1. Executive Summary

The acronym MIME stands for "Mobility and Inclusion in Multilingual Europe". This four-year project has benefitted from European Commission support through the 7th Framework Programme for Research and Development. The MIME project, which has brought together 25 teams from 16 countries across Europe, is unusual in a number of ways.

**First,** MIME approaches language policy as a form of public policy. Therefore, very general questions must be addressed, in particular:

* what "linguistic environment" do we want, and for what reasons?
* how are language policies best used in order to achieve what we want?
* what are the material *and* symbolic costs of alternative language policy scenarios?
* how can we get the most of our resources and make language policies cost-effective?
* what is "fairness" in language policy, and how can fairness be assessed – and ensured?

**Second,** MIME proposes a comprehensive treatment of linguistic diversity, because language pervades all aspects of social, political, economic and cultural life. The challenges of multilingualism are usually addressed by specialists working from their specific angle, and this often results in somewhat fragmented approaches and, ultimately, uncoordinated (and possibly mutually contradictory) policies. By contrast, MIME addresses all these various issues as explicitly interconnected facets of the same multilingual reality. The MIME approach rests on an integrative model in which various dimensions of diversity management are considered jointly, with an emphasis on tools.

**Third,** MIME is a deeply interdisciplinary project. It combines inputs from no less than eleven disciplines (political science, philosophy, sociolinguistics, translation studies, sociology, education sciences, history, economics, geography, law, and psychology).

Rather than working in parallel, separate silos, all teams have applied a common analytical framework.

**Fourth,** the MIME approach takes due account of the fact that when it comes to managing linguistic diversity through actual policies, specific conditions have crucial importance. Each case presents unique features, which are undergoing rapid change. There is no such thing as a “one-size-fits-all” response to language challenges.

Therefore, the MIME project provides:

* an **integrated framework** for understanding and acting upon linguistic diversity in contemporary Europe;
* a **large panoply of findings on specific issues**, ranging from the constitutional protection of minority language to the linguistic integration of migrants, from the development of novel perspectives on non-formal education to the role of language in security policy, or from the efficient use of machine translation to the measurement of correlations between multilingual skills and creativity.
* **concepts and tools** that users (civil servants at local, regional, national or supra-national level), MPs and MEPs, and citizens at large, can adapt to the conditions they are encountering;
* **examples** of language policies in various contexts;
* **general policy orientations** (rather than specific recommendations).

Beyond this rich array of outcomes, the MIME project is intended to flag priorities and provide inspiration to citizens and decision-makers about the handling of linguistic diversity in Europe.
2. Project context and main objectives

An expression such as “the multilingual challenge for the European citizen”, as used by the EC in its call for proposals, harks back to a very broad range of processes. For the purposes of the MIME project, this expression was reinterpreted as raising the following questions:

- how can Europeans balance the requirements of mobility in a modern, integrated, technologically advanced society with the need to maintain and take advantage of Europe’s linguistic and cultural diversity?
- what does this challenge imply in terms of communication practices, language use and language rights, language teaching and learning?
- how does this translate into policies regarding national languages, minority languages, and immigrant or heritage languages?

The very notion of addressing these questions jointly requires a strategy going beyond what most approaches to language policy normally deal with. The MIME project, therefore, has also been designed to foster innovation in the field of language policy at three main levels: (i) the structuring function of policy analysis in the project; (ii) the importance of interdisciplinarity, which we have taken very seriously; (iii) particular attention to the interconnection and interplay between issues and levels, delivering a deeply integrative vision of multilingualism and language policy.

The policy analysis perspective

First, the MIME project’s approach is anchored in public policy analysis. This distinguishes it from other research on language and multilingualism, which often focuses on the observation and interpretation of actors’ linguistic practices in particular settings. Instead, the MIME project offers a framework where a wide panoply of approaches, from recent sociolinguistic work on micro-level processes to macro-level considerations on linguistic justice originating in political philosophy, can be combined in a policy-oriented perspective.

Public policy analysis can be thought of as a tool, or as a box which needs to be filled with elements that depend on the questions at hand. In environmental policy, the tools will be applied to matters of environmental damage and clean-up; in health policy, these tools will be applied to the conditions under which citizens’ health can be improved and guaranteed. The same goes here for language policy, which offers responses to the challenges of multilingualism. Each of these responses has advantages and drawbacks. They have different implications for resource allocation. It is important to emphasise that both advantages and drawbacks can be material or symbolic – a key point when dealing with language, which is intimately connected to culture, as well as to individual and group identity. In other words, we are not merely talking about the material or financial implications of alternative language policy scenarios. Policy choices also have an impact on the distribution of advantages and drawbacks, whether material or symbolic. Consequently, alternative policy choices can be assessed in terms of their relative degree of fairness. Approaching the multilingual challenge in this way makes for a very novel perspective on the “multilingual challenge”.

Interdisciplinarity

Second, the MIME project is deeply interdisciplinary. The project partners represent eleven different disciplines from across the social sciences and humanities. All the 25 teams in the project, however, have previous experience in the application of their particular discipline to language issues, and what unites them is a shared interest in multilingualism and its treatment through language policy, envisaged as a form of public policy. Crucially, none of these
and in the choice of languages taught and used in schools. Provisions regarding the labelling of goods, product composition, health warnings and safety instructions cannot be wholly separated from broader questions of minority language rights or language use in public administration. The specific questions are distinct and they raise different technical questions, and it remains useful to consider them separately in the systematic analysis of language issues. However, when selecting, designing, implementing, monitoring, fine-tuning, and evaluating language policies, these issues must be considered jointly. This naturally results in an integrative perspective that allows various issues (whether educational, legal, socioeconomic, or geopolitical) to be considered in an interrelated way.

Against this complex backdrop, the project aims to approach the management of linguistic diversity in a very novel way, by treating it as a form of public policy. MIME therefore aims to formulate an integrated body of language policy proposals in the various fields mentioned by the European Commission, in its call for proposals, as requiring attention, including questions as varied as:

- the protection and promotion of regional and minority languages in Europe;
- the presence and visibility, in an EU member state, of the official languages of other member states (as a result of intra-European mobility);
- the challenges of effective second and foreign language learning in education systems, which raises, in particular, the issue of the special role of major languages, including one or more lingua franca(s);
- the language issues surrounding the presence of other (historically extra-European) languages accompanying migration flows;
- the problem of efficient and fair communication in multilingual organisations – not least in the European institutions themselves;

Disciplines hold an absolute majority in the project (which would have entailed the risk of a merely tokenistic representation of some disciplines in the research consortium).

### Integrated treatment of multilingualism

Third, the MIME project is designed to consider jointly a wide range of language issues that are usually addressed separately, allowing for a comprehensive approach to the management of linguistic diversity. Traditionally, and as a result of the silo approach that often characterises contemporary scientific research, these various issues are approached in relative isolation from each other. For example, educational, legal, socioeconomic, and geopolitical questions tend to be considered separately, by specialists from different disciplines. They each operate with their own set of analytical concepts, preferred research methods, influential authors, and reference journals. However, this fragmented approach is showing its limits, as a result of a combination of four trends. These four trends can be traced back to globalisation and technological change:

1. the increased saliency of linguistic diversity and the growing occurrence of language contact;
2. the growing international interconnection of societies, in the EU and beyond;
3. the deeper, mutual enmeshing of the local, the regional and the global, which have an increasingly direct influence on each other;
4. technological advances which, through cheaper travel and telecommunications, reduce the relative cost and increase the benefits of maintaining contact with geographically distant places and cultures.

Taken together, these trends imply that the linguistic facets of societies are characterised by rapid and fundamental change. This change affects language and multilingualism in a number of ways, often blurring the boundaries between types of language challenges: there are connections between language questions arising in the provision of language services (through translation and interpreting)
* a number of specific questions connected to the management of multilingualism, such as the linguistic dimensions of consumer protection or the specific language needs of retirees settling in another EU member state.

No European research project on multilingualism to date had addressed language policy issues in such a broad perspective. In each of these areas, the MIME project develops an analysis based on an innovative analytical framework (see following section), gathers and assesses evidence, processes data using qualitative or quantitative methods, and derives policy implications.

Particular care has been taken, in the MIME research project and resulting policy orientations, to avoid concepts such as “good practice” and “best practice”. Apart from the lack of analytical rigour that sometimes envelops them, these notions are ill-suited to the questions at hand for the following reasons:

* as noted above, linguistic diversity in Europe is undergoing rapid and fundamental change. What may be seen as “good” (let alone “best”) practice at a certain point in time may no longer be a few years later. If something deserves a label such as “good” or “best”, it probably is not one practice or another, but, rather, tools, methods and principles. Having a longer shelf life, they have longer-lasting applicability;
* each case is a unique case: what makes sense in a particular context may not in another, because of different material or non-material conditions. Each local “linguistic environment” presents specific features – or at least a unique dosage of commonly encountered features.

In other words, there is no such thing as a one-size-fits-all-solution, which is why the MIME project deliberately does not issue recommendations. Rather, it places an emphasis on two types of results:

* first, general policy orientations, which are broader and point in a general direction. Nevertheless, practical illustrations of specific responses to multilingualism are provided through examples of successful practice observed thanks to a broad range of case studies;
* second, a set of concepts, instruments and methods that users can adapt to their specific contexts and needs.

The principles developed and implemented in the MIME approach are exemplified by one of its chief outputs, the MIME Vademecum, released on 19 June 2018. The MIME Vademecum, which can be downloaded free of charge as a pdf file from www.mime-project.org/vademecum, is a practical resource intended primarily for people whose professional or political activities lead them to consider matters of multilingualism, take a stand on these issues and, directly or indirectly, shape language policy decisions at local, national or supra-national level. It is organised around 72 questions, each treated in two pages. Each question is handled in the same way, offering a brief explanation of the meaning of the question at hand, a succinct overview of research results, an illustration through a practical example, a set of policy implications, and suggestions for further reading. Questions addressed include:

* "How does foreign language teaching influence the costs of migration?” (Q 8)
* "How can the principles of territoriality and personality be combined?” (Q 20)
* "Can states impose language requirements on entry or naturalisation of migrants?” (Q 26)
* "Do translation and interpreting services reduce incentives to learn host languages?” (Q 56)

Summing up, the MIME project examines a wide panoply of complex processes. In order to address them, the project has developed an innovative analytical framework, presented in the following section.
In structural terms, the project’s 25 participating teams from 16 countries have been organised in five research “work packages”, respectively focusing on politics, society, education, mediation, and policy. In addition, a sixth work package called “Frontiers of multilingualism” has been devoted to the exploration of further questions that the EC had not explicitly mentioned in its call for proposals. Two additional work packages were devoted to dissemination, training and management.

3. Main scientific results and foreground

Acknowledging complexity

Before describing the project’s analytical framework and methodology, it is useful to take a closer look at the features that define our rapidly changing “linguistic environment”. Discussing these features is important in order to realise that one of the project’s central contributions resides in the very fact of providing an integrated approach that helps to get a grip on the extreme complexity of “language-in-society” in contemporary Europe; the MIME analytical framework is, in itself, one of the project’s chief outputs.

Complexity arises from four major trends.

* First, as noted in the preceding section, globalisation increases the frequency of interlinguistic contact. Linguistic diversity has become, directly or indirectly, an inescapable feature of most modern societies, at the workplace, in the classroom or during one’s free time, and it pervades economic life (production, consumption, and exchange). This trend must not be overemphasised, since it affects some countries more than others, and urban areas more than rural ones. However, it is a reality in much of contemporary Europe. The increased saliency of linguistic diversity must not be seen as a simple “increase” in diversity, because linguistic diversity, at the same time, is threatened by processes of language attrition: many autochthonous minority languages, in particular, are experiencing serious erosion, to the point where communities of native speakers have become highly fragmented (leading to a debate on the most sensible distribution of protection and promotion efforts between native-speaking communities on the one hand, and learners and secondary speakers on the other hand). In other words, overall objective diversity may not be increasing and may in fact be eroding. What is increasing, however, is subjective diversity, as experienced by a large proportion of European residents, particularly in major cities. This increase is largely the result of migration, whether from other EU member states or from third countries.

* The second major trend, which can also be traced back to globalisation, is the increased integration of states – obviously in the EU context, where integration is backed by institutional mechanisms, but this overall trend can be observed well beyond the EU. What happens in a particular context, therefore, is likely to influence, and be influenced by, what happens in another. The way in which multilingualism evolves in any given country is related to linguistic change and evolution in other countries. Thus, it is difficult to select, design, implement, monitor, fine-tune, revise and adapt language policy in a single country without taking into account the language dynamics unfolding in another.

* The third trend is the growing interconnection of levels in language issues, where the micro level (individuals and households), the meso level (organisations, whether non-profit or for-profit, public or private, such as universities or private-sector companies) and the macro level (society as whole, whether locally, nationally, or globally) influence each other more directly than before. This trend is not unique to language, but it raises, in the case of language, questions of particular complexity. Gone are the days when the protection of a minority language could be envisaged strictly within the confines of some remote corner of a country: the destiny of the language also
Linguistic diversity, therefore, is no longer (if it ever was) just a philological, cultural, or educational question. Its political, sociological, geographical and economic dimensions are inescapable. Concomitantly, states and supra-national entities cannot ignore language questions. A few decades ago, contemporary societies became aware of the fact that our biophysical environment required attention, in the form of protection and proper management. Something similar has happened in recent years with linguistic diversity, with some evolutions originating in the late 1960s and others coming to the fore in the 1990s, following the fall of the Berlin Wall in 1989. The construction of the European Union, as a linguistically diverse entity that has embarked on an ambitious integration project, only reinforces the need to come up with answers on how to manage linguistic diversity. Linguistic diversity, then, cannot be left to itself.

However, as pointed out above, the questions we are confronting are extremely complex. The fragmented approaches through which some of the complexity could be played down or set aside (e.g., by focusing exclusively on the observation of communication patterns between individual participants in a multilingual meeting, or on the contents of multicultural awareness training among primary-school teachers) are, for reasons just explained, increasingly unsatisfactory. An approach embracing the very macro, transversal dimensions of the “multilingual challenge” was necessary, but it should also be designed in such a way as to allow for meso- and micro-level processes to be fitted into it. Generally, the disciplines that have historically been tasked with studying language issues in Europe tend to lack the conceptual and methodological apparatus needed to tackle this complexity.

As a result of the foregoing considerations, the MIME project has adopted a policy analysis approach. Policy analysis is a technique that is applicable to just about any question that society has to face, and about which it has to
make decisions. It operates with an established set of standard criteria, typically “effectiveness”, “cost-effectiveness”, “fairness”, “accountability”, etc., but it is important to note that these commonly used criteria may perfectly well be given more or less emphasis. They can also be changed and replaced by others, in accordance with citizens’ political and cultural priorities. Contrary to a widely-held belief, policy analysis is not a technocratic machine that somehow dictates what societies must do. It is a tool that helps societies approach questions and answers in a systematic fashion. In so doing, it contributes to transparent, well-informed democratic debate. Alternatives (including so-called “critical” approaches) are typically less transparent, and offer no manifest advantages in terms of democratic guarantees.

The analytical framework designed for the MIME project tries to go beyond widespread views holding that diversity is intrinsically and overwhelmingly problematic (a notion commonly held on the far right of the political spectrum) or, on the contrary, that diversity amounts to pure benefit, and that any mention of its costs is inherently xenophobic (a frequent tenet of discourses on the left side of the political spectrum). The MIME project has no problem acknowledging that diversity entails both advantages and drawbacks, benefits and costs. Let us emphasise once more that the “benefits” and “costs” mentioned here can be material or symbolic; they may be tied to monetary flows or to matters of identity, pride and social justice – all these aspects are relevant in the weighing of the pros and cons of alternative scenarios, and all are legitimate components of a proper policy analysis.

Advantages and drawbacks of linguistic diversity

The MIME framework uses some fundamental parallels between environmental policy and language policy. It does not, of course, assume some ontological parallel between “languages” and “nature”, and MIME keeps clear of any biologising analogy. Social, political and economic processes play a driving role in the evolution of our linguistic environment. Nevertheless, the policy analysis instruments brought to bear in the assessment of alternative policies in the field of environmental protection are quite similar to those that can be applied to language policy, and this point is crucial in understanding the framework that has enabled us to come up with an integrative vision of multilingualism.

In the management of linguistic diversity, as in environmental protection, we face both advantages and drawbacks (which may also be called “benefits” and “costs”, as long as it is clear that both benefits and costs are not confined to material or financial ones). In a diagram, one might say that as diversity (measured on a horizontal axis) increases, so do benefits and costs (see Fig. 1).

Let us first consider advantages (or benefits): they may be market-related or not, and they may accrue to individuals or to society as a whole. For society, the benefits of diversity include more open, dynamic, resilient and welcoming societies in which, for example, people face no particular difficulties when they move between cities and countries (whether for study, work, leisure, or retirement). Diversity places more resources at our disposal. One often-heard claim is that diversity encourages creativity, which in turn favours innovation, which ultimately fosters prosperity. For individuals, “internalising” diversity by learning languages provides more direct access to people from other countries and their culture; and living in an increasingly interconnected world, the capacity to deal with otherness and difference (including through a broader range of language skills) is undoubtedly an asset, all other things being equal. All these advantages are typically downplayed by extreme right-wing parties.

Turning now to the drawbacks (or costs) of diversity, they too may be market-related or not; they may have direct financial implications, or belong to the realm of the symbolic. For example, dealing with linguistic...
diversity entails a more complex organisation with associated monetary costs. A frequent illustration is the language regime of the European Parliament with its 24 official languages (even if, upon rigorous examination, the value for money of these services is very good, maintaining multilingual operations certainly involves a higher degree of complexity). Another example has to do with education and schooling: very diverse classrooms may require additional teacher training time, as well as the development of a broader range of pedagogical materials suited to students speaking a variety of languages at home. In addition, there is no denying that diversity is often experienced as a source of tensions. Even if these may rest on prejudice or unjustified fears, the fact remains that diversity may be experienced negatively. This is reflected in the recent success at the polling booth, in various EU member states, of right-wing parties with political platforms that emphasise nationalist majority discourse do not support (or actively resist) the granting of language rights to autochthonous minorities, and tend to portray migration in all its manifestations as a problem. All this provides illustrations of a stark reality: increasing diversity involves symbolic costs. Summarily dismissing such views, as some voices on the left are often prone to do (and ignoring the discontent of citizens who support nationalist or xenophobic platforms) may give one the feeling of occupying the moral high ground, but in political and policy terms, it is an inadequate and unrealistic answer.

It is better to acknowledge from the start the plain fact that diversity carries both advantages and drawbacks, and to design language policies that take both into account.

The problem, however, is that all kinds of circumstantial evidence suggest that the more diversity there is, the smaller the increase in its benefits, while the reverse applies to costs. In other words, benefits of diversity increase at a decreasing rate, while its costs increase at an increasing rate. This can be symbolised, as in Fig. 1, by two curves: a hyperbolic benefits curve, and a parabolic cost curve.

Why do the curves behave in this way? Again, the analogy with environmental protection is useful. Suppose that in Fig. 1, instead of measuring diversity (on the x-axis) and its positive and negative effects (on the y-axis), we measure environmental quality and its effects, whether benefits or costs. Assume that we start with a certain degree of pollution, and that a decision is reached, as a result of a democratic process, to reduce it through various forms of regulations and incentives. Initial environmental improvements will have a considerable effect and substantially improve people’s everyday life. However, after a certain degree of improvement has been achieved, each further improvement, though still beneficial, will be perceived as only having a marginal effect: in other words, the benefits of environmental protection will increase, but at a decreasing rate, yielding the hyperbolic “Advantages” curve in Fig. 1. Symmetrically, when engaging in environmental clean-up, the initial measures will typically be those that easily deliver a substantial improvement without costing too much. However, if the effort is pushed further, ever more technologically advanced or organisationally heavy interventions will be required. The consequence is that each successive wave of environmental clean-up will carry a higher price tag than the previous one: in other words, the costs of environmental protection will increase, but at an increasing rate, yielding the parabolic “Drawbacks” curve in Fig. 1.
Linguistic diversity displays similar properties. Suppose we start from, say, “zero diversity”, that is, a fully uniform, monolingual society. Allowing a little diversity will immediately yield various benefits, of the type discussed in the preceding paragraphs. However, if diversity keeps increasing, the gains will become marginal and, ultimately, hardly noticeable (if only because there is only so many hours in a day to enjoy the benefits of diversity). Symmetrically, diversity will initially entail some costs, which be low at first. However, as diversity increases further, so does the complexity of the arrangements that have to be made in various areas (education, administration, public signage, etc.). In parallel, because diversity is often experienced as dangerous and threatening for various symbolic reasons (such as questioning the place and legitimacy of one’s language community), more diversity will typically stoke such concerns and be perceived as costlier. For all these reasons, each increment costs more than the preceding one.

Starting from zero diversity, each increase in diversity delivers more advantages than drawbacks, as shown by Fig. 1. However, as diversity increases further, the additional benefits become less noticeable, while the additional costs start climbing faster. At level $D_m$, the benefits of diversity will have been wiped out by the costs. One seemingly innocuous, but in fact politically crucial result from this simple analysis is that, just as it makes sense to reason in terms of an optimal level of environmental protection, some levels of diversity are preferable to others because they deliver a relatively large amount of advantages relative to their drawbacks. The preferable level is the one where the vertical distance between the two curves is the largest, namely, at level $D^*$. In other words, far-right political parties who would have us opt for monolingual (and usually uniform, monocultural) societies (where $D \rightarrow 0$) are wrong, because this would deprive us of the benefits of diversity. Conversely, ignoring or downplaying some components of the costs associated with diversity, as some voices (usually on the left of the political spectrum) unwittingly suggest, is wrong as well, because it would push us too close to a situation where the benefits of diversity are obliterated by its costs (that is, where $D \rightarrow D_m$).

The problem, then, is one of identifying $D^*$, and then selecting, designing and implementing transversal language policies that bring us closer to this level.

Obviously, this policy analysis approach to linguistic diversity is not only very different from the approaches traditionally brought to bear on the matter, and which tend to be inspired by sociolinguistics sometimes by the education sciences. But contrary to the latter, it provides an integrated framework that allows one to weigh the benefits and costs of alternative solutions, including their respective impacts on linguistic and social justice.

The question, now, is how to move from this first, very general analysis to a closer identification of the advantages and drawbacks that each policy response to the challenges of diversity necessarily carries.

The trade-off model

The MIME project’s core analytical concept is the trade-off model, which provides a unifying framework for the research carried out by teams working on different questions, with the toolkit of different disciplines. It starts out from the idea that the language issues confronting European citizens and their authorities can be approached through the prism of a common problem, that is, the tension between two equally justified objectives, namely, mobility and inclusion.

The trade-off model is a classic policy analysis instrument. It can be applied to any problem where a human society has to make decisions and, in particular, needs to balance commendable but non-converging goals. Multilingualism is a “challenge” precisely because it points towards goals that are not easily reconciled.
On the one hand, Europe means to become a strongly integrated union whose citizens can freely move between member states for work, study, leisure or retirement. This is what we call mobility, a notion which denotes a broader range of processes than physical migration and reflects the growing multiplicity of motivations and modalities associated with the geographical or sometimes virtual movement of people. Mobility requires easy communication among people with different linguistic backgrounds. This can be achieved by appropriately combining multiple communication strategies involving various ways of using languages, but which challenge the association traditionally made between a particular language and a particular geographical area.

On the other hand, the “multilingual challenge” raises issues of inclusion, in which languages play a fundamental role. The range of languages spoken in Europe is crucial to the very existence of its diversity, which is recognised as a core value of the Union. This diversity is manifested in the linguistic specificity of different parts of the EU, whose member states have different official languages (sometimes more than one, with various internal arrangements, at national and/or sub-national level, to deal with this diversity). Inclusion, then, refers to the fact that a sense of belonging to and connection with one’s place of residence, whether one was born there or moved and chose to settle there. This sense of belonging may, in particular, be reflected in participation in the social, political, economic, and cultural life of the country, region and local area of residence, implying familiarity with the local language. Thus, the conditions needed for the maintenance and/or emergence of a sense of belonging and connection requires that the many languages and cultures that make up European diversity be recognised and nurtured. This enables long-time residents to feel secure, including in their capacity to extend inclusion to newcomers. This matters, given the importance that people usually attach to language and culture in identity-building processes. While inclusion implies the integration of newcomers into local conditions, it does not require them to relinquish the linguistic and cultural features that they bring with them, and it can allow for the emergence of multi-layered identities.

The MIME project builds on the idea that a trade-off problem arises between “mobility” and “inclusion”. If society were to opt for an exclusive emphasis on the necessities of inclusion in a specific place in the EU, this could lead to material or symbolic impediments to citizens’ mobility. Putting it differently, an exclusive emphasis on “inclusion” makes mobility more complicated for people, whether in material or symbolic terms. More inclusion will generally entail less mobility. Conversely, an exclusive focus on mobility can have a detrimental effect on inclusion, because it may, through the potentially uniformising forces it abets, erode the sense of place, specificity and rootedness associated with different locales within the EU. At worst, if this focus on mobility is perceived as undermining local languages and cultures, it can cause a negative backlash among some citizens who may feel dispossessed of their sense of place. More mobility can be disruptive for inclusion processes.

The “challenge of multilingualism”, therefore, presents the typical makings of a trade-off, in which two goals, both worth pursuing, may be at odds with each other, and this trade-off reflects our starting observation that diversity entails both benefits and costs (again, material and symbolic). These benefits and costs are inextricably linked to each other, particularly through the dynamics of mobility and inclusion. In other words, linguistic diversity is a challenge for the European citizen precisely because it carries both costs and benefits, and both are so intimately connected. It follows that Europe’s response to the challenge of linguistic diversity should take due account of these interconnections. This situation can be expressed with the help of another diagram (Fig. 2), in which the extent of “mobility” and “inclusion” is measured on the x and y axes respectively.
mobility, but still want to strongly support newcomers’ inclusion into the local social and cultural fabric, which typically requires them to learn the local language. In order to encourage them to do so, mobility-enhancing policies should be tied to policies that make the acquisition of the local language cheaper and/or unavoidable. This may take the form of free language classes for newcomers. Tying these mutually complementary policies together amounts to an outward shift of the constraint, as shown in Fig. 3.

Point C has now become accessible, and starting from A, more mobility can be achieved without sacrificing inclusion. In order to deal with the trade-off problem, then, the MIME project has been geared towards the pursuit of the two following goals:

1. to identify, given existing constraints (which restrict the extent of mobility achievable while preserving a certain level of inclusion, and vice-versa), the best balance between the two;
2. to identify policy orientations that can help:
   » reach the point that ensures this balance;
   » relax this constraint – in particular, by formulating measures (or novel combinations of measures) that can increase mobility without impeding inclusion, and improve inclusion without restricting mobility. The guiding principle is that of increasing compatibility between mobility and inclusion.

The solid downward-sloping blue line represents a limitation or, in formal terms, a “constraint”; it symbolizes the fact that starting from a situation such as that symbolised by point A, the only way to increase mobility is to sacrifice some inclusion. Society may therefore end up at point B, which is merely another location along the constraint. Conversely, if one were to start from B and try to increase inclusion, this would require sacrificing some mobility.

This constraint reflects hard realities of the type mentioned a few paragraphs earlier. Suppose we make facilitating mobility an absolute priority. Citizens would then be allowed, without any particular requirements, to settle anywhere they like on the territory of the EU, and to demand access to various services in their own language, eschewing any serious effort to learn the local language; ultimately, this will damage inclusion. More mobility may have been achieved, but at the cost of less inclusion; this is exactly what the solid blue line in Fig. 2 symbolizes. The short-term problem, then, is that of finding the best possible combination between mobility and inclusion – or, in terms of Fig. 2, to identify the best point along the solid blue line. Appropriately chosen policies can then be designed and implemented in order to move closer to the preferred combination of mobility and inclusion.

However, we may go one step further and consider whether the constraint itself might not be moved outwards: for example, we may want to facilitate
Much of the attention of MIME researchers has been devoted to the study and reinterpretation of classical language issues in terms of this trade-off model, in order to bring to light adaptations to existing arrangements that can increase the compatibility between mobility and inclusion in various domains (constitutional arrangements, daily life in diverse neighbourhoods, educational systems, etc.). In the following subsection, we take a closer look at how this has been achieved.

Research organisation and methodology

The European Commission’s call for proposals raised an unusually wide panoply of complex questions, ranging from legal-constitutional issues in comparative perspective, language maintenance in the face of linguistic hegemony, the conditions of diversity maintenance, effective communication among European citizens, the advantages and drawbacks of language teaching at various levels (from pre-school to adult education), the role of multilingual education in a context of globalisation, the impact of new technological developments in the language industry, the functions of translation and interpreting in the socialisation of migrants, as well as foresight on the linguistic future of Europe in a globalised world. All these questions, of course, had to be addressed in an interconnected fashion for a consistent vision of multilingualism in Europe to emerge.

In itself, the trade-off model presented above is the project’s first, aggregate response to the requirements of the call: it offers a way to address all these questions together, within a consistent framework that reflects the transversality of the issues at hand. Given the range of topics mentioned in the call, however, the application of the trade-off model needed to be organised in thematic sets, each of which defined a “work package”:

* The “Politics” thematic set used the trade-off approach in a comparative review of political and institutional experience in different linguistically diverse countries, looking at how they deal with their internal diversity.

* The second set, “Society” has focused on the sociological study of linguistic diversity as experienced by social actors in their everyday life, particularly at the local level of the city and its neighbourhoods, and in the construction of individual and collective identities.

* In the third set, “Education”, the analysis was devoted to the re-examination of language teaching and learning. The teams involved have developed an integrated, systemic perspective on the education system as a whole and in particular on curriculum design, making room for micro-level processes in connection with macro-level contextual aspects.

* The fourth thematic set, under the label of “Mediation”, has produced an analysis of the role of, and interconnections between communication strategies including translation, interpreting, the use of lingua francas, the development of intercomprehension (receptive skills in languages related to one’s mother tongue), and the potential of technological development in the more effective use of these strategies. It emphasises their role in mediating between linguistically diverse actors.

* “Policy” constituted a fifth thematic set in its own right, because it is important to maintain a distinction between politics and policy. Politics, addressed in set 1, deals with competing interests between different actors (who usually find themselves in different positions of influence and power). This political power play, which is channelled, in democratic states, through formal processes such as parliamentary debate, ultimately results in orientations being adopted. This is where policy comes in: once general orientations have been adopted, the question becomes one of selecting more specific objectives to give substance to these orientations, as well as precise measures to achieve these goals. Even when there is broad consensus on the goals pursued, it is hardly ever obvious which particular policy measures are best suited to achieving these goals. Each policy entails using and redistributing material and...
symbolic resources, and may involve unintended consequences. Policy analysis is the approach with which the consequences of various alternatives can be identified and estimated – and one course of action then chosen on the basis not of perfect, but more extensive knowledge. Owing to the project’s emphasis on policy relevance, this set plays a crucial role in MIME.

* A separate set of pilot studies called "Frontiers of multilingualism" was included in the project in order to consider hitherto largely unexplored issues. These studies have examined the role of language and multilingualism in the (re-) definition of geopolitical security; the implications of globalisation for citizens’ rights and safety as consumers in a multilingual Europe; the language challenges, but also the specific contributions of Roma communities across Europe; the communication needs, in terms of language skills and facilities, resulting from the north-south mobility of retirees in an increasingly integrated Europe; the connections between creativity and multilingualism, and their possible use for the prevention of financial crises.

In addition to the 23 research teams involved in the six thematic sets just described, one team has coordinated the dissemination and training activities, and another has focused on project management, and has also actively participated in the dissemination work.

The integration of research work anchored in eleven different disciplines, however, required more than designing a shared model based on the principles synthesised in Figures 1, 2 and 3. A three-phase research strategy also had to be implemented. In phase I, all the research teams from the five main thematic sets (18 teams) were invited to reinterpret their research questions (e.g. about the role of non-formal language education, or about the use of translation) in terms of the mobility-inclusion trade-off. This first phase ensured that all the major questions addressed in the project would indeed be studied in the perspective generated by the common framework. The six teams involved in the "Frontiers" work package, however, being entrusted with independent pilot studies, were not required to process their research questions in the same way, but at least to flag connections between these questions and the mobility-inclusion trade-off. In a second phase of the research, the teams were encouraged to make full use of the conceptual and methodological resources of their respective canonic disciplines, as requested by the treatment of the sociolinguistic, political, sociological, economic, educational, legal, psychological, etc., questions they were studying. In the third and final phase, the teams regrouped around a shared format for the presentation of key research findings, applied to the MIME Vademecum described at the end of Section 2.

As to the case studies themselves, they call on very different methods. Some are essentially theoretical, using formal modelling, while others emphasise empirical questions. Some rely on desk research and computer simulations, others focus on fieldwork. Most use qualitative analysis, but some have invested in quantitative work and apply advanced statistical techniques. Some studies have a strong comparative angle, while others focus on the in-depth analysis of a particular situation.

The MIME project has taken four years (spring 2014 through spring 2018, followed by six months devoted to the consolidation of results and the preparation of shared outputs for dissemination). Over the project’s duration, the type of work carried out by the participating teams has thus been at the same time very diverse (reflecting their respective anchoring in different disciplines) but also strongly coordinated, as a result of the application of the shared framework and three-phase work plan.
Additional project features

Additional features of the MIME project deserve mention here, since they have developed alongside the research work proper, have influenced it, and been influenced by it.

The first of these features is the **MIME Stakeholder Forum**. In order to facilitate regular exchange between research and practice, and to enable practitioners and scholars to learn from each other, a Stakeholder Forum meeting has been held alongside the project’s yearly consortium meetings. Stakeholders representing professionals “on the frontlines” in the management of diversity were invited to take part in a day of debate around issues related to their field experience. Four different groups of professionals have taken part in these Forum meetings, namely:

* members of the translation and interpreting professions (Ljubljana, 2015);
* second/foreign language teachers (Faro, 2016);
* practitioners of immigrant integration (Riga, 2017);
* language policy agencies and language commissioners (Brussels, 2018).

The MIME stakeholders who participated in Stakeholder Forum Meetings come from diverse professional backgrounds, face different realities and have different needs, expectations and perspectives on the role of research. Some conduct research themselves, some commission it, others expect very specific types of research targeted for their needs and tailored for the tasks at hand. Generally speaking, the stakeholders attending Stakeholder Forum Meetings expressed concern for the multilingual challenges their institutions are facing, as well as the need to adjust language policies and find innovative solutions to maximize their scope, efficiency and impact.

The input the project consortium has received from stakeholder representatives addresses various aspects of research, in particular:

* the fine-tuning of certain specific research questions, in order to increase their practical relevance;
* the identification and sharing of accurate factual information for inclusion in scientific research work;
* the “extra mile” that sometimes has to be run in order to make sure that research findings (in particular those that are designed to be part of suggested policy orientations) are presented in a way that makes them clear and accessible to practitioners.

It is important to stress that the input provided by the stakeholder representatives has not replaced scientific principles and practices. The Stakeholder Forum was used as part of an approach to scientific work that pays attention to the maximisation of its relevance beyond research to deliver practical tools for policy selection, design and evaluation. Therefore, many of the issues, needs and questions raised by stakeholders during Stakeholder Forum Meetings 1 through 4 are addressed in a very practical way in the **MIME Vademecum**, but also integrated in the rich scientific output of the MIME project.

The project’s scientific output includes internal research reports, articles in scientific journals, chapters in edited volumes, presentations at scientific conferences and workshops, and dedicated panels and workshops (see detail on the MIME project, its activities and research outcomes is available on [www.mime-project.org](http://www.mime-project.org)). At the time of writing (autumn 2018), a scientific volume synthesising the project’s main results for an academic readership is in progress, and the MIME Vademecum, aimed at a more general public, is freely downloadable from [www.mime-project.org/vademecum](http://www.mime-project.org/vademecum).

The project has generated fresh knowledge about how language policies can provide responses to the challenges of multilingualism. In addition to a wide panoply of specific research findings generated by the case studies mentioned above,
Politics

* Political federations or quasi federations characterised by linguistic diversity have developed different strategies to strike a balance between mobility and inclusion. Such strategies include limited decentralisation in language matters governed by common and public principles comparable to the EU's subsidiarity principle; enforcement of vehicular languages and cross-regional transfers; coordination games between government and civil society; and a language-proficiency point system based on subsidiarity and reciprocity.

* The position of traditional minority languages is best characterised by language hierarchies, subordination, asymmetries and threshold restrictions.

* With respect to the rights of mobile minority languages, the rights assigned to territorial minority languages function as a benchmark; mobile minorities' language rights should be recognised according to the personality principle.

* The implementation of the existing international legal instruments, including the two treaties of the CoE concerning minority language rights, is defective. There is a clear difference between formal rights and their practical enforcement in the European public sphere. A remedy could be to give minority languages official status as regional official languages.

* Access to EU member states’ citizenship proves to be a mobilising force, especially among mobile young people from non-EU member states.

* Research on kin-minorities in the multilingual, multi-ethnic region of Vojvodina demonstrate that kin-minorities may be exposed to exclusion by kin- and host-state majorities.

Main results

As mentioned earlier, the MIME project simultaneously considers a very wide range of issues including (but not limited to):

* the protection and promotion of regional and minority languages in Europe;
* the presence and visibility, in an EU member state, of the official languages of other member states (as a result of intra-European mobility);
* the challenges of effective second and foreign language learning in education systems, which raises, in particular, the issue of the special role major languages, including one or more lingua franca(s);
* the language issues surrounding the presence of other (historically extra-European) languages accompanying migration flows;
* the problem of efficient and fair communication in multilingual organisations – not least in the European institutions themselves;
* a number of specific questions connected to the management of multilingualism, such as the linguistic dimensions of consumer protection or the specific language needs of retirees settling in another EU member state.

Clearly, it would be impractical here to list all the specific research findings produced by the various research teams, since they straddle such a diverse range of processes; however, some examples may be provided by way of illustration.
The city of Brussels (itself one of our case studies) illustrates the complexity of language use in modern, multilingual cities. A “free” language market in combination with a growing mobility results in increasingly multilingual practices. The discourse portraying English as the new European lingua franca must be put into perspective. A majority of residents are not fluent in English, and mobility does not go hand-in-hand with the substitution of the local languages by English, but with a growing multilingualism. In terms of social inclusion, there is a clear tension between official policy on the one hand and initiatives within civil society on the other. Politicians react rather defensively and make a clear distinction between the different categories of citizens (nationals, EU citizens and third-country nationals), considering legislation originating at different policy levels. Citizens’ initiatives often go against this categorisation, but sometimes perform a “spearhead” function in the sense that policy makers include elements of these initiatives in their official policy afterwards.

The bottom-up approach adopted for the empirical analysis of the cities of Barcelona, Luxembourg and Riga has led to results highlighting the need for language polices to be in touch with what happens on the ground. In light of the patterns observed in the three cities, our research has developed the concept of “auto-centred multilingualism” as a way to relax the trade-off between mobility and inclusion. This concept implies the adoption of context-sensitive language policies in order to promote individual multilingualism with regard to both autochthonous as well as migrants’ languages.

Individual multilingualism appears to be the most suitable strategy for tackling the trade-off between mobility and inclusion. Individuals with skills in both autochthonous and allochthonous languages are less affected by the segregation along linguistic lines that may characterise the labour market, the school system or urban settings in diverse societies.

The street-level approach used to assess individual experience of the urban linguistic soundscape, which is marked by a deep multilingualism, has pointed out that affective geographies (dealing with feelings and emotions in relation with place and space) should be taken into account in language policies. As much as the sounds of language say something about the places visited by urban citizens, they also spark different feelings – for instance nostalgia, surprise, confusion and hope – which determine the experience of and in space/place, and are essential in understanding “belongingness” in the multi-ethnic and multilingual city. Politicians also need to bear in mind these “softer” experiences of linguistic diversity in public space, which are often highly personal and based on individual linguistic skills, personal biographies and previous life events.

The integration of formal, non-formal and informal modes of language learning is a key factor for avoiding semilingualism and for a person to reach a level of linguistic confidence and comfort in all the languages in his or her repertoire. Integration of this kind allows individuals to become: (1) more mobile and/or “motile”; (2) more oriented towards inclusion; (3) more willing to accept inclusion in the recipient host society. The research identifies the recognition and portability of language skills between formal and informal settings as particularly crucial.

Fieldwork shows that attitudes and language awareness seem to be linked with types of education, and that non-formal and informal education positively influences the linguistic strategies of people in mobility and those who do not take part in it. It further suggests not only on mobile students and staff, but also on those who stay at home and have to adapt to others.
* Positive attitudes towards multilingualism in the family, the education system and society are more generally linked to positive attitudes towards diversity, inclusion and mobility. This result suggests that the promotion of multilingualism should be more closely linked with the movement for educational inclusion, rather than narrowly focused on the promotion of mother-tongue / lingua franca education. Corresponding measures require collaboration between key actors including administrators and staff, teacher trainers, researchers and teachers, peer students and families, and community organisations. Policy recommendations from networks and organisations concerned with migrant education, special needs education and Higher Education mobility organisations and programs must be drawn up to formulate a clearer vision. A well-designed policy needs to be coherent and explicit about its language expectations and societal impact.

* Observations further show that teacher education and staff preparation for diversity is a problematic area, especially with regard to multilingualism. Teacher education programs rarely offer, or require, a basic education in language diversity, and only a very small number of “large” national languages are the focus of any specific training. A substantial rethinking of teacher education is required in order to treat language contact phenomena as “normal” in all societies. Spreading notions of history, geography and Landeskunde at school, universities as well as in society can greatly help the integration of mobile people. Moreover, our survey of European examples clearly shows that the majority languages of recipient societies are not threatened by the contact with immigrant languages “from below” – rather, they can be altered by the overwhelming power “from above” of internationally dominant languages. The case studies also show that this approach to language and language policies is visible in Higher Education management and governance. Certification and/or accreditation systems for academic staff are needed to enhance the relevance of multilingual competence in education systems, including the linguistic repertoires of all actors. They should endeavour to prevent situations of linguistic hegemony in Higher Education.

* Research highlights the importance of promoting awareness of multilingualism in education systems, in curricula, in research and in governance, under a context-driven approach. The internationalisation of the curriculum (e.g. structure, content, teaching strategies, materials, assessment, certification), as well as the design and implementation of useful and relevant education policy measures, should allow respect of heterogeneity and of multilingual and multicultural learning spaces.

Mediation

* All four mediation choices (language technologies translation and interpreting intercomprehension lingua francas) enhance trade-offs between mobility and inclusion by relaxing constraints in various complementary ways. The duration of intended mobility is a key variable for the use of one mediation choice or another. All four mediation choices are well suited to short-term communicative situations, but longer-term mobility eases the trade-off with inclusion through the learning of local or host languages.

* There is no evidence that any of the mediation strategies block or hinder the learning of local or host languages; indeed, there is considerable evidence of complementarity between the short-term and long-term modes of mediation.

* With respect to translation technologies:
  » Online machine translation is used extensively in low-risk communicative situations, by younger people, and in conjunction with other mediation strategies.
  » Online machine translation can assist in language-learning processes.
With respect to public service translation and interpreting:

» Translation and interpreting services are mainly used in high-risk situations at the beginning of the migrant’s stay in the host country.

» The provision of translation and interpreting services does not reduce the incentive for recent immigrants to learn the language(s) of the host country and thereby impede their integration.

» Short-time migrants use different mediation strategies in different situations, including lingua francas, public-service interpreting and translation, translation technologies and intercomprehension.

» Short-term migrants also attempt to solve their communication impediments by learning the host country’s dominant language.

» Long-term migrants (regardless of their L1) decide to learn the host country’s language, while mid-term migrants resort more frequently to use of a lingua franca.

» It is recommended that policymakers consider designing specific translation policies for different groups of migrants, depending on the intended length of stay in the host country.

» It is recommended that free translation and interpreting services be ensured by qualified language professionals in those high-risk situations, in particular in legal, police and healthcare settings.

With respect to lingua francas:

» Migrants are highly motivated to learn the local language. The use of English as a lingua franca functions as a strategy for migrants to navigate everyday life, especially between the time of arrival and the beginning of formal language courses, and it provides a certain degree of social inclusion.

» Esperanto is a valid option as a lingua franca, even though its use so far has predominantly remained in the private sphere.

» Exchange students consider learning the host language to be an important incentive for their stay abroad. In practice, however, their enthusiasm is often stymied by the lack of adequate language courses and poor organisation, leading to students spending most of their time with other exchange students, rather than with locals. Examples of successful practice, such as language awareness diaries and tandem learning, can help make learning the local language a priority of a student’s stay.

With respect to intercomprehension:

» In contexts of long-term mobility, the use of intercomprehension spontaneously emerges as a transitional strategy whenever the speakers’ L1s are mutually intelligible or when the speakers have acquired sufficient receptive knowledge of each other’s language to fulfill their communicative needs. This highlights the need to provide intercomprehension training to people dealing with incoming migrants in face-to-face encounters (such as care-givers or teachers).

» The use of intercomprehension, exclusively or in combination with other mediation strategies, does not hinder the migrant’s acquisition of the dominant language of the host country in the long run, since this remains the desired communication strategy. However, using intercomprehension as a transitional strategy reduces stress from having to adapt to a new and sometimes very different language and culture.

» Short but explicit training in intercomprehensive skills allows for a satisfactory global understanding of written texts in formal contexts. However, a detailed understanding requires complementary use of other strategies such as dictionaries, even for trained readers.
A new model of language contact is now directly applicable to real-world scenarios, such as the case of English and Spanish in the US and Spanish and Basque in the Basque Autonomous Community in northern Spain; it generates accurate projections of real-life language dynamics. Another model allows for the study of the inclusion of minorities in the larger society and allows one to conclude that continuous interaction among groups is key to improving inter-group cohesion.

An in-depth study of the concepts of linguistic domination and territoriality enables us to assess critically their applicability to various situations, with particular consideration for the ethical problems involved. Dignity, which has been shown by our research to be, from a normative perspective, a key criterion of linguistic justice, is under attack when domination takes place. Equal dignity for all citizens occurs only in communities without domination in the sphere of basic liberties. Basic liberties are crucial to be able to develop autonomously, and being able to use one’s own language constitutes a fundamental basic liberty because one needs language to exercise many of the other liberties. For a language to be free to be used publicly, it should be shared by a long-settled community of speakers living in a concrete territory.

Four rival theoretical traditions – utilitarianism, egalitarianism, prioritarianism and sufficientarianism – have been critically assessed, with a focus on the implications of these theories for standard questions in language policy analysis. Different theories tend to converge on overlapping language policy orientations. We have also developed a novel “prioritarian” conception of linguistic justice, which provides a theoretically consistent way of synthesising a number of different policy recommendations towards promoting the interests of the least advantaged members of society. Finally, research has led to the conclusion that both morality and prudence are essential as a basis for feasible, stable and morally justifiable language policy orientations in complex societies, regardless of the underlying normative theory.

The meta-level analysis of language policy and its linkages with complexity theory has resulted in an epistemological critique of some currently popular notions in the academic discourse of applied linguistics, helping to make a distinction between those that usefully contribute to the selection and design of language policies and those that do not, or significantly less.

The application of complexity theory to the selection and design of integrated language policies has been furthered through computer-based simulations. The simulations offer very effective, targeted ways to test, in an environment characterized by complex dynamics, the effects of various changes in contextual and/or policy-actionable variables. The empirical relevance of the approach has been confirmed by the fact that the models developed produce very accurate projections of language vitality in contexts of dynamic language contact.

The legal implications of the policy orientations stemming from MIME research have been examined. In particular, the most significant legal implications turned out to be in the area of equality of rights and the concept of equal protection under the law. In particular, the legal analysis of the issues at hand supports the notion that the concept of proportionality is of fundamental importance in the design of policies set up to meet the “multilingual challenge”.

**Policy**

* A balance is needed between national security, inclusiveness, and the resilience of all ethno-linguistic groups; this applies within member states as well as to the EU as a whole. The following policy measures can serve this purpose:
Final Publishable Summary

» establishing a system of measurable indicators of societal resilience;
» commissioning a pan-EU level study on hybrid campaigns and threats, as well as potential solutions for fostering the resilience of both majority and minority language communities in EU member states and partner countries;
» increasing cooperation between various specialised institutions that investigate hybrid threats as well as means to foster resilience;

The Roma’s experience can make a contribution to European strategies for jointly managing mobility and inclusion. They have developed original combinations of formal and informal language learning strategies adapted to their traditions in circulatory migration, but which hold potential value for sedentary populations as well (although they are likely to be better-suited to groups confronting similar conditions, in particular marginalisation). A key process, in this experience, is the “learning of all from all” approach to knowledge gathering and sharing, which could inspire approaches to language learning that can favour inclusion and mobility in a wide range of contexts.

With regard to mobile retirees, it seems that host societies do not generally expect or demand assimilation but are mostly satisfied with civic integration. Certain linguistic initiatives may also be compatible with a multicultural approach, but most of these do not seem to rest on any explicit conception of immigrant language rights. Yet the mobility pursued by retired migrants also raises a more fundamental question regarding their inclusion: Inclusion into what? In the case of international retirement migration it is clear, first, that many migrants retain strong emotional bonds with their country of origin. Second, in popular destinations, inclusion often takes place in expatriate communities rather than in relation to the host society.

The psychometric examination of the statistical links between individual multilingual profiles and creativity has shown that a latent variable of multilingualism (operationalised as a combination of skills in survey participants’ cultural and linguistic diversity) and Article 4 (respect for the national identities of the Member States) of the Treaty on the European Union, in order to promote multilingualism and linguistic diversity as a transversal objective to be included as such in every EU policy, instead of being ancillary to some economic objective, as results at present from EU case-law.
second, third and fourth language) is positively related to a latent variable of creativity (operationalised as a combination of idea generation, idea selection, and creative interests, activities and achievement). The magnitude of the standardised effect (interpretable as a correlation) was between .15 and .30, depending on the details of the modelling technique and the control variables considered. Multiculturalism (as distinct from multilingualism) also has a positive effect on creativity, especially the variable “number of countries reported as important”. However, multilingual skills retain a positive and statistically significant correlation with creativity, even when multiculturalism variables are taken into account.

The growing complexity of finance has increased the distance between market actors and the consequences of their actions. The distance contributes to dissolving ethical dilemmas. The latter, therefore, tend to be approached in technical terms, even if they remain fundamentally ethical. This stretch entails a long cognitive distance and, as a consequence, it may numb natural ethical sensitivity skills. This means that in order for these dilemmas to be properly identified, stronger ethical skills are required. In finance – but not only there – technical diagnosis and responses (including new rules, procedures and compliance) are more frequent and common than ethical criteria (in terms of culture, values, or training). Survey results show that professional non-native monolingualism (in teaching and practice) using English only might abet a form of ethical blindness.

Seventeen priorities

Out of the many findings presented above, some translate more directly into policy orientations for Europe. These findings have therefore been reformulated in this perspective, suggesting 17 priorities for the development of an integrated language policy for Europe:

1. increase the use of the principle of equal recognition of autochthonous minority languages in order to better safeguard the long-term prospects of these languages;
2. increase EU support for the implementation of international instruments that enhance linguistic diversity, such as the European Charter for Regional or Minority Languages;
3. develop context-sensitive language policies to favour the development of more individualised expressions of multilingualism;
4. encourage pedagogical reforms that integrate formal, non-formal and informal modes of language learning;
5. deepen multilingualism in education in order to improve educational inclusion, rather than narrowly focus on the mother-tongue / lingua franca diptych;
6. keep encouraging the learning of the local/ national languages, since in processes of inclusion, nothing replaces the acquisition of these languages by newcomers;
7. rethink teacher education in order to better prepare teachers to deal with language contact phenomena;
8. adopt truly multilingual language policies in higher education instead of extending the role of English only;
9. make space for multiple lingua francas, since English is not the only one that can be used for this purpose;
10. encourage multilingualism in order to foster individual creativity, since a positive and statistically significant correlation between the two has now been established;
11. combine communication strategies (human translation, machine translation, intercomprehension, lingua franca use, additional foreign language skills), since there is considerable evidence of complementarity between them, but match them with context (e.g., low-risk v. high-risk situations, short-term v. long-term needs, etc.);
12. assess language policy choices with the help of new (classical or simulation-based) models of language dynamics, which are now available for making much finer conditional predictions regarding the impact of language policy choices;

13. give adequate consideration to issues of linguistic justice when weighing language policy plans, paying particular attention to "equal dignity" in the normative assessment of language policy scenarios, because it is a condition for the exercise of other liberties;

14. establish a system of indicators of societal resilience in order to monitor the security implications of language policy and language-related conflict;

15. adapt language rules for consumer protection in the market for goods and in the regulation of selling arrangements, in order to promote multilingualism in EU consumer legislation;

16. move towards a stronger application by EU institutions of Articles 21 and 22 of the EU Charter of Fundamental Rights;

17. consider amendments to certain provisions of the EU Treaties, in particular Article 3, paragraph 3 of the Treaty on European Union, to make reference to valuing and enhancing the multilingual competence of all EU citizens.

Broader implications

As pointed out earlier in this Publishable Summary, however, one of the project’s main concerns was not to suggest specific policy responses, but to equip users with tools to deal with the specific language issues that they may encounter in different contexts.

Therefore, one way in which the MIME project is useful takes the form of four “meta-level” results, with which we now conclude.

Towards a general theory of language policy

First, the MIME project’s analytical framework itself, along with its application, which demonstrates its ability to organise, into a consistent vision, very different elements of knowledge about multilingualism, is one of these meta-level results. One of the project’s ambitions is to offer some essential stepping-stones towards the emergence of a general theory of language policy as a form of public policy. It may be the first to address applied language policy as a transversal accomplishment covering the full range of language issues, such as those that turn up in the list above. Results also remind us that there is no such thing as “no language policy”. All societies have one, if only because states must decide in what language(s) they communicate internally and with the people living under their jurisdiction. In addition, language policies are necessary for reasons of protection (of threatened components of diversity), or arbitration between competing claims, made by individuals and/or groups with different linguistic attributes, over material and symbolic resources.

On the meaning of inclusion

Secondly, for genuine inclusion to occur, there needs to be a lively, sustainable social fabric for the “other” to be included into. Inclusion, therefore, does not amount to a drift towards a form of cosmopolitanism that would deny, lessen or erase the specificity and uniqueness of different parts of Europe. The implication of the European Union’s professed goal to respect its linguistic and cultural diversity is that different locales in Europe must be encouraged to cultivate their uniqueness (which of course may be a historically multilingual uniqueness, as in Luxembourg). It is also important to recall that inclusion, by definition, is for everybody. Therefore, it also implies paying attention to the concerns of those who chose not to be mobile or have no particular reason to move about, but who may find themselves playing a crucial role, as members of a host society, in the management of linguistic and cultural diversity. Their sense of place must not be threatened, but enriched by the arrival of mobile, and linguistically and culturally different European fellow citizens. Security in one’s sense of place is crucial to being able to welcome the linguistic and cultural “others” and offer them the possibility of being included. When seen
in this light, inclusion does not, require newcomers to relinquish their own linguistic and cultural heritage; inclusion as defined here fosters an organic, interactive version of multilingualism.

About linguistic diversity and social cohesion

Thirdly, a key interpretation that has emerged from the application of the trade-off framework, and has helped organise findings pertaining to very different processes into a consistent political vision of linguistic diversity, regards the notion of social cohesion – a term often invoked in public debate in a rather vague way. Our results suggest that cohesion, at the European level, is the product of the balanced combination of mobility and inclusion. This balance, of course, is something dynamic that changes over time, but the general perspective on mobility in the long term can be summarised as follows. Europe will be cohesive if its citizens can easily move between member states and are not confined to a country where they happen to have been born or to have studied; this requires support for arrangements and institutions that facilitate mobility. At the same time, cohesion requires citizens, wherever they come from, to be included in the local community where they choose to live, whether it is for a short or for an extended period. This implies support for the vitality of diverse communities, big or small, which differ from each other and manifest their uniqueness, in particular, through their specific linguistic features. Cohesion, then, depends on a proper understanding of the meaning of inclusion as outlined above, which implies the learning of the local language by newcomers.

The need for interdisciplinarity

Finally, with teams hailing from eleven disciplines, MIME is a deeply interdisciplinary project. Our common work during a little over four years confirms our initial hypothesis that in order to do justice to the complexity of the issues at hand, a concerted effort is necessary, drawing on the questions, concepts, methods, and findings of disciplines spanning the full range of the social sciences and humanities. This, in turn, raises the question of whether the conditions under which multilingualism research currently operates are satisfactory. Our answer is a guarded one: MIME is a lucky exception, in that the European Commission had, in the call for proposals which the MIME consortium answered, explicitly required interdisciplinarity, and gone as far as to list more than ten disciplines that ought to be used in the study of the “multilingual challenge for the European citizen”. However, conditions are rarely as favourable. Scientific research agencies typically pay lip service to interdisciplinarity, while in fact prioritising essentially mono-disciplinary projects. The situation tends to be worse in universities, where “gatekeeping” ensures that academic appointments typically sideline scholars with an interdisciplinary profile. The MIME project reminds us that what exists are objects, issues, questions, problems, etc., and that understanding them properly is impossible if one adopts one perspective only, neglecting other, no less important angles.

Concluding remarks

At the end of any large-scale research venture, it is always tempting to conclude that “more research is needed”, and, unsurprisingly, this short account will end on a similar call.

MIME was from the start designed to be, first and foremost, a tool. It provides concepts, models, principles, references, and examples of successful practice. The project's results, ultimately, must be seen as instruments for users to identify priorities and develop their own policy plans in accordance with the needs and priorities observed in their own contexts. Applying these tools, then, will necessarily require "more research" to address new challenges. The need to do so can only increase in coming years, since managing linguistic diversity in times of globalisation continuously throws up new challenges.
Readers may notice, when reading MIME project publications such as, for example, the MIME Vademecum, that certain notions, topics and discussions, though given strong prominence in some contemporary applied linguistics, barely appear, if they appear at all. For example, the term “superdiversity” does not turn up once in the Vademecum. This is intentional, for reasons explained in some of the publications stemming from the project, we consider it preferable to talk about “complex diversity”. The project also avoids discussions of “discourse” and when discourse is mentioned, it is done with particular caution: we think that the analysis of reality cannot be replaced by commentary on discourses about certain facets of reality.

For lack of space, these epistemological choices cannot be examined here, but this question reflects the complementarity between theoretical analysis and policy applications in the project. MIME strongly emphasises policy-relevant results, and the project is anchored in policy analysis as the provider of strategic angles on, or relevant entry points into the language issues at hand. However, the MIME project is also, at heart, a scientific research project, intended to make a contribution, modest as it may be, to the scientific study of some of the defining challenges of our times.

4. Potential impacts

The need to formulate sound, rigorously assessed policy responses to the challenges of diversity is epitomised by the electoral success, in various EU member states, of parties that are openly hostile to the European political, social, and economic venture. This hostility feeds on the rejection of a model that, arguably, has often turned a blind eye to language questions, and ignored how much they actually matter to citizens, owing in particular to the important effect that language has on people’s sense of space. For example:

* the presence of linguistic “others”, usually as a result of recent immigration from other EU member states or third countries, is not always experienced as unproblematic. Even if the very notion of “otherness” may be questioned (because it may result from a discourse of “othering”), very practical questions, for example for school curricula, still need to be addressed.

* many Europeans have reservations about the unchecked, apparently unmanaged increase in the use of English in non-English-speaking countries. Even if they see the usefulness of having the means (through English or through other strategies) to communicate widely, this does not amount to an endorsement of the eviction of national languages by English, for example in tertiary education.

What a number of different situations have in common, then, is the risk that citizens feel threatened in their sense of space, in which the unquestioned use of a locally dominant language, typically a national language, is an important feature. This situation, in turn, may give rise to various forms of backlash, which all harm Europe as a shared political, social, economic and cultural venture.

Ensuring the success of an open and vibrant society requires appropriate tools to confront these language-related problems, and this is what MIME has set out to develop. In this perspective, the project may be expected to have significant impact.

Such impact, however, is crucially dependent on the effectiveness of dissemination, both within and beyond European institutions. Throughout the duration of the project, considerable effort in this direction has been made by the project coordination, the dissemination team (WP7), the management team (WP8), the chairman of the project’s Advisory Board, and the Special project advisor.
In terms of *products*, the MIME project has given rise (at the time of writing) to:

* well over 1,600 pages of scientific and activity reports;
* some 280 presentations at scientific conferences and public events;
* more than 40 dedicated conferences and thematic workshops or panels included in the programme of major international conferences;
* over 60 scientific publications specifically devoted to MIME project results, in edited volumes and scientific journals.

A dedicated section of the MIME website allows users to get in touch with specialists and access their expertise in language policy and planning (see www.mime-project.org/expertise).

In addition, an edited volume destined for an academic readership is currently in preparation, under the responsibility of the project coordination, which will oversee the production of this book even though no further resources are available for the completion of this product.

Apart from these scientific outputs, the *MIME Vademecum*, as already pointed out earlier in this Summary, constitutes a major and highly original achievement aimed at a broader (in particular non-academic) readership. This volume includes a succinct but in-depth introduction followed by 72 research questions spanning the full range of themes studied in the project. Each question is given an accessible two-page treatment. Our target readership, with this volume, is not academics, but mainly people whose professional or political activities lead them to encounter the challenge of multilingualism, and sometimes to shape language policy decisions. The *MIME Vademecum* constitutes a unique resource providing essential orientation into a wide range of policy questions. It is available free of charge in pdf format via the project’s website at www.mime-project.org/vademecum.

In terms of *activities*, one of the unique features of the MIME project is the Stakeholder Forum with its yearly meetings (described in the preceding section). These meetings have enabled us to establish contact with some 220 stakeholders organisations and individuals, which have been kept informed of project activities, and often made the effort to travel, at their own expense, to MIME meeting venues in order to participate in the Stakeholder Forum meetings. We would like to take this opportunity to thank them for their support.

A special "MIME event" was organised by the project coordination in Brussels in April 2017, roughly one year before the conclusion of the project, in order to present preliminary findings to Commission officers from various DGs (in particular DGT, DGEAC and SCIC) and MEPs.

Finally, a special *MIME Vademecum* book launch took place alongside the MIME fourth and last Stakeholder Forum meeting in Brussels in June 2018. The event was generously supported by the *Mission of Switzerland to the European Union* and by Switzerland’s *Federal Delegate for Multilingualism* – both of whom we wish to thank here.

In addition to the above, all the teams have been encouraged to participate in the dissemination of the *Vademecum* in three different ways, namely:

* by issuing and sending press releases about the *Vademecum*’s publication (or requesting their respective university media centre to do so);
* by distributing physical copies of the *Vademecum* through their own academic, political and media networks (for this purpose, each team has received, depending on need, from 12 to 20 paper copies);
* by sending information by e-mail or other means to draw addressees’ attention to the possibility of downloading the *Vademecum* free of charge from the MIME project website.
In order to make sure that the Vademecum receives attention within European institutions, some 150 copies have been delivered physically to individual recipients at the European Parliament, focusing on MEPs from selected parliamentary committees or intergroups (LIBE, CULT, ITMNCL). Copies have also been delivered personally to the headquarters of DGT, DGEAC and DGRI.

Large-scale dissemination should be a planned, shared responsibility of the project coordination and the European Commission. As a general rule, dedicated dissemination support from the EC, in particular from DGRI, would be most helpful, because it obviously has much more firepower (particularly when it comes to accessing EC civil servants and MEPs) than scholars do. We strongly recommend developing some such support in the context of future programmes such as Horizon Europe in order to:

* facilitate, both in logistic and financial terms, the distribution of project publications across European institutions;
* jointly design an explicit plan for the dissemination of information about research project results in EC and EP information channels (journals, websites, etc.)

In the case of the MIME project, the Vademecum is a flagship product that could benefit from such institutional support. Nevertheless, at the time of writing (late October 2018), a total of about 800 physical copies have already been handed out, and it has already been downloaded more than three hundred times.
OUR CONSORTIUM

1. Université de Genève
   Geneva, Switzerland
2. Universiteit van Amsterdam
   Amsterdam, The Netherlands
3. Univerza v Ljubljani
   Ljubljana, Slovenia
4. Universität Augsburg
   Augsburg, Germany
5. Universidade do Algarve
   Faro, Portugal
6. Universitat Rovira i Virgili
   Tarragona, Spain
7. Latvijas Universitāte
   Riga, Latvia
8. Sveučilište Josipa Jurja Strossmayera u Osijeku
   Osijek, Croatia
9. Sciences Po Paris
   Paris, France
10. Magyar Tudományos Akadémia
    Budapest, Hungary
11. Vrije Universiteit Brussel
    Brussels, Belgium
12. Università di Milano-Bicocca
    Milan, Italy
13. Universität Leipzig
    Leipzig, Germany
14. Université de Reims
    Champagne-Ardenne
    Reims, France
15. Humboldt-Universität zu Berlin
    Berlin, Germany
16. Katholieke Universiteit Leuven
    Leuven, Belgium
17. University of Limerick
    Limerick, Ireland
18. The University of Edinburgh
    Edinburgh, Scotland
19. Uppsala Universitet
    Uppsala, Sweden
20. Universitatea din Oradea
    Oradea, Romania
21. Observatoire de la Finance
    Geneva, Switzerland
22. SCIPROM Sàrl
    St-Sulpice, Switzerland

The research leading to these results has received funding from the European Community's Seventh Framework Programme under grant agreement No. 613344 (MIME Project).

Prof. François Grin
MIME Project Coordinator
Université de Genève
Switzerland

www.mime-project.org
info@mime-project.org