

English as a Global Commodity

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Abstract

English is currently the language of diplomacy, higher education, business, science, the internet, and more. In order to understand what this means for the present state of English and its future, one must begin by looking at this language's diachronic journey, followed by a synchronic picture of English today. In addition to statistics on English, this analysis will consider potential language competitors of Chinese, Arabic, Spanish, and Hindi, among others, in displacing the English language. Compared to these prospective challengers, English has broad roots in world history, lending to its depth and growing breadth; however, not only do the diachronic implications of English carry weight in determining English's future position but also its place at this moment in time, foreshadowing its secure outlook as the dominant global language for the years to come.

English as a Global Commodity

When backpacking through Europe, David and his friend Will were exposed to a multitude of varying cultural behaviors, customs, values, and symbols, each country displaying a distinct uniqueness that comprised its identity. Despite the foreignness of the cultural contexts, David and Will were pleasantly surprised to be accommodated by the English language in most places they traversed. From street signs dubbed in English, to waiters and waitresses who guided their restaurant food choices in English, to fellow backpackers of different nationalities offering directions, the two did not encounter many language barrier issues, even without either of them knowing a second language. English is pervasive and has a powerful place on a global scale—how did it come to be so dominant, and more importantly, will it remain at this level of prominence? Or will travelers perhaps be reading signs with Chinese dubs or some other language in a few years' time? In order to demonstrate the future of English as an enduring major world language, this paper will discuss the meaning of a global language, English's rise, statistics of English in the world today, and the implications that these facets reveal.

Definition of a Global Language

First, a global language refers to “a language that is learned and spoken internationally, and is characterized not only by the number of its native and second language speakers, but also by its geographical distribution, and its use in international organizations and in diplomatic relations” (Mastin, 2011). It also acts as a ‘lingua franca,’ “a common language that enables people from diverse backgrounds and ethnicities to communicate on a more or less equitable basis” (Mastin, 2011). David Crystal (2003)

asserts that “a language achieves a genuinely global status when it develops a special role that is recognized in every country,” perhaps being made the official language of a country or a priority in a country’s foreign-language teaching (pp. 3-4). There are about a dozen of these “supercentral” languages—Arabic, Chinese, English, French, German, Hindi, Japanese, Malay, Portuguese, Russian, Spanish, and Swahili—each of these with more than one hundred million speakers (De Swaan, 2001, p. 5). If a German and a Spaniard or a Russian and an Arab were to meet, they would use one language in order to make their thoughts understood—this supercentral language that holds the entire “language system constellation” together is English (De Swaan, 2001, p. 6). Out of around 6,000 world languages, English has become the language of business, science, technology, and the basis for communication between countries. It represents many things for people—opportunity, information, power, and success, among others.

The Rise of English

In order to more accurately predict the trajectory of English on a global scale, one must take into consideration its roots and rise throughout history in order to better understand its current position. English has not always held the status it does now; its history is primarily a story of literacy interwoven with the history of humanity—through demographic expansion and migration, conquest, commerce, conversion, education, politics, economics, and culture (De Swaan, 2001, p. 6). Moreover, the wide variety of Englishes demonstrates that English is not only tied up in the history of the British Isles and North America but also societies across the globe.

English has a rich history in the realm of economy. Directly influenced by technological innovation, economy reflects the resources and wealth of a country.

Moreover, those countries which throughout history have led the movement of technological innovation are mainly English-speaking. At the beginning of AD in Year 1, India and China, respectively, claimed one-third and one-fourth of the world's economy. For centuries, GDP was “closely approximated” with the population of a region; therefore, the greater the population, the higher the GDP, and vice versa (Thompson, 2012). However, the far-reaching Industrial Revolution changed this pattern. The increase in ease and efficiency of production thanks to the technological innovation in a few particular countries allowed for even greater consumption and a consequent increase in economic growth. Beginning in Britain, the revolution spread to North America, where it “surpassed in magnitude the achievements of Britain,” and it gradually influenced Asia, Africa, Latin America, and beyond (Buchanan, 2017). Some of the noteworthy inventions of the time that transformed not only the manufacturing of goods but also communication and transportation included steam power, the cotton gin, sewing machine, telegraph, telephone, typewriter, automobile, radio, railway network, and airplane. Also, the number and sophistication of banks likewise increased. The Industrial Revolution effected unprecedented growth and expansion in the United States and Britain, leading to the establishment of new industries and markets and strengthening their statuses as powerful trading nations in an international market. The Industrial Revolution of the Western world alone set these countries far ahead of the rest of the globe in terms of economic advancement. Three other notable events include the Napoleonic Wars of the nineteenth century which made Britain the chief naval power and gave it command over a majority of the world’s commerce as well as Britain’s overall expansion through the establishment of various settlements around the globe (Baugh & Cable, 2013, p. 289). Lastly, the

United States emerged as a world power due to its explosive industrial growth (that would eventually lead to the world-changing invention of the internet, further solidifying the States' global presence). These events fortified the English-speaking countries' involvement in international commerce and trade, forming dominant economic roots that would last for years to come.

English also has strong and deep roots in the sphere of knowledge. To start, many of the universities that offer the best educations around the world were founded in English-speaking countries. For example, the University of Oxford, which is currently ranked the top university in the world (TimesHigherEducation.com), was founded in England sometime around the year 1100 and is one of the oldest universities in the world that is still in operation. A century later, the University of Cambridge (currently ranked fourth in the world) was founded in the United Kingdom in 1209 and also remains in operation today (TimesHigherEducation.com). Other renowned schools that lead the world of academia include Harvard University (founded in 1636), Yale University (founded in 1701), the University of Pennsylvania (founded in 1740), Princeton University (founded in 1746), Columbia University (founded in 1754), and the University of Toronto (founded in 1827). Established within the English-speaking world, these universities offer much of the world's best and most rigorous education, attracting the attention of countries and international students around the globe and maintaining influence in the world's research and pursuit of knowledge on a grand scale.

Furthermore, in terms of research, New Zealand is home to several internationally-respected research institutions that were established starting in the late 1800s up through the late 1900s. New Zealand's geographical neighbor, Australia, likewise is a major

world contributor in research. For example, a research team from the Commonwealth Scientific and Industrial Research Organization in Australia is credited with inventing Wi-Fi in the 1990s. Lastly, Ireland deserves recognition for its world-changing innovation; the country is responsible for the inventions of color photography, trans-Atlantic calls, a cure for leprosy, the modern tractor, submarine, tank, and guided missile, among other medicinal and technological advancements.

Regarding other major academic developments, the nineteenth and twentieth centuries were largely characterized by explosive growth in predominately English-speaking countries. This time period was filled with rapid progress in science and every field of intellectual activity, with the United States serving as a frontrunner in many ground-breaking pursuits in medicine, science, flight, and space travel, to name a few. In order to accommodate the growing intellectual and technological advancements, English gained hundreds of new and original terms, mirroring, in a sense, the culture's progress. Countries that desired to (and still desire to) take part in the global academic conversation benefitted by learning the language that led the movement. Meanwhile, the need for literacy intensified in both English-speaking countries and those that were learning English in order to maintain and promote economic, technological, and academic progress.

Likewise, English has a long history in education. Education is the medium through which countries' citizens can develop professional skills, take part in academic pursuits on a global scale, and ultimately impact the community, and countries around the world are aware of its necessity. Being a dominant world language, English has been a major language of education for years. In the English-speaking sphere, education was a

must in England tracing as far back as the Middle Ages for anyone who was preparing to serve in a religious role. As the church led society in literacy and education, it was responsible, in large part, for the establishment of the universities of Oxford and Cambridge during that time, which paved the way for the country's advanced education systems. The church continued to organize education up until the government instituted free, compulsory education in the late 1800s, demonstrating the country's prioritizing of the advancement of knowledge. As a result, various new universities and competitive schools sprung up around this time. Similarly, rudimentary public education in the United States has roots in colonial times for the purpose of educating males for their future professions; however, by the mid-1800s, public education gained ground as the industrial revolution progressed, requiring laborers with greater skill. Finally, by the 1900s, public schools prepared students for higher education, and all children were required to attend at least elementary school starting in 1918 (Regan, 2015). Compulsory education in the States has since become highly developed and prioritized. In addition, as previously mentioned, a majority of the highest ranked universities in the world are in English-speaking countries. As they have become so, other countries have increasingly sent students abroad to study at these universities but have also progressively established English as the language of higher education; in order for an institution to become an internationally-respected, "it needs both to attract teachers and researchers from around the world, and to encourage international students to enroll on its courses, enriching the university's prestige, revenue, and intellectual climate" (Graddol, 2006, p. 74). The unifying language that is chosen to fulfill these requirements is English.

At the same time, schools outside of the English world have increasingly implemented English as a foreign language (EFL) and English as a second language (ESL) programs in lower education in order for students to achieve fluency and have better opportunities. Since around 1835, English has been a prominent feature in Indian education due to the English Education Act that was put in place as a result of Britain's presence in the country (Graddol, 2006, p. 94). Responding to the global position of English, China required English for primary education in 2001. As a result, more people are learning English in China than in any other country (Graddol, 2006, p. 95). Thailand, Japan, the Philippines, and Taiwan followed suit by implementing education programs that would also increase English proficiency and allow for better international interaction. Other notable countries where English has been taught as a second or foreign language for some time include Sweden, Poland, Germany, Singapore, Malaysia, Argentina, Nigeria, and Pakistan.

English also has diverse historical presence in countries besides those that are predominately English-speaking. Britain secured a presence in India beginning in the 1600s, which culminated in the colonization of India. The effects of the country's presence were aptly felt, leading to the enculturation of the Indian people and spread of the English language. Similarly, during its empirical expansion period, Britain gained settlements in Australia, New Zealand, Africa, South Asia, Singapore, Malaysia, Hong Kong (excluding Japanese control from 1941 to 1945, British rule in Hong Kong lasted over a century from 1841 to 1997), the Caribbean, and Canada, furthering the growth and variety of the English language, or Englishes, that language competitors fail to demonstrate to such an extent. English's global status today also reflects its widespread

use in regions across the globe as a lingua franca or official, second, or foreign language in many of these countries and more.

Concerning military history in short, English-speaking countries show strength and authority as defensive forces. Besides the various colonies that Britain established over time, the United States and Britain have proven to possess powerful military branches through their numerous major war victories, abundant resources, expertly-trained armed forces, and ample funding. For example, both countries exhibited advanced military prowess throughout World War I and II, aiding the Allied Powers (among them were English-speaking countries of the US, UK, Canada, New Zealand, South Africa, and Australia) to victory on both occasions. These major wars validated the military dominance of the United States and Britain, helping these countries rise as world superpowers.

Lastly, a brief look at culture demonstrates that the Western world is a major influence in countries outside of the English-speaking tradition. Though Westernization is still a current phenomenon, its origin can be traced as far back as Britain's colonization period in the early 1500s. Each region that Britain took possession of felt British influence ranging from religion to what to wear and how to speak. The Western world's influence significantly picked up in the nineteenth and twentieth centuries with the explosive growth of the United States beginning in the industrial revolution. As the country developed into a world power, other countries sought to emulate the US in its trends, from democracy to movies to music, dance, food, sports, religion, and more. This Westernization still continues today, influencing even the remotest of countries in the world.

Statistics of English Today

Population

Population is an important indicator in discovering the rise of a language— “Because growth in a language is primarily a matter of population, the most important question to ask is which population of the world will increase most rapidly” (Baugh & Cable, 2013, p. 5). This factor may be determined by international migration and the difference between the birth and death rate (Baugh & Cable, 2013, p. 5). The following estimates are taken from the United Nations (2015) on the countries with the highest population in 1950:

1) China:	544,000,000
2) India:	376,000,000
3) United States:	158,000,000
4) Russian Federation:	103,000,000
5) Japan:	42,000,000
6) Indonesia:	73,000,000
7) Germany:	70,000,000
8) Brazil:	54,000,000
9) United Kingdom:	51,000,000
10) Italy:	46,000,000

(geohive.com & esa.un.org)

China led the world in population by over 150,000,000 citizens, followed by India, and then the United States with over 200,000,000 less than its predecessor, foretelling the wide population gaps that would grow in the following decades. Compare these numbers to the world’s ten most populous countries in 2017 (taken from the United States Census Bureau Current Population Clock):

1) China:	1,379,302,771
2) India:	1,281,935,911
3) United States:	326,625,791

4) Indonesia:	260,580,739
5) Brazil:	207,353,391
6) Pakistan:	204,924,861
7) Nigeria:	190,632,261
8) Bangladesh:	157,826,578
9) Russia:	142,257,519
10) Japan:	126,451,398

(census.gov, 2017)

Judging strictly on population of today, it would appear that China and India have the highest number of native speakers. Additionally, seven of the same countries (United States, Indonesia, Japan, and the BRIC countries [those with emerging economies]: Brazil, Russia, India, and China) appear on the most recent list, indicating a large population increase within the timeframe. Among those seven countries, their yearly growth rates are as such:

China:	0.43%
India:	1.19%
United States:	0.81%
Indonesia:	0.89%
Brazil:	0.75%
Russia:	-0.06%
Japan:	-0.19%

(cia.gov, 2016)

Out of these seven countries, the growth rates of Russia and Japan are actually decreasing slowly while the other five are at a slow increase, with China's being the slowest and India's being the fastest. Now, based on these trends, the United Nations (2015) estimates that the highest populated countries in the year 2050 will include:

1) India:	1,620,000,000
2) China:	1,385,000,000
3) Nigeria:	440,000,000
4) United States:	401,000,000
5) Indonesia:	321,000,000
6) Pakistan:	271,000,000
7) Brazil:	231,000,000
8) Bangladesh:	202,000,000

9) Ethiopia:	188,000,000
10) Philippines:	157,000,000

(geohive.com & esa.un.org)

India is predicted to surpass the gargantuan population of China in half a century, the United States will remain in the top four most populous nations, and Russia and Japan will be replaced by two developing nations—Ethiopia and the Philippines.

Number of Speakers

Next, one must assess trends of the most-spoken languages in order to predict whether a language other than English may come into the forefront. As of 2016, the ten most widely spoken languages by first-language users are as such:

1) Chinese as L1:	1,299,877,520	(897,071,810 speak the Mandarin dialect)
2) Spanish as L1:	426,515,910	
3) English as L1:	339,370,920	
4) Arabic as L1:	263,892,450	
5) Hindi as L1:	260,123,420	
6) Portuguese as L1:	202,225,450	
7) Bengali as L1:	189,144,830	
8) Russian as L1:	171,428,900	
9) Japanese as L1:	128,149,960	
10) Lahnda as L1:	116,643,400	

(Ethnologue.com)

By raw numbers, English is only the third most-spoken first language, after Spanish and Chinese, which boasts nearly one billion more first-language speakers than English.

However, it is important to note that some of these languages, namely Chinese, Arabic, and Lahnda, are macrolanguages, meaning that they encompass multiple dialects (that are not all mutually intelligible). In terms of second-language users, data vary greatly on the numbers due to the difficulty of judging and obtaining such information, but they are roughly estimated as such:

1) English as L2:	603,163,010
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2) Mandarin as L2:	193,880,000
3) Hindi as L2:	120,490,000
4) Spanish as L2:	91,308,400
5) Arabic as L2:	90,000,000
6) Russian as L2:	29,945,000
7) Bengali as L2:	19,200,000
8) Portuguese as L2:	6,300,000
9) Japanese as L2:	11,500
10) Lahnda as L2:	?

(Ethnologue.com)

English far exceeds the other languages in number as a second language. Regarding the total number of speakers (those who are native speakers, second-language learners, foreign-language learners, those who are basically proficient, etc.), the *Encyclopedia Britannica* suggests that somewhere around two billion people total speak English now (Potter & Crystal, 2016), as David Graddol anticipated in 2006 in *English Next*: “[this number] is likely to reach [...] two billion in the next ten to fifteen years” (p. 14). Due to the discrepancies among data sources in providing exact numbers of speakers, it may also be helpful to examine the number of countries/dependencies where a language has official or de facto status:

1) English:	110
2) Arabic:	59
3) French:	51
4) Spanish:	31
5) Russian/Portuguese:	11

(esl-languages.com, 2014)

These figures demonstrate the far-reaching influence of English around the world, while the absence of Chinese/Mandarin shows a lack thereof.

An equally interesting piece of information on various languages’ presence in the world is the languages of the internet. The following information lists the percentage of internet users by language:

1) English:	26.3%
2) Chinese:	20.8%
3) Spanish:	7.7%
4) Arabic:	4.7%
5) Portuguese:	4.3%
6) Japanese:	3.2%
7) Malay:	3.0%
8) Russian:	2.9%
9) French:	2.8%
10) German:	2.3%
Other World Languages:	22.1%

(internetworldstats.com, 2016)

English also appears to be the leading internet language, ahead of Chinese by a little over 5% and the other languages by quite a bit more. Because the internet is one of, if not the main medium for international communication, the language predominately used on the internet is a significant reflection of the language's status in the world.

Furthermore, English is the predominant content language for all internet websites. The top ten languages used on internet websites include:

1) English:	52.0%
2) Russian:	6.5%
3) Japanese:	5.6%
4) German:	5.5%
5) Spanish:	5.1%
6) French:	4.1%
7) Portuguese:	2.6%
8) Italian:	2.3%
9) Chinese:	2.0%
10) Polish:	1.7%

(w3techs.com, 2017)

English is used nearly 45% more than the following language, Russian. The second through tenth internet language percentages are fairly close to each other, but English is the highest ranked by a wide margin.

Media

Media is one of the most pervasive forms of the spread of information in the entire world. It comes in many forms—from periodicals to books to television and more—and it attracts the attention of people everywhere. Crystal (2003) asserts that a quarter of the world's periodicals, which refer to all sorts of publications, including newspapers, magazines, comics, literary reviews, hobby journals, and more, are published in English-status countries (p. 93). Newspapers, a source of current events and various informative articles and advertisements, have been a major part of international media for centuries. Crystal (2003) states that “in 2002 about 57 percent of the world's newspapers were being published in those countries [. . .] where the English language has special status” (p. 92). Today, the most-read newspapers in the world include *Daily Telegraph* (British), *The Times of India* (Indian), *Asahi Shimbun* (Japanese), *The Wall Street Journal* (American), *The Sun* (British), *Washington Post* (American), *People's Daily* (Chinese), *The Guardian* (British), *The New York Times* (American), and *Daily Mail* (British) (Kunad, 2013). Read by millions of people, a majority of these are English newspapers, and those that are not from English-speaking countries are printed in English in addition to the country's main language(s). Eight of these ten have been in circulation since the 1800s and have garnered millions of readers since that time.

A snapshot of magazine publications shows that the ten most-read magazines (including the renowned *National Geographic*, *AARP The Magazine*, *Reader's Digest*, and *Good Housekeeping*) are all published in the United States (Briscoe, 2016). Next, based on figures compiled from a UNESCO study on the books published per country each year (including new titles and additions), the top ten countries on this list include (the years of data collection are based on *world library's* latest updates):

1) China (2013):	440,000	6) Japan (2013):	82,589
2) United States (2013):	304,912	7) Germany (2011):	82,048
3) United Kingdom (2011):	184,000	8) Italy (2013):	61,966
4) Russian Federation (2013):	101,981	9) South Korea (2014):	47,589
5) India (2013):	90,000	10) Spain (2011):	44,000

(worldlibrary.org)

Though China leads book publications, the English-speaking countries combined publish more—about 488,912 books were published in English in a year’s time between the United States and United Kingdom. Adding to this number is about twenty-four percent of India’s books, which are also published in English (worldlibrary.org).

Having strong roots in the world of broadcasting, English leads the realm of television news. In fact, the top five news channels (BBC News, FOX News, CNN, Sky News, and MSNBC) are broadcasted from English-speaking countries while the second five (Al Jazeera, Euronews, Al Arabiya, Geo News, and NDTV India) represent Hindi-, Urdu-, and Arabic-speaking countries (as well as a multilingual channel). However, these latter channels operate English stations in addition to their main stations, demonstrating the pervasiveness of English in world news (Singh, 2011).

Economy

Economy has a major role in the position of a language; it is intimately tied to a country’s rise in power, thus lending its language greater influence. Therefore, it is necessary to assess the major factors involved in a country’s economy. The countries with the top ten national GDPs are (in billions of US dollars):

1) United States:	18,036.648
2) China:	11,007.721
3) Japan:	4,383.076
4) Germany:	3,363.447
5) United Kingdom:	2,858.003
6) France:	2,418.836

7) India:	2,095.398
8) Italy:	1,821.497
9) Brazil:	1,774.725
10) Canada:	1,550.537

(data.worldbank.org, 2015)

Though China (at a 6.9% annual growth rate that is slowing) is now in the same GDP ballpark as the United States, the U.S. (at a 2.6% annual growth rate) still made significantly more. In fact, English-speaking countries made up one-third of the world's total GDP (about 74 trillion dollars) in 2015 (data.worldbank.org, 2015). However, while experts predict the U.S. to be at 21,926.509 billion dollars in 2020, China is projected to be at 16,458.029 billion dollars, demonstrating a rapid growth rate (imf.org, 2016). Regarding the GDP per capita for the same year, the U.S. was the only one of the previously listed countries that made the top ten, coming in seventh at \$56,083.97 (knoema.com, 2016). Additionally, out of the countries with the highest GDP in 2015, three of those had among the ten highest debt-to-GDP ratios, indicating high public debt: Japan at 250.35%, Italy at 133.24%, and the United States at 108.25% (statista.com, 2016). A high debt-to-GDP ratio is due to government borrowing when the economy is slow either to meet its obligations or stimulate its economy (forbes.com, 2014). If borrowing for the latter reason, the country may be attempting to shorten the duration of the economic downturn, reflecting a better reality on the high ratio, whereas the former does not foreshadow as bright an outlook.

Another crucial factor in determining global economic influence is GDP per capita based on purchasing power parity (PPP), which is “gross domestic product converted to international dollars using purchasing power parity rates and divided by total

population” (knoema.com, 2016). This indicates the approximate sum of money, or purchasing power, an individual has based on the country in which he or she lives.

Rank	Country	GDP Per Capita (PPP-Based)
1	Qatar	\$129,727
2	Luxembourg	\$101,936
3	Macao SAR	\$96,148
4	Singapore	\$87,082
5	Brunei Darussalam	\$79,711
6	Kuwait	\$71,264
7	Ireland	\$69,375
8	Norway	\$69,296
9	United Arab Emirates	\$67,696
10	San Marino	\$64,443
11	Switzerland	\$59,376
12	Hong Kong SAR	\$58,095
13	United States	\$57,294
14	Saudi Arabia	\$54,078
15	Netherlands	\$50,846

(knoema.com, 2016)

Only two English-speaking countries (Ireland and the United States) make the top fifteen, whereas three Chinese-speaking countries (Macao SAR, Singapore, and Hong Kong SAR) appear on the list, demonstrating the competitive economic rise of the Chinese region of the world.

A brief look at Forbes’ 2016 Global 2000 list shows the world’s biggest companies (their rankings determined by sales, profits, assets, and market value):

- | | |
|---------------------------------------|---------------------------------|
| 1) ICBC (China) | 6) Bank of China (China) |
| 2) China Construction Bank (China) | 7) Wells Fargo (United States) |
| 3) Agricultural Bank of China (China) | 8) Apple (United States) |
| 4) Berkshire Hathaway (United States) | 9) Exxon Mobile (United States) |
| 5) JP Morgan Chase (United States) | 10) Toyota (Japanese) |

(Schaefer & Murphy)

China and the United States nearly swept the top ten except for Japan’s tenth-place presence, demonstrating their competitive and powerful economies. As a whole, 586

companies from the United States made the list of 2,000, followed by 249 from China/Hong Kong, 219 from Japan, 92 from the United Kingdom, and 67 from South Korea (Schaefer & Murphy, 2016). This highlights Asia's economic growth, with three of the five largest companies on the list based in Asian countries, but also reinforces the strong presence of two English-speaking countries—the United States and United Kingdom. Put together, these countries total 678 companies on the list compared to the top Asian countries' 535. In fact, the United States' 586 ranked companies alone are more than China's, Japan's, and South Korea's ranked companies combined.

Innovation

The most advanced countries in the world are by definition the most innovative. Innovation includes technological advancements, infrastructure, institutions, research, market and business sophistication, and the pursuit of knowledge and creativity. Furthermore, “the most innovative countries teach creatively, enforce progressive laws, do business intelligently, and live on the cutting edge” (businessinsider.com, 2016). In 2016, the World Intellectual Property Organization (WIPO) ranked the world's countries in this category and lists the top twenty-five as such (compared to 2015 rankings):

1) Switzerland (1 in 2015)	11) Republic of Korea (14)	21) Israel (22)
2) Sweden (3)	12) Luxembourg (9)	22) Norway (20)
3) United Kingdom (2)	13) Iceland (13)	23) Belgium (25)
4) U.S.A (5)	14) Hong Kong (China) (11)	24) Estonia (23)
5) Finland (6)	15) Canada (16)	25) China (29)
6) Singapore (7)	16) Japan (19)	
7) Ireland (8)	17) New Zealand (15)	
8) Denmark (10)	18) France (21)	
9) Netherlands (4)	19) Australia (17)	
10) Germany (12)	20) Austria (18)	(wipo.int)

Only one of the BRIC countries is represented here—China—which still placed behind the English-speaking countries. In fact, six out of the twenty-five are countries whose

main language is English, which is the most common language among those represented by the ranking.

Academia

The world of academia plays an integral role in the position and influence in a language. Countries that engage in academic research and contribute to the ever-expanding body of knowledge gain recognition as legitimate contributors and a rightful place in the academic community. In the case of research and academic articles published in English, English-speaking countries are major contributors, and English has come to be accepted as the language of academia in most circles. Over time, this cycle has become self-expanding; the more research that is contributed by English-speaking countries, the more research is published in English. The longer English is the leading language in this realm, the more research will be published in the same language in order to join in the conversations. For an example of the place of English as compared to other potential language competitors in the academic world, consider the total number of periodicals published in each language on UlrichsWeb, an authoritative and comprehensive index for periodicals around the world:

Language	Periodicals	Peer-Reviewed Periodicals
English	372,209	73,601
Spanish	27,827	3,183
Chinese	18,249	1,712
Russian	12,976	5,682
Japanese	8,107	550
Portuguese	7,690	1,338
Arabic	1,796	237
Hindi	703	48
Bengali	285	1

(ulrichsweb.serialssolutions.com, 2017)

Additionally, the total number of periodicals cited reaches 760,971—91,154 of which are peer-reviewed. Those indexed periodicals that are not published in English are numbered at 388,762—17,553 of which are peer-reviewed (ulrichsweb.serialssolutions.com, 2017).

These figures portray the overwhelming academic presence of English, which is the language published in thousands of periodicals more than the next competitor, Spanish.

Even more specifically, Ulrichsweb lists the total number of peer-reviewed journals published per language:

Language	Peer-Reviewed Academic Journals
English	66,660
Russian	5,629
Spanish	2,935
Chinese	1,575
Portuguese	1,306
Japanese	466
Arabic	215
Hindi	43
Bengali	1

(ulrichsweb.serialssolutions.com, 2017)

English leads the journal count by over 60,000, followed by Russian and then Spanish, Chinese, and Portuguese for the next highest counts.

Listed next are the articles published in Thomson Reuters-indexed journals from January 2001 to August 2011:

Rank	Country	Articles
1	USA	3,049,662
2	P. R. of China	836,255
3	Germany	784,316
4	Japan	771,548
5	England	697,763
6	France	557,322
7	Canada	451,588
8	Italy	429,301
9	Spain	339,164

10	Australia	304,160
11	India	293,049
12	South Korea	282,328
13	Russia	265,721
14	Netherlands	252,242
15	Brazil	212,243
16	Switzerland	181,636
17	Sweden	179,126
18	Taiwan	177,929
19	Turkey	155,276
20	Poland	154,016
Total		10,374,645

(Clarivate.com, 2011)

Additionally, of these academic papers, the number published in the U.S. is greater than the number of academic papers published in the next three leading countries combined—with the P. R. of China, Germany, and Japan. Altogether, the papers published by English-speaking countries (U.S., England, Canada, and Australia) swell to a staggering 4,503,173 (Clarivate.com, 2011).

Looking at a single year, a study by the National Science Foundation records the peer-reviewed published articles by the top twenty publishing countries for 2013:

Rank	Country	Peer-Reviewed Scientific and Technical Journal Articles
1	United States	412,542
2	China	401,435
3	Japan	103,377
4	Germany	101,074
5	United Kingdom	97,332
6	India	93,349
7	France	72,555
8	Italy	66,310
9	South Korea	58,844
10	Canada	57,797
11	Spain	53,342
12	Brazil	48,622
13	Australia	47,806
14	Russia	35,542
15	Iran	32,965

16	Netherlands	30,412
17	Turkey	30,402
18	Poland	28,753
19	Switzerland	21,060
20	Sweden	19,362

(worldatlas.com, 2013)

Of these academic papers, the papers published by English-speaking countries (U.S., United Kingdom, Canada, and Australia) swell to a staggering 615,477, comprising the most published language of the approximately 2.2 million total articles (worldatlas.com, 2013).

Lastly, Elizabeth Pain, a science journal editor, states that most important science journals are in English, and she cites a graduate school academic writing and publishing professor who asserts that the pressure to publish in English is increasing for scholars around the world, and that many institutions and governments use English publishing as a marker of quality (2007).

Education

One facet of the English stronghold is education and, therefore, knowledge. These two words have become associated with the English language almost synonymously; people everywhere desire access to knowledge, as knowledge represents power. English has, in fact, become commodified through English language teaching (Cameron, 2012, p. 352). The dominant role of English as the world's language of business, diplomacy, and scholarship has created a great need for English teachers around the world. In many nations, English is a required subject in the state school systems, and countless private schools cater to the needs of individuals who desire English skills for work, education, or social life (Snow, 2001, p. 25). In 2003, David Crystal found that English was the language most widely taught as a foreign language in over 100 countries, such as Russia,

Spain, China, Egypt, Brazil, and Germany, and in most of these countries, it is emerging as the foremost foreign language to be encountered in schools, in many cases displacing another language in the process (p. 5). In 2001, Abram De Swaan found that eighty-eight percent of secondary school students in the European Union were learning English, and that number has likely increased (p. 172). Due to universities' increasing number of international students, the need for one unifying language is duly increasing. And since around two-thirds of the world's top 100 universities are in English-speaking countries, English is used increasingly as the medium of education in universities across the world (Graddol, 2006, p. 74). Taking a deeper look at the world university rankings of 2016-2017 (which are based on research, teaching, knowledge transfer, and international outlook), one can see this spread among the top twenty-five universities and their locations:

- | | |
|--|---|
| 1) University of Oxford
<i>United Kingdom</i> | 13) University of Pennsylvania
<i>United States</i> |
| 2) California Institute of Technology
<i>United States</i> | 14) University of California, Los Angeles
<i>United States</i> |
| 3) Stanford University
<i>United States</i> | 15) University College London
<i>United Kingdom</i> |
| 4) University of Cambridge
<i>United Kingdom</i> | 16) Columbia University
<i>United States</i> |
| 5) Massachusetts Institute of Technology
<i>United States</i> | 17) Johns Hopkins University
<i>United States</i> |
| 6) Harvard University
<i>United States</i> | 18) Duke University
<i>United States</i> |
| 7) Princeton University
<i>United States</i> | 19) Cornell University
<i>United States</i> |
| 8) Imperial College London
<i>United Kingdom</i> | 20) Northwestern University
<i>United States</i> |
| 9) ETH Zurich
<i>Switzerland</i> | 21) University of Michigan
<i>United States</i> |
| =10) University of California, Berkeley
<i>United States</i> | 22) University of Toronto
<i>Canada</i> |
| =10) University of Chicago
<i>United States</i> | 23) Carnegie Mellon University
<i>United States</i> |

12) Yale University
United States

24) National University of Singapore
Singapore

=25) London School of Economics
and Political Science
United Kingdom

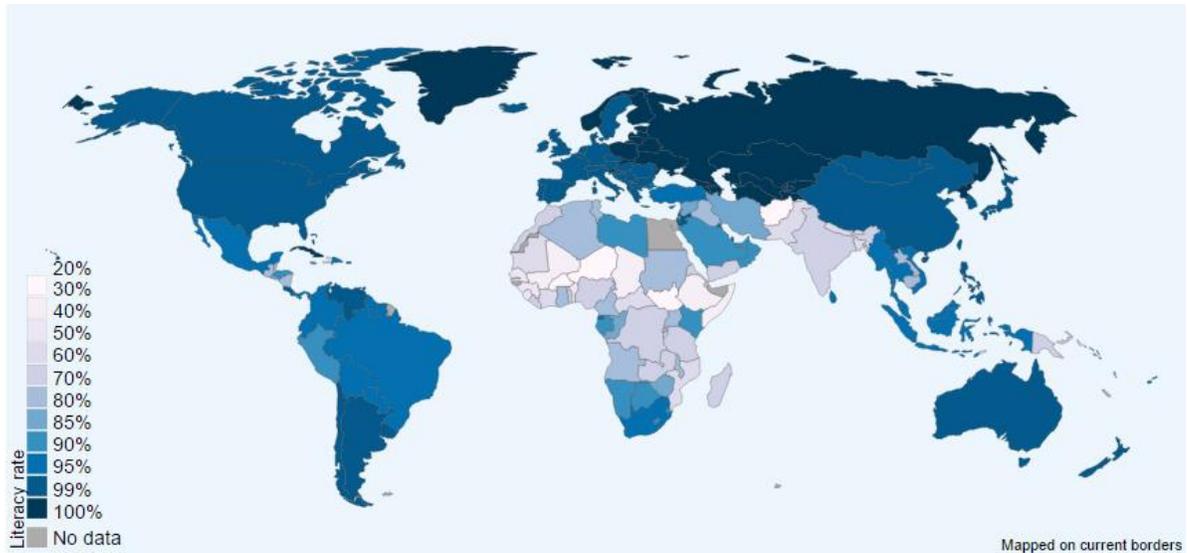
=25) University of Washington
United States

=denotes a tie between two universities

(TimesHigherEducation.com)

This comprehensive list shows universities representing five different countries, three of which speak English as a first language. Furthermore, only two universities out of the entire top twenty-five are located in countries where English is not a first language (ETH Zurich and National University of Singapore). The other twenty-three universities are located mainly in the United States and the United Kingdom, and one in Canada—all English-speaking countries. The rankings do diversify as the list moves down through the next one-hundred seventy-five universities; however, the United States alone still has sixty-three universities among the top two-hundred. Other notable mentions include Germany, which has twenty-two universities among the top two-hundred, and the Netherlands, which has thirteen—both due in large part to their increased emphasis on intensive research. Additionally, France, Italy, Spain, and a few other countries in central and eastern Europe are losing rankings as countries in Asia continue to improve academically; as a whole, nineteen universities located in Asia are ranked in the top two-hundred, up from fifteen universities in 2016 (TimesHigherEducation.com).

Lastly, a brief look at the literacy rates by country shows the distribution of high versus low literacy across the globe:



(ourworldindata.org)

Those countries which are more developed tend to have higher literacy rates and are therefore more likely to engage in international academic conversations. All countries that speak English as a first language or that speak potential competitor global languages fall on the higher end of the literacy spectrum, besides India and those countries that speak Arabic.

Military

A snapshot of the military of English-speaking countries shows a strong power among the world. First, in 2015, the United States spent about thirty-seven percent of the world's total in military expenditures, which was approximately the amount of the next seven largest military budgets worldwide combined, including that of China, Saudi Arabia, Russia, United Kingdom, India, France, and Japan (nationalpriorities.org, 2015). Second, resources among the top ten militaries in the world are compared for the year 2015:

Rank	Country	Budget	Active Frontline Personnel	Tanks	Total Aircraft	Aircraft Carriers (In service)	Submarines
1	United States	\$601 B	1,400,000	8,848	13,892	19	72
2	Russia	\$84.5 B	766,055	15,398	3,429	1	55
3	China	\$216 B	2,333,000	9,150	2,860	1	67
4	Japan	\$41.6 B	247,143	678	1,613	3	16
5	India	\$50 B	1,325,000	6,464	1,905	2	15
6	France	\$62.3 B	202,761	423	1,264	4	10
7	South Korea	\$62.3 B	624,465	2,381	1,412	1	13
8	Italy	\$34 B	320,000	586	760	2	6
9	United Kingdom	\$60.5 B	146,980	407	936	1	10
10	Turkey	\$18.2 B	410,500	3,778	1,020	0	13

(Bender, 2015; globalfirepower.com, 2016)

The top three militaries in the world, from the United States, Russia, and China, prove to have abundant resources as well as funding, adding to their status as world leaders.

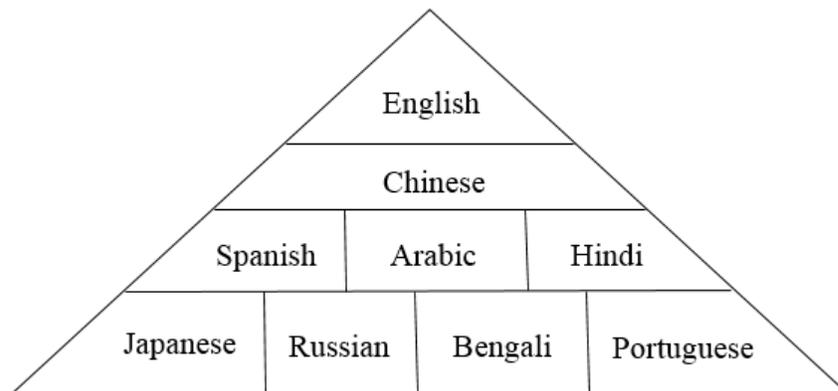
Government

Next, English is a prominent language of international government. For example, the United Nations (UN), a distinguished intergovernmental organization, uses only six official languages of the 193 member states represented: Arabic, Chinese, English, French, Russian, and Spanish. Several other international organizations established soon after the UN (in the 1940s) include the World Bank, UNESCO, UNICEF, and the World Health Organization, all of which are incredibly well-known and respected efforts. Because the groups' members are from around the world, they represent different languages and must use a lingua franca in order to communicate effectively across cultures. Crystal (2003) asserts that "Swahili, Arabic, Spanish, French, English, Hindi, Portuguese, and several other languages have developed a major international role as a

lingua franca” (p. 12). That these languages are chosen to bridge language barriers in an international governmental context says much about their prevalence worldwide.

Implications

Should a language that is clearly so pervasive in the world—far beyond any other—only gain more traction and influence? Or is its position so strongly tied to the progress of those countries which speak it as a first language that it could be surpassed as global language if those countries fall behind? Where will English be in fifty, one-hundred years? These questions are difficult to answer. The course of history and its future development is an extremely complex and indefinite matter. One can only predict the future of English based on trends and estimation. Consequently, the best prediction might be that English will continue to dominate as a global language, ahead of its closest competitor—Chinese—followed by other competitors of Spanish, Arabic, Hindi, Japanese, Russian, Bengali, and Portuguese, as portrayed in the chart:

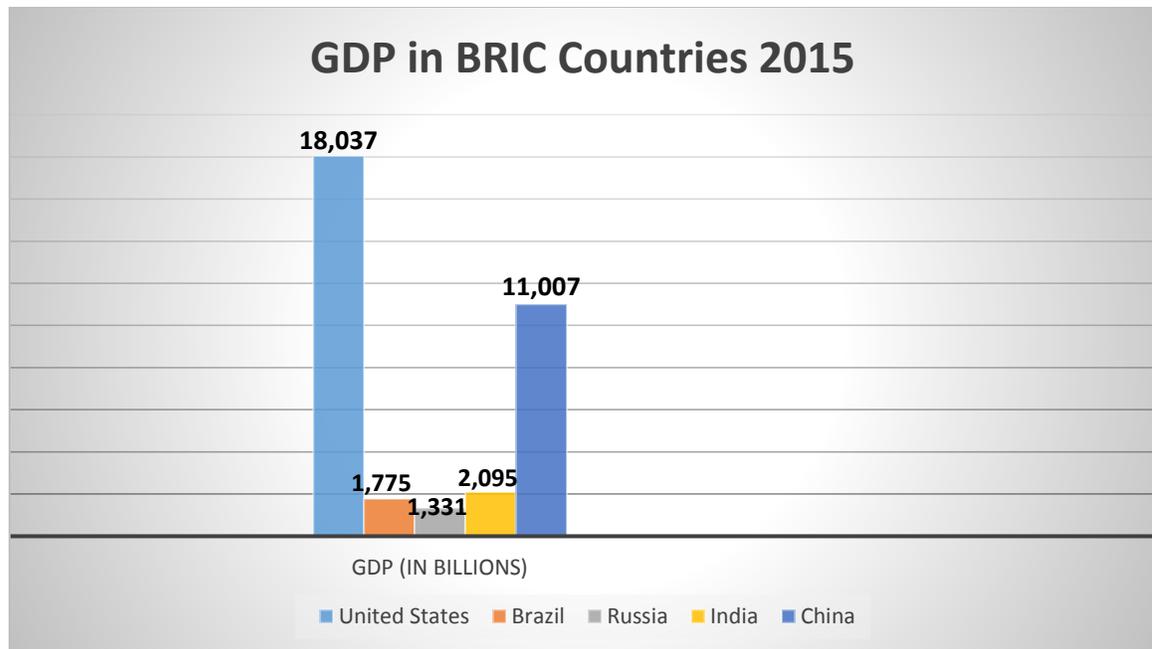


First, regarding the unexpected and intricate history of English, since this language has come in contact with a multitude of settlements and countries around the world, it has become a “hybrid language which can rapidly evolve to meet new cultural and communicative needs” (Graddol, 1997, p. 5). Its roots are so deep and far-reaching

that it might be hard for a rival language to take its place. Based on population trends, the rapid growth of developing countries may eclipse the population of English-speaking countries; however, English will continue to thrive since it is used as a second or foreign language throughout the world. Also, English is one of the official language in some of the countries that have been experiencing the greatest growth, such as India, Nigeria, and the Philippines and a “neutral language among competing indigenous languages” in other countries, as to avoid ethnic conflicts (Baugh & Cable, 2013, p. 6). In fact, textbooks and other classroom materials are readily available in English, oftentimes in place of another main language (Baugh & Cable, 2013, p. 6). The dissemination of sought-for education materials reinforces the position of the language they are published in, making it hard for another language to replace the former. Similarly, competitive English-speaking universities are advancing the knowledge and research front, reinforcing the need to learn English. As a whole, literacy is tied with academic knowledge—in order to take part in the global conversation, one must be able to read academic writing and respond to it intelligently. Even more than economics, military, government, or other such factors, literacy is the catalyst for increase in knowledge, the foremost influential factor in the world. Moreover, all other major factors have origins in knowledge; for example, innovation can only take place as a result of increase or expansion of knowledge about a subject. Knowledge, or academia, is the precursor for all other far-reaching influences, and literacy is its necessary counterpart—knowledge is not effectively passed on or amplified without literacy. Therefore, those countries which exemplify widespread influence have higher literacy rates, and literacy alone is a powerful means of global advancement. For instance, though China may, within the next 100 years, overtake the

United States as a world leader in economic, military, and political power, English will continue to serve as a global lingua franca due to its strong roots in literacy and far-reaching presence in the realm of academia.

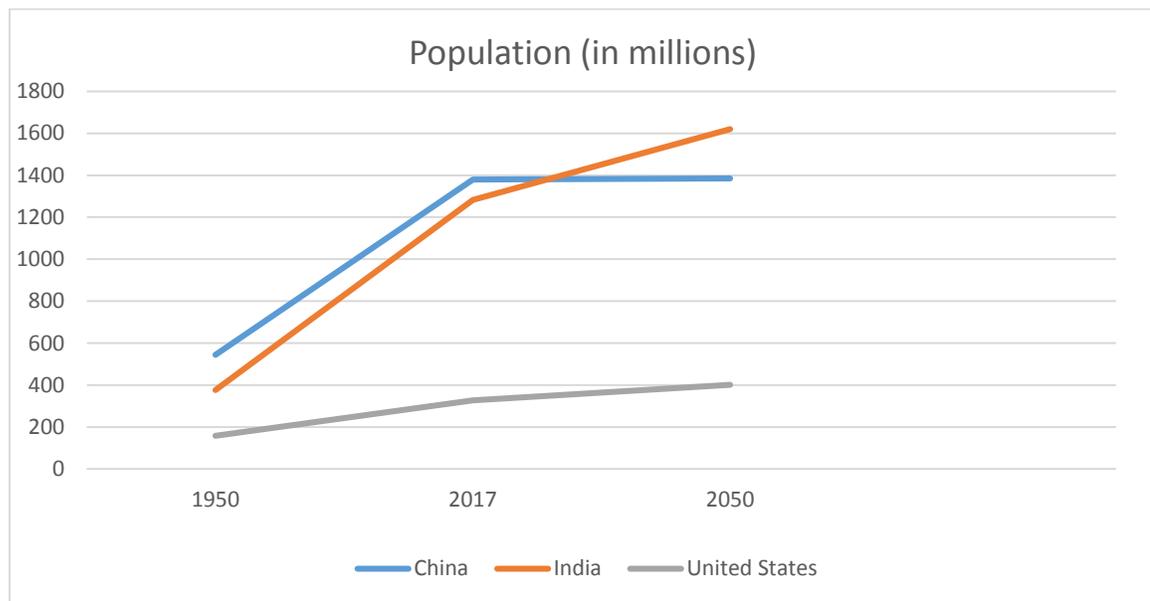
Concerning the economic growth of the BRIC countries, China is most likely to approach the overall level of development of the United States within the next fifty years.



As shown in the bar graph, China is the only BRIC country that is remotely close to the United States' GDP. However, even if China gains the status of world leader economically-speaking, it is plausible that English would continue to be used as an international means of communication, as it has been for quite some time. Also, it would take a considerable amount of time for Chinese to displace English as a global language as China has faced challenges in standardization of a language due to the issues of dialectal differences and mutual intelligibility. So, while China has greatly expanded its business interests in the world in an unexpected manner in just the last ten years, "the history over the past century of the difficulties in promoting the standardization and

literacy within China itself, however, suggests that the odds are not in favor of this happening” (Baugh & Cable, 2013, p. 401).

Similarly, the likelihood of Hindi taking English’s place in the world is also low. By 2050, India is expected to exceed China’s robust population, coinciding with a major increase in the use of Hindi and Bengali, which are already among the top ten languages of the world.



At the same time, though the future of English is hard to predict when bound so tightly with a country’s economic, demographic, and cultural future, a combination of these factors may lead India to having the highest population of English users by the conclusion of the twenty-first century (Baugh & Cable, 2013, p. 404). So, while the number of users of Hindi (India’s largest language) increases rapidly, the number of English users will do likewise.

Next, Russia, Brazil, and Arabic-speaking countries have gained world recognition in several categories; however, as a whole, they are not likely to experience a similar rapid growth that China and India have exhibited that would bring them to the

same level of competition in the near future. Likewise, though Spanish is an extensively spoken first, second, and foreign language, it is most concentrated in the regions of South America and Spain and has been for a long time, unlikely to rival the spread of English.

All things considered, the three most important factors that affect global influence will be quantified, representative of each of top five world languages. These three factors include academic influence, economic influence, and numerical influence (number of speakers). Led by academic influence, these factors most fundamentally demonstrate a country's presence on a global level. For the sake of simplicity, the following formula does not include historical, cultural, innovative, geographical factors, and the like, as they are difficult to quantify but are nonetheless significant and further the influence of the English language.

The first academic-related factor includes the percentage of universities in the world within the top 250 based on language-speaking blocks, the second lists the percentage of peer-reviewed academic journals in the world published in each language, and the third shows the percentage of peer-reviewed academic articles published by specific language-speaking countries. These three factors give a clear picture of the presence of a language in the academic setting, as each represents the advancement and output of knowledge.

<i>% of Universities in Top 250</i>	
English-speaking countries	(141/250)= 56%
Chinese-speaking countries	(15/250)= 6%
Spanish-speaking countries	(3/250)= 1.2%
Arabic-speaking countries	(3/250)= 1.2%
Hindi-speaking countries	(1/250)= 0.4%

Academic Influence	% of Peer-Reviewed Academic Journals	
	English	(66,660/82,466)= 81%
	Chinese	(1,575/82,466)= 2%
	Spanish	(2,935/82,466)= 3.6%
	Arabic	(215/82,466)= 0.3%
	Hindi	(43/82,466)= 0.05%
	% of Peer-Reviewed Academic Articles	
	English-speaking countries	(615,477/2,200,000)= 28%
	Chinese-speaking countries	(401,435/2,200,000)= 18%
	Spanish-speaking countries	(53,342/2,200,000)= 2.4%
	Arabic-speaking countries	(32,965/2,200,000)= 1.5%
	Hindi-speaking countries	(93,349/2,200,000)= 4.2%

(timeshighereducation.com, 2017; ulrichsweb.serialssolutions.com, 2017; worldatlas.com, 2013)

In terms of academic influence, English leads all three categories by a significant amount.

As a whole, the next highest scoring language is Chinese, which still trails English by about 50% in universities, 80% in academic journals, and 10% in academic articles.

The factors assessed in economic influence include gross domestic product (GDP) and GDP per capita based on purchasing power parity (PPP). These elements represent the wealth of a country as well as the wealth of an individual in that country.

Economic Influence	Gross Domestic Product (GDP) (billions of US dollars)	
	English-speaking countries	(25,374/74,152)= 34%
	Chinese-speaking countries	(12,179/74,152)= 16%
	Spanish-speaking countries	(4,353/74,152)= 6%
	Arabic-speaking countries	(2,566/74,152)= 3.5%
	Hindi-speaking countries	(2,370/74,152)= 3.2%
	GDP Per Capita (PPP) Averages (US dollars)	
	Major English-speaking countries	\$50,217

	Major Chinese-speaking countries	\$50,100
	Major Spanish-speaking countries	\$16,180
	Major Arabic-speaking countries	\$23,548
	Major Hindi-speaking countries	\$6,700

(cia.gov, 2016; databank.worldbank.org, 2015)

Again, English-speaking countries lead these categories—the first by nearly 20% and the second by only a marginal amount, demonstrating China’s increasing economic competitiveness. Also, none of the other countries approach the level of these top two.

The last component is numerical influence, or the number of native, second, and foreign language speakers that a language has. For the purpose of quantifying the overall influence of these major languages, the quotient of numerical influence is derived through this equation: (second language [L2] speakers plus foreign language [FL] speakers) divided by first language (L1) speakers. The resulting number shows whether the language has a wide influence beyond its native speakers; if the number is higher than 1, the language has a large outside influence, whereas if the number is lower than 1, the language is largely made up of native speakers and does not have an overwhelming distribution among second or foreign language learners (in other words, it is not as highly sought after).

	Language	1st Language Speakers	2nd Language Speakers	Foreign Language Speakers	(L2 + LF)/ L1
Numerical Influence	English	400 million (M)	400 M	800 M	3.0
	Mandarin	900 M	200 M	40 M	0.27
	Spanish	430 M	90 M	18 M	0.25
	Hindi	260 M	120 M	?	0.46

	Arabic	265 M	90 M	?	0.34
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(ethnologue.com, 2016)

While the number of foreign language speakers for Hindi and Arabic are virtually undetermined, English still proves to have the widest influence among the world's most-spoken languages due to its vast number of second and foreign language speakers. Each of the other four languages is not nearly as much in demand as a second or foreign language, indicating that they are mostly confined to the geographical regions in which they are spoken as a native language. In fact, while spoken by a large portion of Earth's population, Mandarin is primarily learned in Asian countries, Arabic is learned mainly in North Africa and the Middle East, Hindi is largely learned and spoken in India and the surrounding countries, and Spanish is limited to Spain, Central America, South America, and the Caribbean (unesco.org, 2011).

Finally, these three elements can be combined into a product which numerically demonstrates the global influence of each language. This number is ascertained by multiplying the overall figures of academic and economic influence together, and dividing that number by the numerical influence of a language; one can determine the final product of influence for Spanish, for example, by adding the three percentages of universities, journals, and articles from academic influence together ($0.012+0.036+0.024$) (adding these figures rather than multiplying them will result in a whole number rather than a negligible decimal), multiplying the two figures from economic influence together ($0.06 \times 16,180$), and multiplying both resulting factors together (0.072×970.8). Finally, divide this number by the numerical influence ($69.8976/0.25$). The final product is approximately 280, offering a numerical point of reference for comparison with other languages.

Language	Academic × Economic × Numerical Influence	Product of Influence
English	$(0.56+0.81+0.28) \times (0.34 \times 50,217) / (3.0) = 9,390.579$	$\approx 9,391$
Mandarin	$(0.06+0.02+0.18) \times (0.16 \times 50,100) / (0.27) = 7,719.111$	$\approx 7,719$
Spanish	$(0.012+0.036+0.024) \times (0.06 \times 16,180) / (0.25) = 279.5904$	≈ 280
Arabic	$(0.012+0.003+0.015) \times (0.035 \times 23,548) / (0.34) = 72.722$	≈ 73
Hindi	$(0.004+0.0005+0.042) \times (0.032 \times 6,700) / (0.46) = 21.673$	≈ 22

Arabic and Hindi have relatively close products of influence while Spanish's influence is almost 4 times greater than Arabic's. Following that, the next highest on the chart—Mandarin—is over 27 times greater than Spanish's third-highest figure, which is quite a jump between the language tiers. Looking at the largest product on the chart, however, one can see that English's product of influence is still about 1.2 times greater than that of Mandarin, exemplifying just how pervasive English is on a global scale.

Several scholars agree that English will at least maintain its position as a global language in the next few decades. Graddol (1997) declares that there is no impending danger to the English language nor to its popularity (p. 2). Snow (2001) states that a large and growing number of the personnel sent abroad by Western churches during the last several decades have been English teachers, and there are no signs of this trend abating (p. 15). And De Swaan (2001) asserts that even if the economic and political power of the English-speaking nations were to decline, English would likely remain “the pivot of the global language constellation for a long time. It takes, after all, a major effort to acquire a new foreign language, and a language once learned is not all that easily forgotten or abandoned” (p. 17). In the coming decades, English is only likely to reinforce its position even further; its supercentral position is not just self-perpetuating, it is self-expanding

(De Swaan, 2001, p. 6). Just as English was globalized through British expansion, it has become a ubiquitous global presence, always on the leading edge of academia, education, innovation, and literacy. Lastly, “people who want to learn a foreign language expect that others will opt for English, and that is why they themselves choose to learn it” (De Swaan, 2001, p. 187).

English is everywhere. It represents power as well as the means to communicate with a global people in an ever-advancing world. Countless people have undertaken the task of acquiring this unifying language, desiring to be a part of society’s progression—English is the most widely taught foreign language in the world. If other foreign languages begin to gain ground in national schools, English may be on the downward trend; however, a linguistic revolution to displace the English language would take a *long* time. English dominance is pervasive, reaching every sphere of influence, and its depth and growing breadth will secure its position as a global commodity for years to come.

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