Scientific Foresight: What if?



What if everyone spoke the same language?

One language disappears every two weeks, and up to 90% of existing languages could be gone by the turn of the century. Globalisation, social and economic pressures and political options can determine whether a language survives. Multilingualism is a cornerstone of the European project, with 24 official and 60 minority languages. In a digital era, ensuring digital language equality can help preserve linguistic diversity.

Have you heard of <u>Livonian</u>? <u>Yurok</u>? <u>Olmec</u>? Almost <u>7 000</u> languages are currently spoken in the world, but <u>every two weeks</u>, at least one dies out, with <u>50-90 %</u> of all languages predicted to disappear by 2100. But what causes languages to disappear and how can we prevent it?

The Babel myth claims that all humans once spoke the same language. As humanity migrated and civilisations emerged, metaphorical walls were erected and languages diversified. Chomsky has <u>theorised</u> that language emergence must have occurred early in human evolution. A <u>study</u> of phonemes pinpointed the origin of language to 80-160 000 years ago in southern Africa, thus predating the latest major exodus of *Homo sapiens* (50-70 000 years ago) and suggesting a single or main origin.



© Kateryna Kovarzh / Adobe Stock

Today, three main language families exist: Indo-European, Sino-Tibetan and Afro-Asiatic. In Europe, 90 % of citizens (675 million) are native speakers of an Indo-European language of one of three main language groups (Germanic, Romance and Slavic). Minority Indo-European language groups in the EU include Baltic, Celtic and Romani, the latter spoken by 6 million citizens. In addition, 20 million EU citizens speak non Indo-European languages, notably Basque, Estonian, Finnish, Hungarian, Maltese and Sami, the latter of which is considered severely endangered.

It could be argued that linguistic diversity has been threatened by technology since Gutenberg's invention of the printing press. The standardisation imposed by the written form helped shape the structure of what is at genesis an oral tradition, originally passed on through small communities and then travelling longer distances with trade and theta-tel- Take Dante's consolidation of the Italian language, for instance. It could also be argued that written codification set bounds to the expansion of language, an example of which are today's digital communities.

Language is a product of history, politics and socioeconomics, and in turn helps structure them. By 1920, half of the world's languages had been lost as a result of centuries of European colonisation. Throughout Europe, regional and minority languages were prohibited in the 20th century, as centralised governments imposed a dominant language in order to 'assimilate', 'acculturate' and preserve 'national identity'. In Spain, Franco declared Castilian the only official language. In France, minority languages such as Basque, Breton and Occitan were suppressed through both ministerial decrees and educational campaigns, creating a sense of 'vergonha' (shame of one's identity due to institutionalised persecution). Former French President Pompidou asserted 'there is no place for minority languages in a France destined to make its mark on Europe'. Languages can also be lost due to socioeconomic pressure, as was the case in Italy, with the mass movement of southern workers towards industrialised cities in the north (Turin, Milan and Genoa). In Ireland, British rule in the 19th century led to the erosion of Irish. Romani faces decline as a result of ethnic persecution and the pressure felt by young people to integrate in wider society.

But not all is lost. Over the last quarter of the 20th century, policies began to shift towards language preservation. Yurok, a Native American language at the brink of extinction following the arrival of Western settlers, had a recent revitalisation thanks to the government's promotion of a language programme. In the EU, several Member States have integrated minority languages in school curricula and enshrined language rights in national constitutions. In Italy, a 1999 law recognises the country's historical linguistic minorities. Irish became an official and working language of the institutions of the EU in 2007.



Potential impacts and developments

Language is deeply embedded in our sense of culture, social connections and personal identity. While globalisation can lead to language homogenisation, it can also contribute to new linguistic diversity. Brazilian poet Oswald de Andrade wrote, on his theory of anthropophagy, that Brazilian culture is more than the sum of its colonisers and that integrating and elaborating these influences allowed the creation of its synergistic, unique identity. In a reverse dynamic, post 1970s Portuguese society has seen the integration of terms originating from Brazilian and African Portuguese, in a sort of 'reverse triangle trade'. Mozambican writer Mia Couto is famous for creating 'almost words', based on regional dialects infused with animistic realism, which in turn he ascribes as inspiration from the oral tradition of Brazilian author Guimarães Rosa.

Today, English has entered our lives through television, music and the internet. Its influence is felt in business, administration, science and technology. There is no Italian term for 'privacy', nor 'computer'; Germany's youth have adopted words like 'legit' and 'cringe'; and Bulgarians have taken up 'trendy'. One might wonder if English influence on EU languages could become as prevalent as to transform them into bona fide English dialects. Conversely, English is also shaped by non-native speakers, in a cultural mixture known as 'Globish'. Some might be surprised to find that 'beamer' and 'handy' do not mean what they might expect.

What could become our <u>lingua franca</u> in the future? Language dominance depends on socio-political power. While <u>Esperanto</u> was created artificially with the intention of serving as a <u>lingua franca</u> for international communication, fewer than <u>200 000</u> people speak it today. With the emergence of Asian economies, <u>Mandarin</u> or <u>Hindi</u>, which together have <u>more speakers than English</u>, could become next century's <u>lingua franca</u>. However, this will depend on geopolitical balances, with <u>hyperglobalisation</u> and <u>deglobalisation</u> at its extremes.

Policy-making

Multilingualism is at the centre of the EU project and recognised as one of the EU's values, anchored in its cultural and linguistic diversity. Linguistic diversity is enshrined in the <u>Treaty on European Union</u> (Article 3) and in the <u>Charter of Fundamental Rights of the European Union</u> (Articles 21 and 22). The EU currently has <u>24 official and working languages</u>. Members of the European Parliament have the right to express themselves in the language(s) of their choice. To that end, the EU invests <u>€1 billion</u> per year in translation and interpreting services, including in <u>sign languages</u>.

The EU recognises the cultural importance of its linguistic diversity. Maltese, the only Semitic European language, is an official EU language. Irish gained <u>full</u> official and working status in January 2022. Catalan, Galician, Basque, (and previously Scottish Gaelic and Welsh) have <u>semi-official</u> status, which means language services are provided by the Member State, when needed and at its own expense. EU-funded research projects collect corpora of mainly oral languages, such as <u>Romani</u>, to promote language preservation. Language learning and mobility are promoted through <u>Erasmus+</u> and the <u>Creative Europe</u> programmes, aiming for all young people in the EU to have a good knowledge of <u>two foreign languages</u> by 2025. The EU also funds language learning programmes for specific minority languages, such as <u>Romani</u>.

Digital tools <u>can help</u> overcome language barriers and foster language equality. A 2000 <u>STOA study</u> found that online linguistic diversity is threatened not by the dominance of a single language, but rather by the dominance of machine translation in the five most-spoken EU languages (English, French, German, Spanish and Italian), to the detriment of the remaining <u>19 official</u> and <u>60 regional and minority</u> languages used in the EU. Based on the results of a 2017 <u>STOA study</u>, Parliament adopted a 2018 <u>resolution</u> on achieving language equality in the digital age. This led to the creation of the EU <u>European Language Equality</u> (ELE) project, which analysed over 80 languages to develop a <u>roadmap</u> towards achieving full digital language equality by 2030. It includes machine translation, speech technologies, text analytics and natural language understanding. In 2019, Parliament launched a <u>call for tender</u> to deliver live speech-to-text captioning (automatic speech recognition and machine translation) of Parliamentary debates in 24 languages. It aims to contribute to <u>accessibility</u> for deaf and hard of hearing persons, who currently have no direct access to Parliamentary debates. Digital tools for <u>sign language to/from text</u>, however, remain an underdeveloped challenge.

What-ifs are two-page-long publications about new or emerging technologies aiming to accurately summarise the scientific state-of-the-art in an accessible and engaging manner. They further consider the impacts such technologies may have - on society, the environment and the economy, among others - and how the European Parliament may react to them. As such, they do not aim to be and cannot be prescriptive, but serve primarily as background material for the Members and staff of the European Parliament, to assist them in their parliamentary work. The content of the document is the sole responsibility of its author(s) and any opinions expressed herein should not be taken to represent an official position of the Parliament. Reproduction and translation for non-commercial purposes are authorised, provided the source is acknowledged and the European Parliament is given prior notice and sent a copy. © European Union, 2022.