

Florian Coulmas

Economic theory and the diffusion of languages¹

Abstract

Since Adam Smith, economists have taken an interest in various aspects of language. Reviewing some of the resulting models, this paper addresses the question as to whether economic theories can explain the diffusion of languages. To this end, it looks at various areas where, in the course of the past half century or so, language has become an object of economic interest, including, in particular, political economy, decolonisation and migration, development, globalisation and trade, commodification, human capital, and languages as means of exchange. In connection with the last point it discusses whether economic concepts such as ‘value’, ‘network effects’ and ‘externality’ can have more than a metaphorical meaning when applied to language.

1. Introduction

When, in the 1960s, Jacob Marschak published a paper on an optimal communication system entitled *The economics of language*, Adam Smith’s 1759 *Considerations concerning the first formation of languages* of two centuries earlier had been largely forgotten and Marschak felt obliged to apologise to his fellow economists who might be opposed to the “identification of economics with the search of optimality in fields extending beyond [...] the production and distribution of marketable goods” (Marschak 1965, 136). Clearly, languages were not then considered marketable goods, and applying the instruments of economics to language was worth an apology.

When I published my book *Language and economy* almost 30 years later, which was largely ignored by economists, I forgot to apologise. That was a mistake, especially vis-à-vis linguists, many of whom felt that I owed them an apology for reducing something as lofty as language to calculations of cost and benefit. Many linguists criticised the utilitarian view of language that they attributed to me, although studies on the economic utility of languages had already started a turnaround, most notably in Canada (Renouvin 1989). Slowly the idea that language utility hinges upon optimisation mechanisms that make languages work as they do gained acceptance among economists (e.g. Rubinstein 2000).

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When Michele Gazzola, François Grin and Bengt-Arne Wickström published their *Bibliography of language economics* in 2015, it comprised some 46 pages with several hundred titles. The 2017 bibliography by Renata Coray and Alexandre Duchêne lists more than 600 titles on language and work alone. Obviously, something had changed. Language had become a legitimate object of economic research and linguists – hardly all of them, but some – had become aware that such research does not equate to a profanation of language. On the contrary, economic studies began to be undertaken with the express purpose of demonstrating the advantages of multilingualism, developing models of sustaining minority languages and examining possibilities of language commodification. The 2016 publication of Victor Ginsburgh and Shlomo Weber's *Handbook of economics and language* was another milestone. "Handbook" is rather a high-sounding title for this collection of articles, which is full of interesting contributions but cannot claim systematic coverage. However, the fact that a reputable publishing house has lent its name to such an endeavour is indicative of the fact that language and economy is no longer just a curious conjunction but a proper field of inquiry that can contribute to our understanding of the world.

The question I want to address in this paper is which, if any, economic model or theories can help to explain the distribution of languages in the world. In order to approach this question, in the remainder of this paper I will briefly review the principal areas in which economists have taken an interest in language, namely political economy, decolonisation and migration, development, globalisation and trade, commodification, human capital, public goods and means of exchange.

2 Political economy

In the 1960s, when Canada was threatened with being broken apart by the deepening rift between the Anglophone majority and the Francophone minority, serious study began of the economic aspects of this division. The wage gap between Anglophones and Francophones was examined (Christofides/Swidinsky 1998; Albouy 2008) and attempts began to be made to weigh the monetary cost of official bilingualism against the benefits of national unity (Pepin 1970; Desgagné/Vaillancourt 2016). One of the reasons why Canada played a pioneering role in paving the way for further studies on the economics of language was that in this country two highly developed and prestigious European languages were in competition. Indigenous languages in the colonies were not usually – from a European point of view – regarded as threats to the dominant status of the official colonial language. The inequality of languages was taken for granted. In Canada, however, the emerging imbalance between two European languages of seemingly equal rank was unexpected, prompting research into economic correlates of linguistic inequities.

3. Decolonisation

A related source of interest in language for economists was decolonisation. The languages of former colonial governments proved to be a lasting legacy, which gave rise to examining the advantages and disadvantages (benefits and costs) of employing various languages for various purposes. An indigenous language acquiring official status in a newly independent country was exceptional and even where it happened, as with Swahili in Tanzania and Kenya and Malay/Indonesian in Malaysia and Indonesia, the former colonial languages continued to play an important role. From a linguistic point of view, all languages are traditionally considered equally valuable realisations of the human capacity for language; however, from a sociological point of view, this tenet cannot be upheld. Rather, the evident disparities in the social valuation of languages is the very point of departure for the sociology of languages. One of its principal topics is language-based discrimination, which often correlates with economic inequality.

To date, the predominance of former colonial languages continues. Outside Europe, there are 64 countries where English enjoys official status, 35 where French is an, or the, official language, 22 Spanish-speaking countries and 9 Portuguese-speaking ones (Table 1).

Language	Number of countries where it has official status	Number of speakers (L1 + L2)
English	64	1.39 billion
French	35	229 million
Arabic	26	422 million
Spanish	22	661 million
Portuguese	9	229 million
German	6	129 million
Italian	4	87 million
Malay (incl. Indonesian)	4	281 million
Russian	4	267 million
Swahili	4	107 million
Chinese	3	1.15 billion
Hindi/Urdu	3	544 million

Table 1: The predominance of former colonial languages. Word Tips (<https://word.tips/100-most-spoken-languages/>), Nations Online (www.nationsonline.org/oneworld/most_spoken_%20languages.htm), various sources

While the worldwide preponderance of European languages is a direct consequence of European expansion, decolonisation also brought in its train increased demographic movements from South to North and with it the linguistic diversification of Western countries. This happened at a time when, as a consequence of the national revolutions that had changed the politics and society of nineteenth-century Europe, both economic activity and language had become firmly associated with the nation state. Since nationalism made itself felt in economics and in linguistics alike, it is not surprising that, a century later, when the prevalent economic order came under pressure from globalisation, the linguistic world order predicated on the privileged status of national languages also came under pressure, and the economics of multilingualism became topical (Grin 1997). The proponents of European colonialism and imperialism never anticipated the multilingualisation of the mother countries (metropolises) brought about by the flow back of migrants from the colonies to Europe.

4. Development

In conjunction with decolonisation, promoting capitalist economic organisation in what was termed the developing world became a major concern of Western governments, stimulating much research into how to achieve this, the political purpose being to prevent newly independent countries from drifting into the orbit of the communist bloc. Although it has been argued that “language is one of the most neglected areas in the development field” (Kaplan 2012), there are obvious and important connections between the linguistic and economic situations of developing countries. Education is one. By using a European language for education, law and government, they maintain connections with and facilitate access to more advanced countries, which is in some ways economically beneficial. At the same time, such a language policy helps entrench elites in power and raises the hurdle for the general population to acquire knowledge. Imparting general and higher education in multiple languages involves additional cost, is hard to implement and may work against fostering cohesion in a national population.

The tension that arises from these opposing positions poses a formidable problem for policy decision making, and the problem does not become easier as the repercussions of globalisation make themselves felt in the remotest places on earth. Can language choice be, and has it actually ever been, reduced to a public choice problem? Are there any examples where a public choice approach has been executed successfully?

The most convincing case I can think of is Singapore. Founding prime minister of Singapore, Lee Kuan Yew, who had been involved in education policy prior to independence, was keenly aware of the divisive potential of language. He once stated that “language has nothing to do with race [‘race’ being the term for what nowadays is commonly called ‘ethnicity’, FC]. You are not born with a language.

you learn it” (Lee 2009). Lee Kuan Yew encouraged the people of Singapore to embrace such a sober, decidedly non-nationalistic attitude to language, which, however, is an exception rather than the rule.

5. Globalisation and trade

The “unprecedented globality” (Beck 1997) that characterises our age has many faces, not all of which are relevant to the topic at hand. One that is relevant is that markets are increasingly less controlled nationally. Karl Polanyi proposed and developed the idea that economic activities are “embedded” in other social institutions. Since the 19th century, the principal structure into which markets are embedded has been the nation state. The forces that we now summarily refer to as globalisation have undermined this framework. As states become more reliant on international financial markets for raising capital, the embeddedness of markets in nation states is being turned on its head: states are gradually being embedded in global markets.

These developments are redefining the relationship between economy and politics. Global, regional and transnational structures and institutions are gaining importance at the expense of the nation state. Since the “national language”, however ill-defined, was a loadbearing pillar of the linguistic world order throughout the 19th and 20th centuries, these transformations could not but have consequences for language, too.

English as a second language, the principal language of the principal world power driving globalisation forward since the end of the Second World War, has shed off the garb of a national language in favour of that of a truly global language not restricted to diplomacy and scholarship. Many Brits still call English “our national language”, which is not surprising, but it has become more than that. It is both a result and an instrument of globalisation which, for the time being, has no competitor in this function. English also exemplifies two other tendencies concomitant to globalisation: destandardisation and “winner takes all”.

English is no longer the language of the English or of the Americans or of the Australians, etc. Many Englishes coexist, perhaps in a prestige hierarchy, but in such a way that whatever institutions Anglophone countries would employ to regulate its evolution have lost control to multinational companies, such as Google and Microsoft.

As an electoral system, the winner-takes-all principle is the opposite of proportional representation and, in economics, it means that only one competitor survives, taking one hundred per cent of the profit a new industry or market offers. Similarly, various measures in support of other languages notwithstanding, as the international lingua franca English has outclassed all competitors. Regional and international organisations such as the UN, EU and AU, among others, have several official languages but at their informal and, increasingly also at their

formal, meetings people end up speaking English – as do the participants of EFNIL Conferences.

Attentive researchers, such as Jacques Maurais and Michael A. Morris, saw it coming early. Most of the chapters of their 2001 book, *Géostratégies des langues* – English translation: “Languages in a Globalising World” – take issue with English because it is involved in most of the rearrangements taking place in the communication patterns of individuals, groups, nations and international institutions. In the same year, de Swaan (2001, 17) posited English as to be the sole “hypercentral language that holds the entire world language system together”. Others followed suit, for example, Blommaert (2010) and Smakman and Heinrich (2015), helping to establish the sociolinguistics of globalisation as a new research domain.

Among the various developments summarily referred to as globalisation, trade occupies a central position. The exchange of goods and services involves transaction costs comprised, among others, of transportation charges, legal fees, information costs (e.g. market research) and communication costs. Language barriers obviously contribute to the latter and have, therefore, been the subject of a number of studies, for example about the benefits of adopting a common corporate language (Marschan-Piekkari/Welch/Welch 1999; Piekkari 2006) and, conversely, about the economic advantages of bilingualism (Canadian Heritage 2016) and the value of language skills for business (Hogan-Brun 2017). Considering the market potential of multilingualism once again leads to the problem of the inequality of languages that has been framed variously as balancing the opposing requirements of efficiency and fairness (Berthoud/Grin/Lüdi 2013) or of national cohesiveness and the disenfranchisement of minor speech communities (Ginsburgh/Weber 2011).

One meta-study of language effects on trade based on an analysis of 81 academic articles on the subject concluded that, on average, a common (official or spoken) language increases trade flows by as much as 44% (Egger/Lassmann 2011). This is a figure well worth considering when choosing trading partners and when analysing trade flows.

Conflicts between efficiency and fairness are universal, although their relative prominence as a policy issue varies considerably across countries.

6. Commodification

Foreign language teaching and learning, once the prerogative of a small elite of intellectuals and, it should be added, merchants, has become a sizeable industry. In 1989, Bertrand Renouvin, though a staunch royalist well aware of what counts in the age of consumer capitalism, introduced a new topic in the debate about language celebrating the “utilité économique et commerciale de la langue française”. It was an attempt to present a ship previously known for its elegance

and glittering lights as a powerful tug boat. However, the newly styled vessel could not compete with the juggernaut which ploughed the seas reaching new destinations on all five continents. “English: A world commodity” announced the Economist Intelligence Unit (McCallen 1989) with rather more credibility than Renouvin’s report of the same year.

These two statements made it clear for everyone to see that in the age of neo-liberalism, languages have been added to the long list of commodities for which there is a market that offers commercial opportunities to various suppliers. Since the late 1980s, many studies have been undertaken about the supply and demand of goods and services sold in the language market; about the size of the market in terms of revenues, number of language workers employed and clients (Statista 2018); and marketing languages (ICEF 2015). Network effects (Coulmas 1991; De Swaan 2001) were recognised as determining the competitiveness of individual languages, the crucial variable being not L1 but L2 speakers.

A market for systematic foreign language teaching exists for a few select languages only. Even languages with tens or hundreds of millions of L1 speakers have no more than a negligible presence in the foreign language market as long as the size of that community’s economy – measured by GDP or GDP per capita – remains below a certain level. The questions as to what that level is and how it interacts with the size of the L1 speaker community remain unanswered to date. Foreign language education was, for a long time, and still is, in many parts of the world, limited to a handful of European languages.

McCallen (1989, 117) concludes the Economist Intelligence Unit report on English stating that

[t]he reality of the situation appears to be that English has become a commodity and one which has developed into a very large and frequently lucrative international market. The competition for the market is hotting up.

By that he meant that providers outside English L1 countries were pushing onto the market, importing as well as exporting English. He saw this as a threat to the UK and feared that “the removal of trade barriers within the EC in 1992 will [...] hasten this possibility” (McCallen 1989, 117).

Nowadays, no one doubts that in a utility ranking of the languages of the world, English comes out on top. However, the foreign language market has diversified and the commodification of language is no longer confined to a few European languages. What is true of markets in general also holds for the language market. Markets are dynamic structures whereby parties engage in exchange. As suppliers exit and enter the market with new products and services, it changes. The language market is no exception.

With due apologies for citing my own work, which I only do because I know of no other that makes the same point, let me refer to the linguistic situation of East Asia in the 1980s. A paper about “The Surge of Japanese” concludes that

[d]uring the past two decades the study of Japanese has been transformed from a somewhat exotic scholarly pursuit into the acquisition of a practical skill with economic utility. The importance of the study of the language as a means of practical rather than literary communication has become increasingly evident as Japan has emerged as an economic superpower. (Coulmas 1989, 129)

Ever since, the number of people outside Japan studying Japanese has continued to rise, especially in Asia. Research indicates that from 2009 to 2012, the number of Chinese students of Japanese alone rose by 26.5 percent, to a record 1.04 million (Japan Times 2013).

Compare this with a recent report about Chinese as a foreign language:

The study of Chinese as a foreign language has become one of the world's largest language learning markets in just 10 years of exponential growth. Kick-started in 2004 by the launch of the Confucius Institute programme, which aims to promote understanding of Chinese language and culture around the globe, the sector has seen rapid expansion both at home and abroad. (Heron 2016)

Comparing these two cases of Japanese and Chinese is doubly interesting. First, while the authors of the studies cited refrain from making claims about causality, the co-occurrence of Japan's economic rise first and then, a generation later, China's with the growing appreciation of Japanese and Chinese is hard to overlook. Economic power *is* a factor in promoting the use of a language, although other factors, such as, and specifically, cultural importance are often foregrounded by the "owners" of the language in question. However, it would be hard to argue that the historical importance of Japanese and Chinese culture has increased significantly in the course of the past three or four decades. Rather, the presence of both countries in global markets has brought the study of their languages out of the corner of arcane scholarship. Secondly, for a long time, the Chinese and Japanese writing systems were regarded as a serious impediment to modernisation and economic success, and as the principal reason why these languages had no place in the foreign language market.

For a market of goods and services to exist, there must be a demand for these goods and services, or so the naïve novice would think. Marketing, after all, is the art of creating a demand for your product. And rather than protesting against the neoliberal socioeconomic system that turns everything into a commodity, it is to marketing that language activists have turned as a strategy to sustain declining languages. For instance, promoting "the valorization of 'authentic' local francophone dialects" (Heller et al. 2016, 183) is part of a strategy for building a cultural economy in Acadia, Canada once again setting the pace.

Whether marketing minority languages/varieties/dialects as a tourist attraction will have the desired effect of sustaining them or will reinforce their image of backwardness and thus help to accelerate their demise remains to be seen (Moring

2014; Muth/Del Percio 2018). Such efforts will, if only marginally, raise awareness for the plight of minority languages but will not turn them into significant components of human capital.

7. Human capital

For certain occupations, language skills are required and in the labour market, language competence can be an asset that finds expression in wage differentials between language groups. These and other observations prompted conceptualising language skills as human capital (cf. Schroedler 2018 for an overview). Language has economic value but not all languages are equally valuable economically. Research has shown that it is beneficial for speakers of minority languages to learn and use the dominant language. For them, this has positive effects on their earnings and the “economic well-being is enhanced when members of a group communicate in the same language” (Grenier 2015).

In recognition of this fact, target countries of mass immigration tend to adopt policies that offer, reward or insist on the acquisition of the dominant language. Research findings to the effect that linguistic distance between immigrants’ languages and the target country’s dominant language has a negative effect on immigrants’ earnings lend further support to the implementation of such policies (Ispohrding/Otten 2011).

In the age of neoliberal consumer capitalism, the utility of languages finds expression in the market value of language skills. One way of measuring the value differences between languages is by looking at language competition in a market examining which language(s) people spend time and money acquiring (Wiese 2015). This may be the world market, where no investment offers a greater return than studying English as a foreign or second language, or it may be national or regional markets, where national, local, indigenous and migrant minority languages may form valuable components of human capital that have a positive effect on employment opportunities and earnings.

The economic value of languages differs greatly, which has to do with network effects, where a language is spoken and how wealthy and powerful its primary speech community is. As human capital, languages have value for the individual who has to make a living. What are the earning benefits associated with acquiring a second language? This is an empirical question to be investigated case by case.

At the same time, languages have non-pecuniary values associated with culture, tradition, ancestry and group membership, etc. This kind of symbolic value is hard to quantify but when it comes to decide on language policies, it has to be taken into account and weighed against the pecuniary market value of language skills.

8. Public good

One way of approaching the symbolic value of language is by conceptualising language as a public good, which nobody owns and which serves everyone in like manner. Language shares with other public goods, such as clean air and flood control systems, the elements of non-excludability and non-rivalry. Everyone can join and consumption – i.e. using it – does not diminish supply.

Because a common language is regarded as a public good, governments claim a mandate to provide public services in and for the dominant language, as in schools, educational publishing, language academies, etc. The cost incurred for these services is typically justified as benefitting the welfare of the nation. Providing services in other languages in addition to the national language increases fiscal costs. Whether government expenditures should be increased by providing services in minority languages is a question that must be answered on a case-by-case basis taking into account other policy goals, such as social harmony and overall satisfaction with life as well as externalities, such as civil unrest because of language discrimination that may threaten the national state.

A further complication comes into play when we open the horizon beyond the nation state. Globalisation has lent credence to the notion that there are public goods for all humanity, notably with regard to environmental issues and responsibility for the planet. Rightly or wrongly, linguistic diversity has been likened to biodiversity which, it is widely agreed, is worth protecting. On the basis of this analogy, linguistic diversity, too, is thought to have value and be worth protecting, although it has not been possible to assess this value in calculable terms.

On a global and on a national scale it is unrealistic to reduce the problem of sustaining languages as public goods to the calculation of financial costs and benefits. For languages are not only marketable commodities and elements of human capital, but many other things that make it difficult to look at them through the lens of marketisation only. In recent years, attempts have been made in other branches of economic theory to integrate immeasurable factors in model building.

In particular, “Identity Economics” as introduced by Akerlof and Kranton (2010) represents a step in this direction. Neoclassical economics assumes that rational actors are guided by the principle of efficiency understood as the optimal usage of the available resources in order to *maximise* individual utility. However, there is plenty of evidence that people often deviate in their behaviour from the path of efficiency optimisation as they follow traditional norms, act in accordance with what they consider proper, enact social roles and insist on other acquired preferences. Subsumed under the umbrella term ‘identity’ (Coulmas 2019), these tendencies interfere with efficiency and, hence, affect people’s economic lives.

If the imperative of efficiency were categorical we would all speak one language. Evidently this is not so, and identity economics goes some way to explaining why.

9. Means of exchange

I want to mention one more way of conceiving of language that could also be relevant to our understanding of the distribution of languages in the world: language as a means of exchange.

Under the auspices of Neoliberalism, everything that can be owned can be marketed. Even means of exchange, once thought only to facilitate exchange, have become commodities, money and, of late, crypto currencies. So why not the most fundamental means of exchange of all, language?! As we have seen above, languages have been commodified and their market value very much depends on their utility as a means of exchange.

English has often been compared to the US dollar, and for good reason. Our age is marked by the world language English as much as by the world currency USD. This is not a very original idea which I could lay claim to. In a 1967 article, economic historian Charles Kindleberger put it simply: “The dollar ‘talks,’ and English is the ‘coin’ of international communication” (Kindleberger 1967, 8).

The essay which I took this quote from is really about the author’s defence of the US dollar as an international currency, which met with considerable criticism as being nationalistic. Kindleberger rejected this censure, pointing out that “a common second language is efficient, rather than nationalist or imperialist” (ibid.). Pointing to the utility of the dollar, he argued, involved positive rather than normative economics. (For ‘positive’ read ‘positivistic’.)

This argument is reminiscent of the discussion about who benefits – and perhaps unfairly so – from English as the international language of science and business (e.g. Canagarajah 1999).

Clearly a believer in the free market, Kindleberger opined that the dominant position of the dollar at the centre of international monetary arrangements benefits all and, moreover, “is not the work of men but of circumstances” (ibid., 10). By analogy, and he makes the point explicitly, circumstances brought English to the top of the world language system, while all attempts at installing a deliberately created language in that position failed, Esperanto, for example.

But is this really so? Quasi-natural “circumstances”? This is much like Trickle Down Economics that says benefits for the wealthy (tax cuts) will trickle down to everyone else. If this is so at all, benefits for the wealthy have not reduced disparities between rich and poor. On the contrary, disparities between individuals, on the national level, and between advanced and developing countries, in the world system, have only increased (World Inequality Lab 2017).

Institutions such as the British Council and US Aid, not to mention the power to force English down dominated peoples’ throats in colonial times, played no role in the diffusion of this language? This would seem hard to defend. With Marx’s old adage we can say that “men *make their own history*, but they do not make it as they please”. Obviously, it wasn’t God Almighty or Nature that instated Eng-

lish in its present position at the apex of the international hierarchy of languages, and it may not remain there forever. Against the background of recent political developments – notably Brexit –the question has already been raised: “Have we reached peak English in the world?” (Ostler 2018).



Fig. 1: 新渡戸 稲造 Inazo Nitobe, 1862-1933, Undersecretary League of Nations 1920-1927 and leading Esperantist depicted on a Japanese 5000 Yen note

Kindleberger’s essay appeared during the final phase of the Bretton Woods fixed exchange rate system that culminated in the suspension of the convertibility of the dollar into gold. Yet, in the new floating system, the US dollar remained at the centre of the world currency system. He pointed out that rearrangements were necessary and that “it is important that rates of interest in the international capital market be determined internationally, on the basis of conditions in *Europe* and *Japan*, as well as in the *United States*” (Kindleberger 1967, 7, emphasis added). China wasn’t even mentioned in a footnote.

A mere half century later, in 2016, the Chinese Renminbi (yuan) became one of the world’s reserve currencies. The Special Drawing Rights (SDR) reserve basket of the International Monetary Fund is now composed of 41.73 percent for the U.S. dollar, 30.93 percent for the Euro, 10.92 percent for the Chinese yuan, 8.33 percent for the Japanese yen, and 8.09 percent for the Pound sterling, thus a bigger share for the Chinese currency than for Japanese yen and Pound sterling.

Marketwatch.com (18 Jan., 2018) of the Dow Jones Media Group asks: “Could China’s yuan replace the dollar as a reserve currency?” Just a decade ago, the very question would have made people laugh; nowadays the fact that it is being discussed in earnest is a cogent reminder of how transitory some of the things are that we take for granted.

“Could Chinese replace English as the language of international communication?” Many people will find this question equally laughable but is it beyond imagination? Supported by some economists, the man and woman in the (Western) street will justify their incredulity with efficiency arguments, pointing to the writing system: Chinese is so cumbersome. Nobody can learn it. Which, of course, is just

language ideology. In Japan, literacy rates have been on a par with Western countries for several generations and China has achieved comparable levels too. In connection with China's emergent superpower status, Lo Bianco (2007, 5) speaks of a "phenomenal expansion in the teaching and learning of Chinese".

In short, we are dealing with volatile systems. A half a century is not a long time but long enough to refrain from making predictions. What will be the Renminbi's role, what that of Chinese in 2070? We can contemplate these questions and try to develop models that include the relevant variables but no responsible scholar would make any predictions. There are just too many imponderables.

By way of concluding this section, let me draw your attention to one more factor that strikes me as particularly interesting, local means of exchange.

Language endangerment has been a topical subject of discussion and research for some time but national languages have, so far, not driven out local languages. Many minority languages, dialects and local varieties continue to be used on a local level. Likewise, national currencies have not, so far, driven out local currencies. Consider, just briefly, the numbers (Table 2). Like the languages of the world comprise more than the national languages officially recognised as such, the currencies of the world comprise more than those recognised as legal tender.

As is well-known, languages are difficult if not impossible to count. Counting currencies isn't much easier, although, partly at least, for different reasons.

Counting languages is an exercise in vagueness as they merge into each other and cannot be separated without a measure of arbitrariness. This is why nowadays linguists speak of "named languages". This doesn't solve the problem of counting, though, as the same idiom may be a language here and a dialect there, like Picard, which Belgium grants language status but France considers a dialect or patois.

The principal difficulty of counting local currencies is that there are many which nobody knows anything about. They are used locally only and, literally, nobody else's business. What is more, like shadow banks, they are unregulated financial intermediaries that facilitate the creation of credit and as such may straddle the boundary line between what is legal and what is illegal. An additional difficulty is that experts on the subject may not agree on their definitions of "local currency". Various terms are used, whereby it is not clear whether or not they are synonymous, such as, for instance, "off-the-book loan", "Bank Acceptance Note", "collective credit support", "scrip", "IOU (I owe you) note", among others.

Because of these and other imprecisions, we have to make do with estimates, both with regard to languages and currencies. It is incontrovertible that languages and currencies outnumber *officially recognised* languages and currencies by a large measure. How large? By a factor of 30, or so. Interestingly, and this is why it may be enlightening to investigate this parallel in greater depth, this is roughly the same order of magnitude. The rough-and-ready number of languages in the world currently cited is 7,000 while the largest estimate of alternative currencies in the world I found exceeds 6,000 (Sobiecki 2016).

Sovereign states recognised by the UN	197
Languages with official status	207
Currencies recognised as legal tender	180
Languages of the world	approx. 7000
Local/alternative currencies	approx. 6000

Table 2: Number of official languages and legal currencies compared with the number of languages and currencies

Different means of exchange coexist in a hierarchy, fulfilling different functions. Local languages and local currencies are characterised by a limited range, where the limits in terms of numbers of users is both fate and design. The main purpose is community protection, that is, to prevent the drying up of monetary and cultural capital. The advantage, imagined or real, is community integration, the drawback, insularity.

The challenge for scholarship is to find out how advantages and disadvantages can be balanced to achieve a beneficial division of labour between the various means of exchange that together constitute the system.

In financial economics, the “Theory of Optimum Currency Areas”, first developed in the 1960s (Mundell 1961), tries to determine the factors that, in combination, make for an optimum currency area. It argues, for example, that a country can join a currency union if the benefits for its economy of doing so outweigh the cost of forsaking an exchange rate mechanism as an instrument of adjustment. It predicts that in the absence of exchange rate adjustments in response to a crisis, adjustments in capital and labour must be possible in order to avert negative effects such as unemployment.

This theory last received considerable attention when the Euro was brought into existence in 1999. Immediately before that happened, economist Milton Friedman argued that

Europe exemplifies a situation unfavourable to a common currency. It is composed of separate nations, speaking different languages, with different customs, and having citizens feeling far greater loyalty and attachment to their own country than to a common market or to the idea of Europe. (Milton Friedman, *The Times*, 19 November 1997)

Rather than just considering efficiency, Friedman, a hard-core neoliberal economist, talks about nations, languages and customs. That’s interesting. If these “soft” criteria play a role in determining an optimum *currency* area, it is fair to assume that with regard to an optimum language area – if there is such a thing – utility, that is, communication efficiency is not the only aspect that needs to be

taken into consideration. If increasing efficacy is a driving force at all, it is modulated by other wants, for instance, distinction, tradition, solidarity, belonging, inertia and path dependence, as well as political, religious and cultural allegiances.

What is more, there is no clean slate. The equality of languages is an abstraction far removed from reality. Languages exist in a hierarchical order, which at any given point in time exercises an influence on how language arrangements are maintained and changed.

10. Concluding remarks

Let me return to my original question: “Which, if any, economic model or theories can help explain the distribution of languages in the world?”. We can split this up into two questions:

- Can the distribution of languages in the world be explained in terms of economic incentives, forces/exigencies?
- Is there an economic theory that explains the distribution of languages in the world?

The answer to the first question is “Yes” in the sense that economic forces have an influence on shaping the linguistic map of the world and that these forces and activities can be identified. However, the answer to the second question is “No”.

We have seen that the Theory of Political Economy looks at language in various fields and from various points of view: as a legacy of colonialism; as an asset for, or impediment to, economic development; as an influence on trade flows; as a commodity, human capital and as a public good. And finally, we have looked at language as a means of exchange that shares several properties with another important means of exchange, money.

The discussion has shown that, by themselves, these theories and factors can elucidate various economic aspects of language but none of them can comprehensively account for the distribution of languages in the world, and it is doubtful whether, taken together, they can provide such an explanation. Languages have utility, constitute a value, can be marketed as commodities, form a component of human capital and function as a means of exchange. These are not just economic metaphors but genuine economic properties of language. However, even in our age of efficiency maximisation and marketisation, countervailing ideological forces temper economic imperatives such as the principle of least effort, competitiveness and economies of scale.

As long as we do not have an economic theory that can exhaustively explain human history, we will not have a general integrated economic theory of the global distribution of languages because there are too many economic aspects of language, none of which seems to be subsidiary to efficiency optimisation.

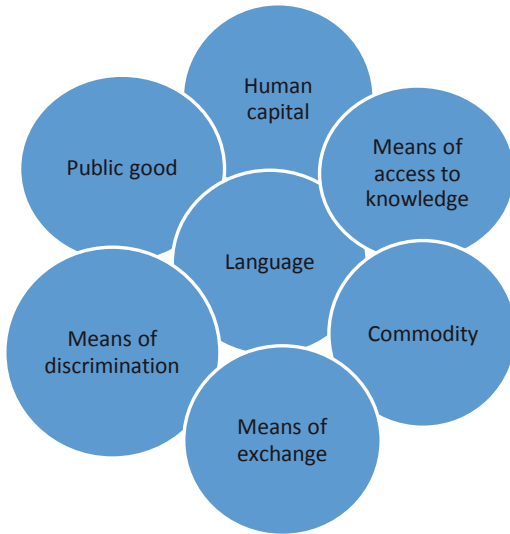


Fig. 2: Language can be analysed in terms of any of the six phenomena depicted above, which constitute interconnected parts of the economic system

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