), and in which people meet not just in pairs, but in groups ranging in size from 2 to N, where N is the total number of people in the population. Then an easy way for communication to occur without any translation and interpretation is to get everyone to become fluent in one and the same foreign language (which can be an "outside" language like Esperanto or Klingon, or one of the 24 languages present, like Greek or English in the case of the EU — all these solutions offering both advantages and drawbacks discussed elsewhere, e.g. Pool, 1996; Grin, 2005; Gazzola, 2015).

Some trainers of translators and conference interpreters appear to assume that the skills they impart are not just necessary now, but always will be. In the short term, this is true. In the long term, it might not. There is no shortage of voices, some of them quite influential, who advocate a radical shift *away* from multilingualism and toward much less multilingual modes of communication, usually through an increased, or generalized, or sometimes even exclusive use of English. For example, the Dutch political scientist Abram de Swaan is on record for having described multilingualism (in the presence of the then Commissioner for multilingualism, Leonard Orban) as "a damned nuisance"; the Italian political scientist Daniele Archibugi advocates the use of English to increase political

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 $<sup>^2</sup>$  This does not rule out the possibility that some residents speak additional languages. The simplifying assumption (made for the sake of the example) that all residents have one of X, Y or Z as a first language does not rule out the possibility that they feel fully at ease in more than one language and have two first languages. Wherever large-scale surveys of language repertoires are taken, and even in questionnaires where respondents are allowed to list a large number of languages and specifically told that depending on their personal profile, they may not find it easy to single out a particular language as a "first" language, well over 95% of respondents have no qualms about designating a particular language as such. These well-established empirical observations also explain why even though I prefer to use the term "first language", "mother tongue" would usually be an acceptable equivalent.

<sup>&</sup>lt;sup>3</sup> See <a href="http://euobserver.com/879/26742">http://euobserver.com/879/26742</a>.

participation by citizens of the European Union<sup>4</sup>; the American sociologist Amitai Etzioni, who teaches international relations, argues that multilingualism is artificial, costly and just too complicated<sup>5</sup>; and of course, readers of the prominent weekly *The Economist* are by now used to its (mainly) pro-English tirades and occasional condescension towards other languages<sup>6</sup> (though other widely circulated newspapers are notably worse<sup>7</sup>).

The arguments marshalled in favour of this linguistic flattening are often powerful ones, and they are usually formulated in terms of efficiency, occasionally in terms of fairness. As I have tried to show elsewhere (e.g. Grin, 2005, 2015) such arguments against multilingualism, which can be very seductive for some politicians, taxpayers and media pundits, are in fact much less convincing when examined at close range. However, establishing this latter point – and demonstrating the economically advantageous nature of multilingualism, *even* if this implies paying for translation services – requires the identification of causal relationships in which translation is explicitly featured.

One immediately obvious relationship is that translation services are provided *because* there is a demand for it, and there is demand for it *because* a society, at a given time in a given space, operates multilingually. It is therefore important to understand the underlying patterns and to identify the reasons *why* the world operates multilingually; this causal chain may be represented with a simple diagram that we shall use as a starting point (Fig. 1):

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 $<sup>^4</sup>$  See  $\underline{\text{http://www.opendemocracy.net/article/daniele-archibugi/european-parliament-language-diversity}$ .

<sup>&</sup>lt;sup>5</sup> See http://www.federalist-debate.org/index.php/current/item/216-a-global-community-building-language.

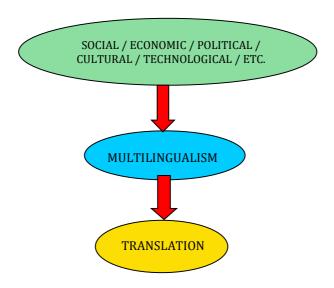
<sup>&</sup>lt;sup>6</sup> See e.g.: "The triumph of English. A world empire by other means", 22 December 2001; "Sharp tongues. The Nordics' pragmatic choice is English", 14 June 2003; "After Babel, a new common tongue", 7 August 2004; "English is coming", 12 February 2009.

<sup>&</sup>lt;sup>7</sup> "Voilà, English wins the battle of global tongues", *Financial Times*, 8 April 2016.

<sup>&</sup>lt;sup>8</sup> Efficiency and economy are among the arguments invoked to justify the decision, by the Swedish presidency of the European Union, to hold several informal meetings in English only in the second half of 2009 (see

http://www.observatoireplurilinguisme.eu/index.php?option=com\_content&task=view&id =2567&Itemid=1); fairness is invoked by van Parijs in several pieces, e.g. 2004a.

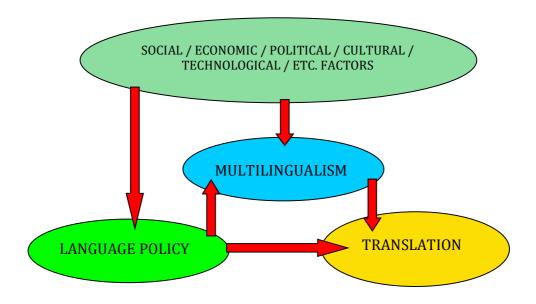
FIG. 1: DETERMINANTS OF TRANSLATION



It is, in a sense, obvious that translation does not occur in a vacuum, and that translation, whether as an intellectual activity, as a social practice, or as a way to earn one's living, *depends* on all kinds of factors upstream; and that the demand for translation services at time t depends on the value of all kinds of variables at time t-1. However, this vision of translation in context is not quite complete for at least two reasons.

First, it is important to introduce language policy and recognize its crucial importance. Language policy is itself a product of a certain social and political context; but it also intended to shape this context, through the influence it has on the extent of multilingualism in society. Much of language policy affects translation – either directly, because it makes translation mandatory (for example, by requiring that for reasons of consumer safety, the product composition of medicines be available in various languages), or indirectly, because it protects and promotes a variety of languages; this will, in turn, encourage multilingualism, boosting the need for language services, including translation and interpretation. In order to take this into account, Fig. 1 can be modified as follows (Fig. 2):

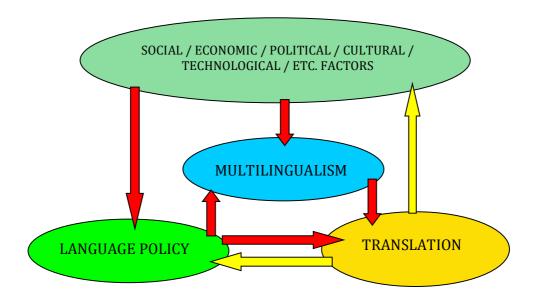
FIG. 2: INTRODUCING LANGUAGE POLICY



Secondly, we do not live in a static world of unidirectional causes and static structures. Rather, the world is dynamic, and various forms of human action are interconnected in multiple ways. This also applies to translation, which is not just *subjected* to changing patterns, but which can also *contribute* to these changes. Hence, what we ought to be looking at, if we wish to develop a fuller account of the role of translation in context, is not just the set of arrows travelling *to* translation in the preceding figures, but also the "feedback" arrows travelling *from* translation *to* other constituting elements of its environment, as shown in Fig. 3 below:

<sup>9</sup> The fact that translation is deeply enmeshed in everyday life can be exemplified in several ways. Apart from being a spontaneous strategy for meeting the challenges of exolingual communication among adults, it is a commonly used tool in second or foreign language teaching, notwithstanding the fact that it may be formally proscribed.

FIG. 3: A DYNAMIC VIEW OF TRANSLATION



Only a few aspects of some the relationships symbolized by the seven arrows in Fig. 3 have been studied so far. It would be well beyond the scope of this paper to venture in an extensive examination of all these relationships. However, we can already propose some stepping stones towards an integrative view combining the dynamics of multilingualism, language policy, and translation. In order to address the question of the dynamics of *multilingualism*, let us begin by taking a look at *language* dynamics.

# 3. The relevance of dynamics

The notion of language dynamics can be addressed at two different, non-mutually exclusive levels, namely, *internal* and *external*.

"Internal language dynamics" refer to the processes through which any language is liable to change. Morphosyntax and phonology evolve over time. Language change is the result of the interplay of numerous factors (Aitchison, 1991). Change can remain slow over extended periods of time, but it may also

suddenly accelerate in response to particular conjunction of factors. <sup>10</sup> Though many of these factors are by now well-known, their interaction is not yet fully conceptualized. However, we shall not discuss this further, because my concern here is with *external* language dynamics – that is, why do some languages spread, while other languages retreat, or even disappear altogether?

The effects of external dynamics are surveyed in various sources such as Martí et al. (2006) in a UNESCO-sponsored World Languages Review. The attrition of Europe's regional or minority languages (RMLs) like Scottish Gaelic or Ladin is well-known, though small languages on other continents are having an even rougher ride. At the same time, we hear that major international languages like English, but also regionally important languages like Swahili or Hausa, are gaining speakers (as a first or second language). "External language dynamics" refer to all these processes of language spread, maintenance and decline, and because these dynamics necessarily concern the respective position of different languages, they ipso facto constitute dynamics of multilingualism. In what follows, therefore, I shall treat the expressions "(external) language dynamics" and "dynamics of multilingualism" as synonymous. It is important to note that the word "dynamics" is used here in a fairly demanding sense. It does not merely evoke the idea that "things are not static" or that "things change". Rather, "dynamics" implies a systemic view of a set of relationships as symbolized by arrows in the diagrams presented earlier, including causal ones, which are positioned with explicit reference to the passage of time.<sup>11</sup>

Needless to say, identifying and explaining language dynamics in this demanding sense is a difficult task. At this time, there is no general and complete theory of (external) language dynamics. What we have, however, are some contributions that examine one or another aspect of these dynamics:

1/ the maintenance and decline of minority languages, but also, by implication, the conditions for their revitalisation (for example Giles, Bourhis and Taylor, 1977; Fishman, 1991; Grin, 1992, 2003, 2016; Grin and

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<sup>&</sup>lt;sup>10</sup> Some languages, like Icelandic and French, are considered to change at a relatively slower pace than some other European languages, but I am not aware of any systematic comparative research on the pace of aggregate change in different languages. It is difficult to say if this reputation is factually accurate, or whether it is another one of those unfounded rumours that go round about languages – what Bauer and Trudgill (1998) call "language myths".

<sup>&</sup>lt;sup>11</sup> In a full-fledged dynamic approach, the value of a particular variable at time t should be explained as a function of the value of the same or another variable at time t-1, and as a determinant of the value of the same or another variable at time t+1. For example, the percentage of the population speaking Scottish Gaelic in the Outer Hebrides in 2010 would be seen as the result of the value of various variables (including the percentage of speakers of Scottish Gaelic) in, say, 2000, and it will also co-determine the percentage of speakers in 2020. Not all the work that contributes to our understanding of language dynamics formally expresses the causal links at hand with explicit time indexes, but at least informal reference to the passage of time must be part of a truly "dynamic" perspective.

- Vaillancourt, 1999; Abrams and Strogatz, 2003; Mira and Paredes, 2005; Wickström, 2005);
- 2/ the emergence of a particular language as a medium of communication between two different language communities (for example Carr, 1985; Church and King, 1993);
- 3/ the emergence of a hierarchy of languages as a result of patterns of language learning, with the dominant languages enjoying more central positions (for example de Swaan, 2001);
- 4/ trends in language learning resulting from strategic interaction between actors (for example Selten and Pool, 1990, 1997; van Parijs, 2004a, 2004b; Ginsburgh, Ortuño-Ortín and Weber, 2007) or from the evolution of rates of return to language skills (for example Grin, 1997).

Accordingly, existing analyses of language dynamics do not actually seek to explain the same thing. Rather, they look at one or another aspect of these dynamics, focusing on at least six different classes of "dependent (or 'explained') variables":

- 1/ the vitality of a minority language (e.g. Giles, Bourhis and Taylor, 1977); however, it is not always clear in what units this "vitality" is supposed to be measured – presumably some indicator of intergenerational transmission;
- 2/ the percentage of users of a minority language (e.g. Grin, 1992; Abrams and Strogatz, 2003; Mira and Paredes, 2005);
- 3/ the use of a minority language, measured in absolute or relative time units (e.g. Grin, 1990; Grin and Vaillancourt, 1999);
- 4/ the use of one language (instead of many different languages) by speakers interacting in a multilingual meeting (e.g. van Parijs, 2004a, 2004b), where "use" is presumably measured through absolute or relative frequency (for example, the percentage of meetings held in languages *A*, *B*, etc.);
- 5/ the relative communicational value of different languages (e.g. de Swaan, 2001), measured in terms of an index based on the distribution of people having different language skills; this communicational value, in turn, influences language learning and hence the distribution of people with different linguistic profiles;
- 6/ a certain distribution of language skills among the population (e.g. Selten and Pool, 1990, 1997), measured in terms of the number of non-native languages learned by social actors.

Limitations of time and space prevent us from discussing these orientations further, but they suggest the following two observations. First, language dynamics are, to a significant extent, influenced by language policies. Language policies can encourage or discourage multilingualism; deliberately "doing nothing" is *per se* a form of language policy, particularly if there is an explicit decision to "do nothing". But even doing nothing out of ignorance is not without consequences; hence, we could say that there is no such thing as "no language policy". Second, the above analyses do not mention translation, let alone include it as an explanatory

component of their account of language dynamics. Several assumptions can be made regarding the reasons of this oversight: translation (and interpretation) may be viewed as a form of banal transaction cost; alternatively, they may be viewed as a transparent stage in a process of information transfer that goes from a situation of inefficient non-communication to a situation of efficient communication.

Developing a full-fledged dynamic model encompassing the full range of the processes just outlined would be an enterprise of daunting complexity. A more modest, and arguably more realistic strategy is to venture a general, yet very simplified (and, at this stage, tentative) model of language dynamics explicitly featuring language policy and translation. Let us for this purpose refocus on the dynamics of multilingualism, where multilingualism is defined as follows:

Multilingualism denotes the fact that aggregate communication in society, rather than taking place through one language only, takes place through several languages.

In other words, multilingualism will be characterized by a relatively high occurrence of linguistic diversity in oral and written communication.<sup>12</sup> To clarify this definition, however, two main qualifications are in order.

1/ First, "communication" is, as always, a risky word, because it can mean very different things depending on whether communication is looked at from the perspective of the sender or of the receiver, or whether the focus is on the message being transmitted. What is more, these notions do not denote neat, clear-cut categories but can be further analysed to uncover their intrinsic complexity. For example, the "message", rather than some finite and stable entity, is something that can in large part depend on the very process of interaction between sender and receiver. For our purposes, we need not address these complex questions. What matters, however, is to conceptualize communication as an *effective utterance*. This means that a message, oral or written, whether emitted in one language (to which a person's idiolect can be unambiguously assigned, irrespective of syntactic correctness) or more than one language (for example because of codeswitching) reaches its goals. "Reaching the goal" means achieving some

<sup>12</sup> The need for a definition is confirmed by the lack of a clear-cut one even in specialist

communication structures, whose purposes make individuals use several languages". Even if we leave aside the ontologically different status of these four possible characterizations, it is unclear how each of them would be operationalized, let alone measured.

work. Consider e.g. the book on *Multilingual Communication* edited by House and Rehbein, where the authors say (2004: 1) that "generally speaking, 'multilingual communication' can be characterized by the following features: the use of several languages for the common purposes of participants; multilingual individuals who use language(s) to realize these purposes; the different language systems which interact for these purposes; multilingual communication structures, whose purposes make individuals use several languages". Even

- communicational objectives which concern the receiver, or an adequate proportion of receivers.  $^{13}$
- 2/ Secondly, diversity is also a rather vague term (its very vagueness, incidentally, may have something to do with its current popularity in the media, politics, and academia). Van Parijs (2006) breaks it down in three dimensions: richness, evenness and distance, all of which tend to increase diversity. *Richness* refers to the number of different languages present. *Evenness* refers to the distribution of these different languages: in a four-language setting, diversity will certainly be higher if each language is spoken as a native language by 25% of the population than if three languages are spoken by 1% each, while the fourth language is spoken by 97% of the population. *Distance* refers to the extent of differences (for example in morphology, syntax, or phonetics) between the languages present. For our purposes, we shall define diversity only in terms of richness and evenness.<sup>14</sup>

We can then define a "diversity score" *D* as the product of the number of languages actually used in aggregate communication (both oral and written) by the value of the *Simpson index of fractionalisation* of that same communication:

$$D = N \times (1 - \sum_{i=1}^{N} s_{j}^{2})$$
 [1]

The first term on the right-hand side of equation [1] is N. N is the total number of languages present. We assume all the languages present to be used,

<sup>&</sup>lt;sup>13</sup> As regards the *goals* of effective communication, see Gazzola and Grin (2007: 92), who identify three classes of communicational goals, namely "informatory", "cooperative" and "strategic". This distinction is not essential for the purposes of the present discussion; let us simply note that it usually — though not systematically — implies being *understood* by the receiver. The emphasis on the *effectiveness* of an utterance also flags one of the queries of this paper with the notion of "languaging", in which the fact that some sort of interaction has taken place at all, without any check on the effects of this interaction (particularly *relative to those that other strategies could have had if applied to that interaction what*) often passes for a sufficient token of success.

 $<sup>^{14}</sup>$  Interlinguistic distance is not irrelevant, but it also carries awkward implications: consider a setting with languages X, Y and Z, where X and Y are closely related (and may in fact be mutually understandable with little effort), while Z is unrelated to either one. Assume that Y is a majority language, while X and Z are threatened minority languages. Thus, the distance XY is smaller than the distance YZ. If the goal of language policy is to preserve linguistic diversity, and if resources for this purposes are scarce, the policy recommendation (if based on a concept of diversity including "distance") would be to focus on the protection of language Z, while abandoning language X to its sorry fate. This is, of course, highly debatable in political as well as policy terms.

even if only exceptionally. The second term on the right-hand side of equation [1] is the Simpson index of fractionalisation.<sup>15</sup>

The term  $s_j$  in this expression refers to the relative share of each language in effective communication, which is itself given by the number of occurrences of effective communication taking place in language j divided by the total number of occurrences of effective communication across the N languages present. It is important to note that  $s_j$  is defined in such a way as to take account of the demolinguistic weight of effective addressees (or "receivers") of any given utterance: a TV broadcast watched by an audience of 5 million is more important, all other things being equal, than a late-night show viewed by a few thousand.  $^{16}$ 

Should we want to give relatively more importance to richness or evenness respectively, we could re-define D as follows, where  $\rho$  is a parameter that multiplies "richness" and  $\eta$  is a parameter that multiplies "evenness":

$$D = \rho N \times \eta \left( 1 - \sum_{j=1}^{N} s_j^2 \right)$$
 [2]

In the basic case,  $\rho = \eta = 1$ , but if we want to give richness more prominence, we simply need to set  $\rho > \eta$  (and conversely if, on the contrary, we want to give evenness more importance).

In this duly qualified definition, multilingualism can be measured through the diversity score, obtained by computing the aggregate number of ("effective") oral and written utterances in a given space over a given period. In order to move on to actual measurement, we need data for  $s_i$ . Values for  $s_i$  may be roughly estimated on the basis of representative sample data from direct observation or survey values. We would need to tally up the total number of utterances addressed to others, whether orally (formal speeches, turn-taking in informal interaction, radio and television broadcasts, everyday conversations etc.) or in writing (published materials, websites, advertising, etc.) in each language, also taking account, in each case, of the number of receivers. For application to actual language policy decisions, the challenges posed by proper empirical measurement can be mitigated by focusing on specific forms of communication in specific settings. We might for example examine internal, work-related written communication taking place within an international organization (working documents on policy matters; administrative information such as circulars; collective or personalized e-mails and letters; signage on institutional premises;

<sup>&</sup>lt;sup>15</sup> The Simpson index is also known as the Greenberg index of linguistic diversity; it is by definition equal to one minus the Herfindahl index of (industrial) concentration.

<sup>&</sup>lt;sup>16</sup> See the appendix for suggestions regarding the handling of this point.

other internal information posted on billboards). Ultimately, the criterion is what counts as a relevant aspect of a person's *linguistic environment*.<sup>17</sup>

## 4. Fitting in translation

As already pointed out in Section 2, it stands to reason that translation exists *because* of linguistic diversity. Putting it differently, *if* the value of the diversity score *D* is higher, it means that more languages are used and that total communication is more diverse; and as a consequence of higher diversity, the demand for translation services is higher, all other things being equal. However, translation is particularly sensitive to those components of multilingualism that depend, in turn, on explicit language policies in favour of multilingualism.

Some translation services would of course be in demand for reasons that may be independent of explicit public policy. Consider for example the following two-language situations:

- a company in country *X* where language *X* is spoken, trying to sell its products in country *Y* where language *Y* is spoken, will need to translate texts like product composition, instructions for use and possibly safety warnings from *X* to *Y*; in a similar context, an advertising campaign created in language *X* will need to be translated in language *Y*, and possibly localized;
- literary works produced in language *X* will have to be translated in language *Y* if they are to reach non-*X*-speaking individuals in country *Y*;
- TV programs produced in language *X* will have to be dubbed or subtitled in language *Y* before being aired in country *Y*.

Nevertheless, we may observe that:

multilingua

- much professional translation work takes place in the public sector, to serve the needs of national or regional authorities that have a policy of bi- or multilingualism, and are therefore required to make all kinds of documents

<sup>&</sup>lt;sup>17</sup> On this view, it is not just the production of fresh material that counts, but also the dissemination within the institution of documents produced elsewhere. For example, the relaying within a Directorate General of the European Commission of a policy document in English produced by the OECD increases the share of English in the Commission and affects its diversity score – negatively, since this further reduces the evenness component of diversity, in which English is already over-represented.

<sup>&</sup>lt;sup>18</sup> There are very few economic models studying the demand for translation, and then they focus on literary translation; see Hjorth-Andersen (2001), Mélitz (2007), or Ginsburgh, Weber and Wyers (2007); for a recent overview, see Heilbron and Sapiro (2016). Explicit linkages between language dynamics and translation are few, one exception being Pym (2006: 744) who posits "globalization as an economic process that has certain consequences for the social role of translation".

available in its designated official languages; this is, of course, a result of language policy;

- this obviously also applies to international and supra-national organizations, which are instituted by sovereign states, and apply language-related regulations stemming from language policy;
- some of the translation work produced in and for the private, "free-market" sector is directly determined by language policy for example, when such policies mandate the use of local languages on product packaging for reasons of consumer safety;
- other translation work in the private sector is dependent on the very existence of linguistic diversity. Linguistic diversity, however, is often highly dependent on political choices in its favour which, in turn, translate into prodiversity language policies;
- the translation of linguistically specific goods like books and audiovisual products or, more generally, of "cultural" goods and services (though using this adjective admittedly runs the risk of stretching the notion of culture a bit far) are presumably immune from the above observations and are, therefore, not dependent upon language policy. However, language-policy inspired measures play a significant subsidizing role in the translation of cultural goods and services and literary translation is a negligible part of aggregate translation services anyway.

Thus, even in its strongest redoubts, much of the translation industry is directly or indirectly dependent on language policies that protect and promote multilingualism, often through the protection and promotion of the variety of individual languages that make up this multilingualism.<sup>19</sup>

The work of translators is in the interest of linguistic diversity too – it is, in fact, indispensable to it. Translation itself is a key conduit for language policy,

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<sup>&</sup>lt;sup>19</sup> This is even more true of interpreting – particularly *conference* interpreting, which is certainly at least 95% dependent on the fact that because of language policies to that effect, international and supranational organisations are variously bilingual (Council of Europe; rganisation for Economic Co-operation and Development), trilingual (World Trade Organisation), hexalingual (United Nations) or "tetracosalingual" (European Parliament). All these language policies do not fall from heaven: they exist because at a given point in time, there was political will to preserve multilingualism. Of course, this will does not necessarily reflect a fondness for multilingualism as such. Rather, preserving multilingualism may simply be seen as a logical implication of other, non-linguistic goals such as "democratic participation", "fairness", "appropriate treatment of cultural identity", "prestige of different parties" (such as member states), etc. (Gazzola, 2006). But this political will, in turn, is not something that should be taken for granted: it is under constant attack from the advocates of a lingua franca, and multilingualism has to be defended, among others, with scientific arguments on the value of multilingualism - and the costs of giving it up. In any case, it follows from the above that it is in the interest of translators and interpreters to enter the fray and become explicitly supportive of language policies in favour of multilingualism—as well as of the research that provides the ammunition for such language policies.

because translation into language *X* reinforces the capacity, opportunity and desire of speakers of *X* to actually use the language (Grin and Vaillancourt, 1999). Translation helps to establish or disseminate equivalents, in various languages, of terms initially coined in the language in which the corresponding concept or material reality was developed (this holds in particular for technical and scientific innovation), thus developing the capacity of people at large to formulate their ideas in their respective languages. It provides opportunities to use these languages, by contributing (in the spirit of the Catalan principle of *normalització*, that is, "making something normal"; see Bastardas Boada, 1987), the use of a variety of languages in all sociolinguistic domains. Translation, finally, validates people's desire to use a variety of languages, because translation into these languages is a way of establishing the latter's social legitimacy.

In sum, translation is deeply enmeshed in the dynamics of multilingualism: it exists because of multilingualism and encourages it, and it is in constant relation with language policies: it largely depends on them but is also indispensable to their implementation. Translators are, as suggested in the introduction to this paper, full-fledged players in these processes. Better awareness of their role would be to the benefit of translator training.

The advocacy of multilingualism may be seen as antithetic to professional translation, in the sense that the latter is needed precisely because language users lack certain foreign language skills. However, this corporatist line would be self-defeating. Let us simply point out that foreign language learning by people at large does not make the skills of professional translators' redundant for at least three reasons:

- first, L2 learners will tend to achieve very heterogeneous levels of competence, and few will reach the level where they feel fully self-confident when using an L2 or L3, orally and in writing. Whenever a certain quality needs to be guaranteed, the language professional remains indispensable;
- secondly, even when receptive or productive quality is not essential, users may opt for translation for simple reasons of comfort;
- thirdly and this ties in with research in Québec and Catalonia about language in advertising and commerce people often reveal a preference for accessing various goods and services in their native language, even if they are fluent in another language.

Ultimately, translation depends on *societal* multilingualism. Multilingualism, in turn, is correlated with *individual* multilingualism (which, importing the term from French, I shall often call "plurilingualism", and which itself may manifest itself in various ways). Encouraging foreign language learning, also in the form of receptive skills in languages related to one's first language (what is known as *intercomprehension*; see e.g. Conti & Grin, 2008; Escudé and Janin 2010), contributes to the multilingual *ethos* in which the language professions can

flourish.<sup>20</sup> For reasons of space, I shall not discuss this correlation further, but focus instead on one of the questions that this raises regarding our understanding of multi- and plurilingualism.

# 5. Language policy, translation, and fashionable ideas in applied linguistics

A proper appreciation of the functions of translation in language policy can also help to assess some notions that are currently receiving considerable attention in particular segments of applied linguistics. As we shall see, the issues at hand are not merely theoretical, but they have genuine import for linguistic diversity and language rights, two themes to which Joshua Fishman has made such essential contributions.

Let us start by observing that a multilingual *ethos*, by definition, is not conceivable without diversity. Diversity, in turn, is made up of a variety of elements, which need to be identified, defined, and distinguished from one another, lest diversity itself lose all meaning (Page, 2008). This, of course, also applies to languages. This is not to say that languages are separate, watertight realities. Of course, "named" languages are constructs - why, for instance, do we decide that a particular combination of traits crystallized in a particular variant counts as "French", "English", or "Lingala" whereas another combination does not? And quite obviously, asserting the presence of boundaries between two "named" languages, particularly when these are closely related, does not establish an immanent difference between them: for example, Irish as spoken in Donegal may not have much more in common with Kerry Irish than with Scottish Gaelic from the outer Hebrides, despite the fact that the former two are called "Irish". And the very notion of intercomprehension advocated just above banks on an increased awareness of the porosity of languages. But intercomprehension is a strategy that speakers usually develop (and can be helped to develop) between *named* languages; referring to named languages, far from expressing a "monolingual view of multilingualism" (as some commentators claim, thereby resorting, incidentally, to a disturbingly vague notion whose use often seems to owe as much to liturgy as to analysis), can be the embodiment of a truly multilingual ethos encouraging the recognition and use of several languages.

The vogue, in some quarters, of the notion of "languaging", must give us pause. Again, nobody denies that languages are porous and interconnected, as the example of intercomprehension just above amply illustrates. That people actually draw on multi-faceted skills, particularly when they have to interact in exolingual contexts, is not in doubt. But what may be doubted, however, is the idea that

<sup>&</sup>lt;sup>20</sup> Intercomprehension is closely related to the notion of "receptive competence" (ten Thije and Zeevaert, 2007), but is primarily oriented to closely related languages, in which the respective first language of the interlocutors bear morphosyntactic, lexical and sometimes phonological similarities.

"named languages", being mere "inventions", do not really exist, and that we would be better advised to approach multilingual interaction *only* as a process that draws on a continuum of communication skills embodied in the participants' respective repertoires is problematic on many counts, while discarding the notion of identifiable languages altogether. The empirical weaknesses of this idea (despite the fact that it is usually put forward with the best of intentions) have been eloquently exposed by Edwards (2012), and the very reality of translation provides a merciless test of validity, going beyond the trivial observation that translation presupposes the assumption that we are dealing with different (named) languages. Consider an interaction between two persons with non-identical linguistic repertoires. Unless there is a sufficient degree of overlap between their repertoires, communication will be slightly or severely impaired, particularly when communication requires more than conveying simple, easily guessable contents but carries high requirements in terms of accuracy. This is precisely why translators exist, even in multilingual societies made up of highly plurilingual persons freely drawing on their multi-faceted repertoires. Translators bridge the gap between elements of the speakers' respective repertoires, and these elements are, ultimately, "named" languages or idiolectal variants of the latter.<sup>21</sup>

One more remark may be added to Edwards's robust criticism of the notion of languaging. It resonates with Fishman's concern for the conditions needed for oppressed linguistic minorities' fight for recognition to be successful (1991; see also Flores Farfán and Ramallo, 2010). Reclaiming dignity for small, often marginalized languages, establishing language rights and developing policies for the protection and promotion of endangered languages requires the latter to be identified as such. Bearing in mind the importance of translation helps to makes this necessity abundantly clear: the requirement, for example, that certain official forms, or work contracts, or instructions for use for certain types of equipment goods be available in a minority language makes no sense unless the ("named") language concerned is identified. The notion of "languaging" may occasionally be useful as a reminder of the well-known fact that languages are porous and, to some extent, blend into each other, but it is of little relevance in language policy. No less importantly, it can turn out to be, almost paradoxically, detrimental to the cause of linguistic diversity, because it deprives the oppressed of the concepts and categories needed in their struggle for language rights. This point is eloquently made by Kubota, who reminds us that "the hybridity orientation is distinct from the pluralist one, even though they both attempt to pluralize the traditional norms" (2014: 3). She further reminds us that "contrary to the postmodern sociolinguistic idea that language is no longer fixed at a certain location [...], claiming to belong to

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<sup>&</sup>lt;sup>21</sup> The relevance of the notion of "named" languages persists even in cases where languages are, indeed, *not* named. Consider the case of Vanuatu, with roughly one hundred vernacular languages (in addition to Bislama, English and French as official languages). Most vernaculars do not have a name *as a language* other than "the language of (such-and-such a part of) such-and-such an island". Yet they remain identifiably distinct, which is also why Bislama often becomes the family language in families where parents come from areas in which different vernaculars are used (Thivoyon, 2016).

ancestral land constitutes important means for language preservation or revitalization and for resistance in indigenous communities" (*ibid.*, 9), and is led to conclude that "while notions such as hybridity, fluidity, and multiplicity are potentially liberating, they can obscure actual struggles and inequalities (*ibid.*, 17).

Summing up, the neatness of languages should not be overstated, but the opposite error, leading to the denial of the existence of languages, if not of language, is at least as pernicious from a sociological and political standpoint. Therefore, at least for those concerned with language policy, the notion of "languaging" should be approached with a healthy dose of skepticism, since it turns out to be of limited use beyond offering a reminder a few well-known generalities. Apart from the fact that some of the arguments currently offered in its favor can be found (and are usually advanced in more robust and more prudent form), in the work of speech act theorists like John Searle, in Roy Harris's integrationism, in some applications of Harvey Sacks's approach to conversation analysis, or even in Harold Garfinkel's ethnomethodology, empirical evidence on the ways in which people use languages (not to mention how they relate to them) amply demonstrates the relevance of named languages.

In connection with the preceding point, it is necessary to debunk a common myth known as "globish" or "English as a *lingua franca*" (sometimes called "ELF"). Contrary to advocates of "languaging", proponents of ELF have no problem with notions like "native speaker" or "mother tongue", and they start out from the (normative) premise that native speaker norm (in English at least) should not enjoy particular legitimacy in an era where English is often used for communication among non-native speakers; they combine this claim with the (positive) observation that non-native users of English often do depart from native speaker norm. They conclude (which is, however, a non sequitur) that English as a lingua franca is intrinsically different from English, and that ELF may be taught as a language in its own right, overriding, as it were, the unnecessary strictures of native speaker norm. The fact remains, nonetheless, that non-native learners of English overwhelmingly choose to strive, with more or less success, towards that native-speaker norm. After all, there are some 400 million native speakers of English in the world, and they still constitute a model that counts (Mackenzie, 2014).

Let us leave aside the logical inconsistencies that plague the very concept of ELF as something distinct from English (on this point, see e.g. Gazzola and Grin, 2013), and note that here again, awareness of the functions of translation helps to expose the deleterious effects that the notion of ELF can have on diversity and multilingualism. The reason, once again, has to do with power. Proponents of ELF claim that non-observance of native speaker norm (as if it could occur by decree) levels the playing field between native and non-native speakers of English, because it requires two-way adaptation instead of arguably unjust, unidirectional language learning (that is, learning of English by those who do not have it as a first language). They make much ado about the fact that in international interaction, native speakers of English sometimes have to avoid colloquialisms that non-native

speakers are unlikely to be familiar with. They also point out that there are some courses designed to help native speakers of English address non-native interlocutors and be understood by them. But such courses last, at most, a day or two - a far cry from the years of investment required to acquire fluency in English as a foreign language (estimates of the effort needed to reach this goal are in the range of 10,000 to 15,000 hours of study and practice; see Piron, 1994). Thus, ELF changes nothing to the problems of efficiency and fairness associated with any linguistic hegemony (again, this holds whether the "hegemon" is English or any other "natural" language). 22 The claim that ELF somehow eschews problems of power ends up justifying the spread of one hegemonic language (namely, English, but of course the problem would be no different if the role of world hegemon were played by French, Chinese or Hausa), to the detriment of diversity. The ELF stance amounts to a crude syllogism going more or less as follows: (1) yes, the spread of English defined by a native speaker norm may be imperialistic and exclusionary; (2) ELF is not English; (3) therefore ELF is neither imperialistic nor exclusionary and may be used without threating diversity, or the languages that make up this diversity.

What we are witnessing, in terms of language dynamics, is the spread of a hegemonic language. Calling it ELF instead of English makes no difference at all to the fact that it entails the displacement and exclusion of other languages, and neither does the allowance that can be made for the use of deviations from native speaker norm. What matters is that the concomitant reduction in the use of translation (and interpreting) in international settings is merely a manifestation of the decline in aggregate diversity.

The points raised in this section return us to a topic we have hardly addressed, but which dovetails with our discussion, namely, that of the politics of translation. The role of translation in mediating matters of inequality and power has been addressed by many authors, such as Meschonnic (2007) or Heilbron and Sapiro (2016), and we shall not discuss it further. Let us, however, point out that translation can provide a good indicator of the waxing and waning of languages in the broader dynamics of multilingualism. Available data from the UNESCO's Index Translationum suggests that translation overwhelmingly flows from the dominant to the dominated languages. For example, 55% of the books translated in the 1979-2007 period are from English (ibid., 2016: 378). The next (distant) languages are French, German, and Russian, leading these authors to conclude that "80% of all recorded translations are from [these] four languages only". Moreover, "translation" is not confined to literary works. Most translation is of either official documents (legislation, by-laws, forms, etc.) or commercial materials (internal and external communication of companies, product composition, instructions for use, etc.). All this overwhelmingly takes place from dominant to dominated languages; yet the extent to which, taking account of variables such as the differential spread

<sup>&</sup>lt;sup>22</sup> For reasons which we do not have the time to discuss here, it is only for deliberately designed languages like Esperanto or Klingon that this problem does not arise, or only to a much lesser extent.

of literacy among speakers of various languages, this result can also be used as a valid indicator of overrepresentation is a point that deserves careful discussion (Ginsburgh, Weber and Wyers, 2007). More research into the framing topic of this paper, namely, the interconnection between translation, language dynamics and policy, can only lead to improvements in our capacity to select and design appropriate language policies.

### 6. Concluding remarks

In this paper, I have tried to highlight the relevance of translation on a number of counts: it is a key feature of linguistic diversity; its existence depends on linguistic diversity, but the practice of translation also maintains and nurture diversity, particularly when the latter is approached not as a given state of affairs but as a dynamic process. Paying due attention to translation also helps to reconsider with a healthy dose of skepticism some currently fashionable notions in applied linguistics.

One first implication of our discussion is that the connections between multilingualism, language policy and translation ought to be recalled more frequently than is usually the case. Specialists of multilingualism and language policy would benefit from increased awareness of how central translation is; symmetrically, scholars in translation studies and professionals of translation would do well to bear in mind that translation does not occur in a vacuum, but is deeply embedded in a demolinguistic and political context that can strongly influence demand for their skills.

A second implication is that awareness of the importance of translation, by exposing the inconsistency of some notions that are currently fashionable in applied linguistics, can contribute not just to a sound understanding of multilingualism, but also to the selection and design of better-advised language policies. Interestingly, awareness of the importance of translation also reinforces – and to some extent vindicates, against often shallow criticism – some of the concerns found in Joshua Fishman's contributions to sociolinguistics and the sociology of language. In particular, this awareness is crucial to understanding why Fishman's perspective on languages remains highly relevant to the struggle for the protection and promotion of linguistic diversity and the sustainability of a multi-polar world.

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#### REFERENCES

- ABRAMS, Daniel, and STROGATZ, Steven (2003): Modelling the dynamics of language death, *Nature* 424 (2), 900.
- ADAMIC, Lada, and HUBERMAN, Bernardo (2002): Zipf's law and the Internet, *Glottometrics* 3, 143-150.
- AITCHISON, Jean (1991): *Language Change: Progress or Decay?* Cambridge: Cambridge University Press.
- Anderman, Gunilla and Rogers, Margaret (2008): The Linguist and the Translator, in G. Anderman and M. Rogers (eds.), *Incorporating Corpora: The Linguist and the Translator*. Clevedon: Multilingual Matters, 5-17.
- BASTARDAS BOADA, Albert (1987): L'aménagement linguistique en Catalogne au XX<sup>e</sup> siècle, in Jacques Maurais, ed., *Politique et aménagement linguistiques*. Paris: Le Robert. 121-158.
- BAUER, Laurie and TRUDGILL, Peter (1998): Language Myths. London: Penguin.
- CARR, Jack (1985): "Le bilinguisme au Canada: l'usage consacre-t-il l'anglais monopole naturel?", in François VAILLANCOURT, ed., *Économie et langue*. Québec: Conseil de la langue française, 27-37.
- CHURCH, Jeffrey and KING, Ian (1993): Bilingualism and Network Externalities, *Canadian Journal of Economics* 26, 337-345.
- CONTI, Virginie and GRIN, François, eds. (2008): *S'entendre entre langues voisines: vers l'intercompréhension*. Geneva: Georg.
- DE SWAAN, Abram (2001): Words of the World. Cambridge [MA]: Polity Press.
- Eco, Umbrerto (1994): La recherche de la langue parfaite. Paris: Folio.
- EDWARDS, John (2012): *Multilingualism. Understanding Linguistic Diversity*. London: Continuum.
- ESCUDÉ, Pierre and JANIN, Pierre (2010): Le point sur l'intercompréhension, clé du plurilinguisme. Paris: CLE international.
- European Commission (2010): *Contribution de la traduction à la société multilingue dans l'Union européenne.* Luxembourg: Office des publications de l'Union européenne. *English summary available on* 
  - http://ec.europa.eu/dgs/translation/publications/studies/multilingual\_society\_summary\_en.pdf.
- EVEN-ZOHAR, Itamar (1990). *Polysystem Studies*. Durham (NC): Duke University Press.
- FISHMAN, Joshua (1991): Reversing Language Shift. Theoretical and Empirical Foundations of Assistance to Threatened Languages. Clevedon: Multilingual Matters.
- FLORES FARFÁN, José Antonio and RAMALLO, Fernando (eds.) (2010): *New Perspectives on Endangered Languages*. Amsterdam/Philadelphia: John Benjamins, 93-118.

- GAZZOLA, Michele (2006): La gestione del multilinguismo nell'Unione europea, in Augusto Carli, ed., *Le sfide della politica linguistica di oggi* (Collana di Educazione bilingue/26). Milan: Franco Angeli, 15-116.
- GAZZOLA, Michele (2015): "Identifying and mitigating linguistic inequalities in the management of patent information in Europe", *World Patent Information* 40, 43-50.
- GAZZOLA, Michele and GRIN, François (2007): Assessing efficiency and fairness in multilingual communication. Towards a general analytical framework, *AILA Review* 20, 87-105.
- GAZZOLA, Michele and GRIN, François (2013): Is ELF more efficient and fair than translation? An evaluation of the EU's multilingual regime, *International Journal of Applied Linquistics* 23 (1), 93-107
- GENTZLER, Edwin (1993): Contemporary Translation Theories. London: Routledge. GILES, Howard, BOURHIS, Richard, and TAYLOR, Donald (1977): Towards a theory of language in intergroup relations, in Howard GILES, ed., Language, Ethnicity and Intergroup Relations. London: Academic Press.
- GINSBURGH, Victor, ORTUÑO-ORTÍN, Ignacio, and WEBER, Shlomo (2007): Learning foreign languages: Theoretical and empirical implications of the Selten and Pool model, *Journal of Economic Behavior & Organization* 64, 337-347.
- GINSBURGH, Victor, WEBER, Shlomo and WEYERS, Sheila (2007): The economics of literary translation. A simple theory and evidence, *CEPR Discussion Paper* 6432, August 2007.
- GRIN, François (1990): A Beckerian Approach to Language Use: Guidelines for Minority Language Policy, *Cahiers du Département d'économique*, Université de Montréal, No. 9007.
- GRIN, François (1992): Towards a Threshold Theory of Minority Language Survival, *Kyklos* 45, 69-97.
- GRIN, François (1997): Market Forces, Language Spread and Linguistic Diversity, in Miklos. Kontra, Robert Phillipson, Tove Skutnabb-Kangas and Tibor Várady, eds., *Language: A Right and a Resource*. Budapest: Central European University Press, 169-186.
- GRIN, François (2003): *Language Policy Evaluation and the European Charter for Regional or Minority Languages*. Basingstoke: Palgrave Macmillan.
- GRIN, François (2005): *L'enseignement des langues étrangères comme politique publique*. Paris: Haut Conseil de l'évaluation de l'école.
- GRIN, François (2015): "The Economics of English in Europe", in T. Ricento (ed.), Language Policy and Political Economy. English in a Global Context. Oxford: Oxford University Press, 119-144.
- GRIN, François (2016): Challenges of Minority Languages, in Victor GINSBURGH and Shlomo Weber, eds., *The Palgrave Handbook of Economics and Language*. Basingstoke: Palgrave Macmillan, 616-658.
- GRIN, François and VAILLANCOURT, François (1999): The cost-effectiveness evaluation of minority language policies: Case studies on Wales, Ireland and the Basque Country. Flensburg: European Centre for Minority Issues, Monograph No. 2.
- GUIDÈRE, Mathieu (2008): La communication multilingue. Bruxelles: De Boeck.
- HEILBRON, Johan and SAPIRO, Gisèle (2016): Translation: Economic and Sociological Perspectives, in Victor GINSBURGH and Shlomo Weber, eds., *The Palgrave*

- *Handbook of Economics and Language.* Basingstoke: Palgrave Macmillan, 373-397.
- HJORTH-ANDERSEN, Christian (2001): A model of translations, *Journal of Cultural Economics* 25, 203-217.
- House, Juliane and Rehbein, Jochen (2004): What is 'multilingual communication'?, in Juliane House and Jochen Rehbein (eds.), *Multilingual Communication*. Amsterdam: John Benjamins, 1-17.
- INGHILLERI, Moira, ed. (2005): *Bourdieu and the Sociology of Translation and Interpreting*, Theme issue 11 (2) of *The Translator*.
- Kubota, Ryuoko (2014): The Multi/Plural Turn, Postcolonial Theory, and Neoliberal Multiculturalism: Complicities and Implications for Applied Linguistics, *Applied Linguistics*, doi: 10.1093/applin/amu045.
- MACKENZIE, Ian (2014): *English as a lingua franca. Theorizing and teaching English.*Cambridge: Cambridge University Press.
- Marti, Fèlix, Ortega, Paul, Idiazabal, Itziar, Barreña, Andoni, Juaristi, Patxi, Junyent, Carme, Uranga, Belen and Morrotu, Estibaliz (2006): Words and Worlds. World Languages Review. Bilbao: UNESCO Etxea and Clevedon: Multilingual Matters.
- MÉLITZ, Jacques (2007): The impact of English dominance on literature and welfare, *journal of Economic Behavior and Organization* 64, 193-215.
- MESCHONNIC, Henri (2007). Éthique et politique du traduire. Paris: Verdier.
- MIRA, Jorge, and PAREDES, Ángel (2005): Interlinguistic similarity and language death dynamics, *Europhysics Letters*,
  - http://www.edpsciences.org/articles/epl/abs/2005/06/contents/contents.html.
- Munday, Jeremy, ed. (2007): *Translation as Intervention*. London: Continuum. Ost, François (2009): *Traduire. Défense et illustration du multilinguisme*. Paris:
- Fayard.
- PAGE, Scott E. (2008): *Diversity and Complexity*. Princeton: Princeton University Press.
- Pergnier, Maurice (1993): *Les fondements socio-linguistiques de la traduction*. Lille: Presses Universitaires de Lille.
- PIRON, Claude (1994): Le défi des langues. Du gâchis au bon sens.
- POOL, Jonathan (1996): Optimal Language Regimes for the European Union, *International Journal of the Sociology of Language* 121, 159-179.
- PYM, A. (2006): Globalization and the Politics of Translation Studies, *Meta* LI (4), 744-757.
- Selten, Reinhard, and Pool, Jonathan (1990): The Distribution of Foreign Language Skills as a Game Equilibrium, *Language and Society Papers, Linguistic Decisions Series*, No. 9. Seattle: Center for the Humanities, University of Washington.
- Selten, Reinhard and Pool, Jonathan (1997): Is it worth it to learn Esperanto? Introduction to game theory, in Reinhard Selten, ed., *The Costs of European Non Communication*. Rome: ERA, 114-149.
- STEINER, George (1975): *After Babel. Aspects of Language and Translation*. Oxford: Oxford University Press.

- TEN THIJE, Jand and ZEEVAERT, Ludger (2007): *Receptive* Multilingualism. Amsterdam: John Benjamins.
- THIVOYON, Marie-Ambrym (2016): *Le multilinguisme au Vanuatu: entre perceptions, politiques et pratiques.* MA Dissertation, Faculty of Translation and Interpreting, University of Geneva.
- VAN PARIJS, Philippe (2004a): L'anglais *lingua franca* de l'Union européenne: impératif de solidarité, injustice distributive, facteur de déclin? *Économie publique* 15(4), 13-32.
- VAN PARIJS, Philippe, (2004b): Europe's Linguistic Challenge, *Archives européennes de sociologie* XLV (1), 113-154.
- VAN PARIS, Philippe (2006): *Linguistic Diversity. What is it? And does it matter?*Paper presented at the conference "Challenges of Multilingual Societies",
  Université Libre de Bruxelles, 9-10 June 2006.
- Wickström, Bengt-Arne (2005): Can Bilingualism be Dynamically Stable? A Simple Model of Language Choice. *Rationality and Society* 17, 81–115.
- WOLF, Michaela and FUKARI, Alexandra eds., (2007): *Constructing a Sociology of Translation*. Amsterdam: John Benjamins.

#### APPENDIX: MEASURING MULTILINGUALISM IN COMMUNICATION

Proposing a metric for diversity based on the relative share of communication taking place in different languages raises the challenge of operationalizing this notion, at least in principle.

If "utterances" in different languages are used as the basic unit of measurement of multilingualism, the number of utterances needs to be adjusted to take account of the number of recipients (listeners, readers, etc.). As a first approximation, we may assume that if a speaker (or writer) addresses an audience of, say, one thousand, then this instance of communication should count as one thousand in our reckoning, whereas if the speaker had addressed only one listener, this same instance would have counted as one.

Suppose that a total of K utterances is made in language j. Each utterance reaches a specific number of recipients  $R_{j,k}$ , where k=1, 2, ..., K. Then the share of language j in total communication is  $s_j = (\Sigma_k R_{j,k})/R$ , where R is the total number of receivers of all messages uttered in all languages. Clearly, persons will be counted more than once in R, since they normally receive more than one message during any observation period.

This definition raises one problem, namely, that of knowing the audience size for each utterance. However, this information may be replaced by an approximation. What justifies using one is the fact that it is probably more realistic to assume that in terms of resulting aggregate diversity, the importance of the marginal listener, for each individual utterance, is positive but decreasing. Thus, we would be led to pick an appropriate logarithmic-type transformation of  $R_{j,k}$  for each individual utterance (oral or written) in language j.

One possibility is to call on Zipf's law, which applies not only, as in its well-known initial formulation, to the relationship between the frequency and rank of words in natural languages (a constant according to Zipf), but to a host of other phenomena, from the rank-size distribution of cities in any given country to access to Internet pages (Adamic and Huberman, 2002). This latter result is particularly relevant to communication: if the most frequently consulted page has been accessed t times, the second most frequently read will be accessed t/2 times, the third t/3 times, and so on. Thus,  $P_j$  pages in language j give rise to a total number of "messages"  $M_j = R_j \times (1 + 1/2 + 1/3 + ... + 1/P_j)$ , where  $R_j$  is the number of times the most frequently consulted j-language page has been accessed. Moving to the continuous case, the term  $M_j$  can be re-expressed as:

$$M_{j} = \int_{1}^{P_{j}} R_{j} \cdot \frac{1}{x} dx = R_{j} \cdot \ln(P_{j})$$

If the Zipf law pattern holds more generally, it can be used as an approximation of the actual number of "effective utterances", for which we only need to know the (approximate) number of recipients reached by the most successful utterance. A fraction f of the total number of speakers of a language (above, say, the age of 4) can provide a reasonable estimate of  $R_j$  (meaning that a share f of the j-speaking population will be reached by the most successful of all the messages uttered in language j, whether this message is a political speech, a news broadcast or a commercial ad). The number of different utterances in language j,  $P_j$ , can be approached as a multiple of the total number of speakers, with some speakers emitting a large number of oral and written messages, and others very few. For the purposes of estimating  $P_j$ , the definition of a "speaker" need not be restricted to physical persons but can extend to administrations, media channels and firms – whoever, in fact, can emit messages.

Calculating  $M_j$  for each of the N languages present in a given context like a neighborhood, city or country, we can compute M as the sum of all  $M_j$ 's for j=1, 2, ..., N, namely,  $M = \Sigma_j R_j \times ln(P_j)$ . The linguistic evenness of the context considered can then be expressed replacing the term  $s_j$  appearing in equation [1] in the text by  $(M_j/M)^2$ .