

# Linguistic entrepreneurship: Machine translation and the future of English as an international lingua franca

## Introduction

The impact of Covid-19 outbreak has been devastating for the global economy. Families lost their beloved members, employees lost their jobs, businesses went bankrupt and governments around the world introduced tough measures that many have never taken before.

When I got back to my country in March, things did not go as planned. I voluntarily quarantined at hospital as soon as I learnt of infected cases in my flight. During that time, I got to voluntarily work as a translator for doctors and nurses as the frontline hospitals and their business administration models were never prepared for such overwhelming influx of non-Vietnamese patients. English, despite its role as the means of communication, also becomes a barrier between anglophone patients and local hospitals in countries where English is not official language. Although machine translation (MT) was also used, this is limited in simple scenarios where things are easily translated, and patients are still conscious enough to use such technology.

While the disadvantages of English have been increasingly examined in the business administration domain, that of MT have not been intensively defined. While Covid-19 might not necessarily be the direct cause of death, it does worsen underlying diseases. English and MT, metaphorically like patients, also have many underlying problems and this pandemic will likely worsen them. This paper will try to understand why human beings have paid more attention to linguistic issues recently as well as the future of English.

### 1. The emergence of research on language

Researchers from different fields started to focus on the role of languages since 1960s. Zhang and Grenier (2012) whose literature review covers the evolution of language in economic field state that the economics of language first appeared in 1965 in the work of Jacob Marschak published in Behavioral Science. The basic idea of Marschak' work is that there exists a close connection between "*the explorations of language optimization and economics*" and language has all economic characteristics and is "*indispensable tool in human economic activities*". Zhang and Grenier also point out two scenarios which gave rise to the research on language. Firstly, after the Second World War, some countries had to decide what national language(s) should be promoted after gaining independence from European colonialists. Secondly, the linguistic struggle between the English and French speaking parts in Canada also attracted attention from researchers.

Literature review on language in the field of business management has been well documented by Brannen et al (2014). Brannen et al (2014) identifies that "*the field of [International Business] (IB) has addressed the role of language(s) since 1970s*" while Sanden (2016) states that "*Over the last two decades, a growing number of scholars have taken an interest in language and language strategies in international business*".

Even though the timings appear to be slightly different between the two researches, both periods took place only after the end of World War Two, therefore, are still in line with other fields of linguistic researches. According to Brannen et al (2014), the early works regard language as an external factor. For example, language plays a crucial role when it comes to “*selecting foreign markets and selling to overseas customers*” in the field of international marketing and exporting or “*linguistically aligned services*” help increase market share in health services and tourism. However, as time goes by, issues of managing languages have been internalised into businesses’ day-to-day operations and management. As a result, the promotion of internal lingua franca, coupling with the dominance of English language give rise for the creations of new terms and concepts such as “*language standardization by headquarters*”, “*anglicization*”, “*Englishization*” or “*corporate Englishization*”.

Linguistic research also sets its foot on entrepreneurship but much later compared to other fields. One of the most notable works in this field is of Costa et al (2016) on linguistic entrepreneurship and language education. They acknowledge that “linguistic entrepreneur” is not a new term and has been explored as early as 1998. However, their work takes a different approach to this term which was traditionally related to “*brokers between linguistically and culturally distinct groups*”. Under neoliberal society, language learner acts as linguistic entrepreneur who exploits “*language-related resources*” for the sake of “*one’s worth in the world*”. And in this paper, another two definitions regarding linguistic entrepreneurship, to my best knowledge of existing researches have not been defined, will be added to broaden our understanding of this relatively new concept.

However, why language gained such incredible attention since 1960s remains relatively untouched.

## 2. “Nation” as a new invention

In the well-known book *Cultures and Organizations: Software for the Mind* (2010), Hofstede wrote:

*“The invention of nations, ... is a recent phenomenon in human history ... The nation system was introduced world-wide only in the mid-twentieth century. It followed the colonial system ...”* (pp. 20-21)

The United Nations (UN) defines “nation” on its website as <sup>(01)</sup>:

*“The nation as we think of it today is a product of the nineteenth century. ... After the First World War ... 'National' came to mean anything run or regulated by the state, ...”*

According to the two definitions, the term “nation” (or “national”) has been only coined between the nineteenth century and the mid-twentieth century, hence the terms “multinational”, “international” or “transnational” should emerge no earlier than 19<sup>th</sup> century. Having said that, we can understand that because of international / multinational businesses being relatively new concepts, research on languages in the field of IB / MNC also emerges as a relatively new phenomenon. Therefore, the fundamental reason for research on

language being relatively new might be because of the way we name things. As a result, we need not care about from where the responsibility of managing languages has been created or transferred.

### **3. The role of individuals**

Brannen et al (2014) points out that one of the recent developments of the language stream in International business is “*the shift from viewing language exclusively as a skill that resides in the individual to considering it as a constitutive, collective force contained in the MNC*”. As mentioned earlier, in the field of economics of language, Grin (1994) and Zhang and Grenier (2012) have admitted that the role of language or linguistic characteristics were largely ignored in understanding the economic interactions between two economic agents. However, language has now been regarded as “an indispensable tool in human economic activities. Human capital theory and economics of education further emphasize the impact of language acquisition or investment in language on individuals.

As we can see from the above discussions, while the field of economic of language focuses on language skills of individuals, international business field has moved the focus of the strategic role of language away from individuals to (international) businesses. Therefore, what Brannen et al (2014) claims that there exists a shift from individual to businesses simply reflects the shift towards the research interest of IB researchers, given that their work was published in “Journal of International Business Studies”, and not necessary explains the main causes in the shift of language management responsibility.

### **4. The role of governments**

This part will try to discover the role of governments in managing languages in the nineteenth century onward when the notion of “nation” was first coined (using the UN’s definition).

#### **a. France**

Moore (2015) makes an interesting comparisons between language strategies between the French “revolutionary monolingualism” and the current EU “reactionary multilingualism”. The 1794 Decree “*calls for the universal adoption of French by all citizens, and the annihilation and extirpation from French soil of all the forms of speech (‘dialects’, patois, etc.) that diverge from the national standard*”.

Gadet and Ludwig (2014) re-confirm the systematic suppression or, in other words, the standardisation of the French language. According to Moore (2015) and Gadet & Ludwig (2014), Abbé Henri Grégoire’s report “*On the necessity and means to annihilate the patois and to universalize the use of the French language*” in 1794 is the clear effort of the French Republic to regulate the use of French language not just for the benefit of the survival of the Republic itself but also for the benefit of the internal trade. The French revolution then led to the Napoleonic War which ends in 1815, at which the French Republic returned to monarchical system.

#### **b. The Netherlands**

After the end of the Napoleonic War, the United Kingdom of the Netherlands was established as a result of the Congress of Vienna 1814-15. The newly created kingdom covers mostly now the Netherlands (the northern part), Belgium (the southern part) and Luxembourg. To unite the newly created kingdom, William I of the House of Orange – King of the Netherlands set out his decrees (de Taalbesluiten) to promote the use of Dutch (Donaldson, 1983). One of the main reasons is because the southern elites (now Belgium) were in favour of French even though the majority of the southern population spoke Flemish/Dutch. And while the southern population (Belgium) followed Roman Catholics, Protestant dominated the northern part (the Netherlands). Not surprisingly, William I's ambition did not last long as his decrees faced strong resistance from the French-speaking southern elites. Seven years later, the Belgian revolution broke out that laid the foundation for the creation of the kingdom of Belgium in 1830.

### **c. Belgium**

At the very first days of the creation of Belgium in 1830, Flemish/Dutch was marginalised while French was recognised as a sole national language given that it was spoken by the minority of the Belgian population. The imposition of French at all governmental levels created resentment among Flemish population. It is not until 1873 when Dutch was used in criminal trials, and it took another 5 more years for Dutch to be used in administrative matter and in education in 1883. The 1898 Law of Equality validates both Dutch and French in official documents. The linguistic legislation passed between 1932 and 1935 gave way for the emergence of the two monolingual regions. At the moment, Belgian federal government is no longer responsible for language management, the regional governments are now in charge of their own linguistic policies. (Hambye, 2009, Mnoonkin and Verbeke, 2009, Poelmans, 2012)

### **d. European Union (EU)**

At the supranational level, the EU does not try to promote any single language as official like in the case of France, the Netherlands or Belgium in the past. Instead, the EU recognises 24 official languages <sup>(02)</sup> and also promotes “mother-tongue-plus-two” repertoire which means *“Europeans should speak their mother tongue plus two other languages, one for business and one for pleasure”* (EurActiv 25 March 2009), quoted in Moore (2015).

### **e. The United Kingdom (UK)**

In contrast to the current EU's approaches to languages, in 2016, the demand to end the Welsh language ban (the ban of the use of Welsh in the UK parliament) was rejected by British ministers, given that Wales has been recognised as a nation within the UK. Some members of parliament argued that doing so would cost taxpayers money on translation facilities which is obviously not an excuse made by the EU <sup>(03)</sup>.

### **f. The United States of America (USA)**

On the other side of the Atlantic Ocean, the USA have been unable to recognise any official language at federal level since its independence in 1776 from the UK. One of the latest attempts to propose for such an official language to be adopted at federal level dates back in 1995. Congressman Bill Emerson introduced the “Emerson English Empowerment Act as part of The Language of Government Act 1995”. In 1996, the Committee on Economic and Educational Opportunities approved the bill. A month after, the bill was passed by the House but was not discussed in the Senate in the 104<sup>th</sup> Congressional session. A year after in January 1997, the bill was introduced again to the House but has since been awaiting “Senate approval and presidential signature” before coming into effect (Chiu, 2015).

#### **g. China**

Despite being a multi-lingual and multi-ethnic country like the USA, China managed to pass the law on *the Standard Spoken and Written Chinese Language* in October 2000 <sup>(04)</sup> to recognise Putonghua (Mandarin) as official language.

*Article 1. This Law is ... for the purpose of promoting the normalization and standardization of the standard spoken and written Chinese language and its sound development, ...*

*Article 2. ... the standard spoken and written Chinese language means Putonghua (a common speech with pronunciation based on the Beijing dialect) and the standardized Chinese characters.*

*Article 3. The State popularizes Putonghua and the standardized Chinese characters.*

*...*

*Article 9. Putonghua and the standardized Chinese characters shall be used by State organs as the official language, except where otherwise provided for in laws.*

*...*

#### **h. India**

Although India gained independence from the UK much later the USA did, India had already passed the Official Language Act in 1963 in which not just the most widely-spoken language - Hindi but also the language inherited from the colonial era - English as official languages of the Union <sup>(05)</sup>:

#### **3. Continuation of English Language for official purposes of the Union and for use in Parliament-**

*1. Notwithstanding the expiration of the period of fifteen years from the commencement of the Constitution, the English language may, as from the appointed day, continue to be used in addition to Hindi,*

*a. for all the official purposes of the Union for which it was being used immediately before that day; and*

*b. for the transaction of business in Parliament: Provided that the English language shall be used for purposes of communication between the Union and a State which has not adopted Hindi as its Official Language:*

*...*

## **i. South Africa**

Unlike the USA in 1996, South Africa did pass such a law. And, unlike China, South Africa officialised eleven languages <sup>(06)</sup>:

### *6. Languages*

*1. The official languages of the Republic are Sepedi, Sesotho, Setswana, siSwati, Tshivenda, Xitsonga, Afrikaans, English, isiNdebele, isiXhosa and isiZulu.*

...

## **j. New Zealand**

Although anglophone Europeans account for the majority of population, similar to the USA, New Zealand did pass the Language Act in 1987 in which only Māori has been recognised as an official language <sup>(07)</sup>:

### *3. Māori language to be an official language of New Zealand*

*The Māori language is hereby declared to be an official language of New Zealand.*

...

Having contemplated what nations and unions have done with language policies regarding official languages in five continents spreading over 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup> and 21<sup>st</sup> centuries, we can take away following lessons:

Firstly, different nations have different approaches to language policies regarding the recognition of official languages, depending on their unique historical events and social and conditions. Some countries adopt no official languages, some adopt one and others opt for several official languages.

Secondly, prior to the end of the War World Two, states and governments were much more willing to achieve their linguistic goals through violent means and suppression while periods after 1945 experience a much more peaceful manner. However, it does not mean violence and suppression have completely disappeared.

Thirdly, while the tendency of promoting one official language, spoken by the majority or the privilege few, dominates the period prior 1945, the following periods witness the promotion of linguistic diversity. However, attempts to promote a single official language and linguistic assimilation still happen.

Fourthly, nations and unions which recognise several official languages tend to face higher translation cost compared to those with one official language.

Fifthly, even though MT technologies have become increasingly advanced, available and less expensive, some governments and nations still argue not to use such technologies, deprive the linguistic rights of minorities and follow (unstated) linguistic assimilation policies.

But why have all these changes taken place?

## **5. “Human rights” and Machine translation as new inventions**

On 12<sup>th</sup> October 1948, the UN proclaimed the Universal Declaration of Human Rights which includes 30 points and two of which might have completely changed the way governments handling language policies from 20<sup>th</sup> century onwards <sup>(08)</sup>:

**Article 2**

*Everyone is entitled to all the rights and freedoms ... such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.*

...

**Article 19**

*Everyone has the right to freedom of opinion and expression; ...*

...

As of 1948, the UN had 58 members, but that number more than triples to 193 as of May 2020. With no exception, all members have to adopt such universal declaration.

The human rights declaration, clearly, puts some limits on what governments and nations could do with language policies. And unlike the period when states could much easily go to wars and multinational megacorporation could have their own “*private armies [which] were larger than those of almost all nation-state [at that time]*” like East Indian Company <sup>(09)</sup>, nations and international companies today that want to beautify their images on the global stage need to find much more peaceful means.

If the UK, France, Germany, China want to promote their languages overseas, they will expect strong resistance from other countries if such a language promotion is accompanied with an armed force. What those countries are doing now is to promote their languages through educational and cultural organisations such as the British Council (English), Institut francais (French), Goethe-Institut (German) and Confucius Institute (Chinese). And companies which operate internationally may find it much easier to do business if they assimilate themselves to local culture including languages. Aetna - a multinational health insurance company established in 1853 in the US is now providing services in nearly 70 different languages “at no cost” to clients <sup>(7)</sup>. High-tech companies like Facebook has now developed its own translation tool using a novel convolutional neural network (CNN). Facebook’s mission has been stated clearly on its post published in May 2017 <sup>(10)</sup>:

*“Language translation is important to Facebook’s mission of making the world more open and connected, enabling everyone to consume posts or videos in their preferred language — all at the highest possible accuracy and speed.”*

Apart from traditional text translation, multinational companies have also invested heavily for speech recognition and translation such as Google Translate, Microsoft Translator Bing, Apple’s Siri, Amazon’s Alexa and Microsoft’s Cortana.

According to William John Hutchins <sup>(11)</sup>, a leading English linguist and information scientist, the earliest versions of MT date back in 1930s. Georges Artsrouni and Petr Trojanskij pioneered in the field of MT with

two patents issued in France and USSR (Russia) respectively in 1933. However, in early 1990s, the focus of MT had moved “*from ‘pure’ research to practical applications, to the development of translator workstations for professional translators, to work on controlled language and domain-restricted systems, and to the application of translation components in multilingual information systems*”. These trends have continued in late 1990s and early 2000s. the “*use of MT and translation aids (translator workstations)*” by large multinational companies further has consolidated these trends. Sales of MT software accelerated while online translation networked services have become increasingly available.

## 6. Why do we continue to invest on MT development?

To foster communication, in the absence of technology, between two people A and B who speak completely different languages, there are a few possible (peaceful) solutions to overcome linguistic barriers. Firstly, either person A or person B is bilingual, Secondly, both A and B become bilingual. Thirdly, A and B adopt another language called C. Fourthly, A and B can hire a human translator who must be bilingual in both languages of A and B. Fifthly, A and B can (mutually) create another language called AB. And the above scenarios should not be assumed as exhaustive. However, as the number of languages grow arithmetically, the possible solutions proposed as above expand exponentially and it will increasingly become impossible for one person to learn all languages in order to conduct conversations with the rest of the population.

Esperanto is another example of the effort to bridge the gap in communication in the context of multilingualism. Esperanto was created by Ludwik Lejzer Zamenhof and first launched in 1887, however, it is not the only recently planned language to date (Fiedler, 2018). Thanks to its regularity and logic of its word creation, Esperanto can also be used to improve the quality of MT. Gobbo (2015) concludes that MT and Esperanto “*are two different ways to deal with the same problem: the problem of communication across language barriers*”.

With the advancement of technology, creating a new language seems to be much easier and quicker than any time in the past. Fiedler (2018) states that planned languages “*has probably reached almost 1000 already*”. In an article published on the Economist, S.C.S <sup>(12)</sup> goes further saying that “*constructed languages, in various stages of completion, now outnumber the world’s natural tongues*”. Even though technology is credited for its helpfulness in “*generating words or applying sound changes to age the language artificially*”, the author recognises the role of human in the creation process. One interesting thing to note in the article is that much of those newly created languages were invented by individuals and not by (multinational) firms.

If language can be “easily” created thanks to new technology, why do not many (multinational) companies become “linguistic entrepreneur” – creator of new languages? Even if companies adopted the most widely spoken Esperanto, which has around two million speakers worldwide, there is no way to guarantee that customers will adopt a new language. Economic factors clearly play an important role in the spread of any language, but throughout history, military force strengthens the adoption of foreign languages both

domestically and abroad, be it the case of Greek, Latin, French, English, Portuguese, Spanish, Russian, Chinese or Arabic. As a linguist Nicholas Ostler points out in his book “The last lingua franca”:

*“On the assumption that successful imperialism is no longer possible, it is difficult to see even globally dominant new economic powers spreading their languages as Britain and the USA were able to do over the past three centuries...”*

In short, MT exists partly because of the gradual disappearance of “absolute power” as well as of human failure to adopt a common language. And if “absolute power” is not exercised, what companies are doing to overcome multilingual problems?

## **7. English**

In the 2013 report “English effect report” <sup>(13)</sup> published by the British Council, English is spoken approximately by a quarter of the world population. In 2020, the council estimates around two billion people to be learning or using the language. Ostler (2013) lists around 30 countries and territories use English in the form of native language, nearly 50 countries and territories spreading in five continents recognise English as official language. English is also an official, co-official, working language, co-working language of many large organisations such as the UN, EU, NATO and ASEAN. And (un)surprisingly, around 80 percent of all peer-reviewed research papers were published in English <sup>(14)</sup>.

With all these factors that English language has been enjoying to date, it is hard to think of any gloomy scenario English might experience in, at least near, future. However, when compared to one of the most prestige lingua-franca in Europe – Latin which was once thought unchallengeable only managed to survive for two millennia before being replaced by French and now English in Europe or Arabic in Near East and North Africa.

*“... English, the world’s current lingua franca, corresponds to Latin ... which seemed to have everything going for it in the 16th century, ... But in the seventeenth century, Latin’s position fell away.” (Ostler, 2013, p.265)*

There are many different things that can cause the decay of a lingua franca and not all lingua-frances were affected in the same way by the same factors. In this section, two factors will be examined namely mother tongue – nationalism and MT technology.

### **a. Mother tongue and nationalism**

English undoubtedly has achieved its current position as mother tongue in many countries across the world through imperialism. And many more countries which were not part of the British Empire now embrace English as second or foreign language. However, some countries have also been trying to disassociate themselves from English.

Malaysia, a former British colony, had switched from English to Malay in 1967 for parliament proceedings and the role of Malay was further cemented with the National Language Act 1967 <sup>(15)</sup>. Pakistan, even though already had a plan to phase out English as official language in 1973 within fifteen years, has finally done so in 2015 <sup>(16)</sup> <sup>(17)</sup>:

*National language*

*Article 251.*

*(1) The National language of Pakistan is Urdu, and arrangements shall be made for its being used for official and other purposes within fifteen years from the commencing day.*

*(2) Subject to clause (1), the English language may be used for official purposes until arrangements are made for its replacement by Urdu.*

...

Unlike Malay, Urdu is not spoken by the majority of the population but has played a role of national lingua franca. However, as the world has become increasingly globalised and English more popular, nations whose main languages are not English also look inwards to create some senses of nationalism among their citizens, even though, their decisions might be regarded as bad for doing businesses internationally. It is still clear that regardless how neutral English will become, the image of English in relation with British imperialism and U.S. hegemony has yet faded away completely.

Ostler (2013), after having contemplated pretty much all known lingua-francas, also argues that in the long run, the most important factor that guarantee the survival of any lingua franca does not depend on the number of people using it as a foreign or official language but as mother tongue. And as discussed earlier, without promoting imperialism, it is unlikely that English can be spread further as a mother tongue quickly given that the natural population growth is low in many countries where English remains as mother tongue such as England while immigration into such countries has been gradually changing the balance of power between English and non-native speakers such as in the USA (notably Spanish community).

## **b. Machine translation**

For many people, English is a language of science and of technology. The role of English in MT is not an exception. Google Translate has successfully remained as the most used translation tool for years and English has been used as a benchmark - acting as a pivot for all non-English translations without many users realising it. However, in 2016, the embedded dominance of English language in MT was challenged when Google introduced Neural MT which does not require English as a pivot language. The results generated from new model were assessed as favorable in comparison to the old method since the whole sentence can be translated as a whole instead of having to break down the sentences into pieces. (Ramati & Pinchevsi, 2018 & Turovsky, 2016)

And with the advancement of technology and increasingly improved result of MT, many researchers and linguists think that MT can remove the need for a lingua franca (due to MT's neutrality) and also injustice caused by nativespeakerism when native speakers of a particular lingua franca benefit more advantages than non-native speakers. One of many injustices is that native English speakers can allow themselves not to learn foreign languages in the expense of other non-natives having to learn it. According from the statistics released by the European Union, in 2016 (when the UK was still an EU member) the average for population aged 25-64 declaring that they knew one or more foreign languages is around 65%. The figure for the UK bottoms the list, standing at nearly 35% while Sweden tops the list at nearly 97% <sup>(18)</sup>.

However, it is also crucial to point out that those companies who process those extremely expensive MT tools will further cement their dominances in the market and the long-term impacts of such dominances are unclear for societies and users.

## **Conclusion**

This paper has tried to explain why research on languages has become increasingly important, especially in the field of business administration. After having analysed what nations and governments in five continents have done from 17<sup>th</sup> to 21<sup>th</sup> century, it can be seen that the responsibility of managing languages has been transferred from government to businesses and the creation of Human Rights Declaration plays an important role in this process.

With the new responsibility, what businesses, especially international ones which have to deal with multilingual environments, do is to increasingly rely on translation tools, notably MT.

The need for quick, automatic and large-scale translation services also gave rise for a new kind of entrepreneur (linguistic entrepreneur) which specialises in translation technology development. While English has played an important role as pivot language for all non-English translations in old method, new models have phrased out English without deteriorating the quality of translation results. However, new technology also consolidates new power in the hand of a few companies which provide online translation services.

MT gives many people the hope that the need to learn a lingua franca gradually becomes unnecessary, hence injustices caused by nativespeakerism will be removed. New technology will challenge the current position of English, therefore, the long-term survival of English as an international lingua franca is put in doubt.

Given that new technology allows new languages to be created by everyone including international businesses which have to manage multilingual workforces, the creation of new languages or the adaptation of MT for internal communication for each company might not sound too strange in the future. Given the Human rights declaration, employees might have the power to express themselves in any languages they like, other than English, when communicating internally.

However, as seen in Belgium, promoting linguistic diversity does not make multilingual society more harmonised, but more divided. If the end results of deploying MT replicate domestic Belgium, it seems the future of the world will become more divided (linguistically).

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## Notes:

- (01): <https://wayback.archive-it.org/10611/20171126022449/http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/nation-state/>, accessed on 01-Apr-20
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Other materials have been re-used for this assignment from my previous assignments submitted at UWTSD for:

- LCDB7000 - Term 02 - Approaches to Research & Academic Communication
- LCDB7001 - Term 03 - Entrepreneurial Perspectives
- LCDB7002 - Term 01 - Managing in Complex Environment
- LCDB7003 - Term 03 - Qualitative Research Methods
- LCDB7004 - Term 01 - Quantitative Research Methods
- LCDB7006 - Term 02 - Visions for the Future