Since the winter issue of the ACTFL Newsletter appeared reporting in a brief paragraph a ranking of the world's "ten most influential languages," we have repeatedly seen the same paragraph appear in state and local foreign language newsletters. While the paragraph cites some criteria used in the ranking, it has left us curious about the original article. After much searching we were able to find the British publication Language Today (Vol. 2, Dec. 1997) and the specific article reprinted here, with the kind permission of the

editor, Geoffrey Kingscott. The article appeared under the rubric "Geolinguistics." We decided to reprint the article in its entirety, despite its length, because its density and its complexity make it difficult to summarize or extract other than in the very brief form we have all seen, as previously indicated. We hope you will find it interesting as well as be warned away from any sense of security or smugness about the second place of French after English.

TOP LANGUAGES

the Word's 10 Most Influential Languages

by George Weber

ne hardly risks controversy with the statement that today English was a more influential language world-wide than Yanomami. To a child's

question why that should be so, the well-informed parental brush-off would be that English had hundreds of millions of speakers while Yanomami could with difficulty scratch together 16,000. Really difficult and well-informed off-spring could then point out that in this case, Chinese would be the most important language of the world. At this point, the experienced parent would send the brat off to annov someone else

Every language, including Yanomami, is the most important language of the world - to its speakers. Rather than

number of primary speakers (native or home speakers) number of sociosecondary literary 6 speakers prestige economic number and power of population countries of countries using the language 5 **3** using the

using the language internationally FIG. 1. Factors that make a language influential

number of major fields (science, diplomacy, etc) language

in its stead. Chinese is a very influential language, no doubt about it, but is it more so than English? Clearly not. The number of speakers is relevant but quite insufficient for a meaningful ranking of languages in order of current world-wide influence, the stress being on the word 'world-wide'. There are many other factors to be taken

into account and this is what we

shall attempt to do in the fol-

'important' we shall here, there-

fore, use the world 'influential'

Ranking the world's current top languages is not just an idle pastime. The world is growing closer and this historical development is matched by largescale linguistic adjustments, the most dramatic of which being

the explosive growth of the English language. It does matter how major languages stand and evolve in relation to each other. Like the weather, many develop-

lowing.

ments make sense only if one looks at the world-wide picture, not just parochial bits of it.

What does 'influential' mean in this context? Each

language carries considerable cultural, social, historical and psychological baggage. As anyone who has ever had to learn a foreign language knows, doing so in many ways alters one's attitudes and world view. To what extent, in what form and how deeply such changes actually manifest themselves in the individual learner depends on many factors, the circumstances that have led to the decision to learn the foreign language, the learner's character, intelligence, education and background. Theories on this subject need not detain us here. The very discovery that one can actually express the same thing in different words or look at something in totally different ways alone widens many a mental hori-

zon. But not all. There are polyglot fanatics and it would be naive to claim that knowing a foreign language necessarily reduces aggression and the risk of war. It helps if other conditions are right, but more than linguistic skill is needed to bring that about. Leaders in what used to be Yugoslavia spouting murderous sentiments in nearperfect English provide sufficient warning of exaggerated hopes in this respect.

No people are more acutely conscious of the longterm influence that knowledge of another language can have on its learners than the French. No other language is promoted so aggressively all over the world. The French clearly understand that their language is the main carrier of la civilisation française. Speakers of most other major languages think along similar lines. However, two major civilisations, the Chinese and to a lesser extent the Japanese, actually take the opposite attitude. They consider their civilisations so manifestly superior that pressing their language on foreigners was really doing them too much honour. They also tend to think their languages far too complex to be mastered by clumsy strangers, although they are far too polite to say so openly.

Languages expand and shrink on the back of the social, cultural, military, scientific, technological, organisational and other strengths and weaknesses of

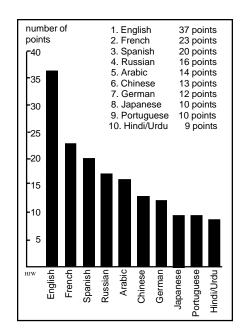


FIG. 2. The real strength of the top ten languages

their speakers. What is today called, over-simplistically and geographically incorrectly. 'The West' dominates the world in countless subtle and not-so-subtle ways. While this is often denied for reasons of self-respect, even stand-offish China has for half a century embraced an ideology of Western origin. With the introduction of Western technologies Western ideas slip in quietly, along with Western attitudes and languages. That these effects can be absorbed without abandoning one's cultural identity has been shown with huge success by the Japanese and Koreans. Not all cultures and languages share the inherent strengths of those two. More fragile cultures can feel seriously threatened by Westernisation but if they wish to participate in the ongoing industrialisation of the world they have little choice beyond making protesting noises.

Fig. 2 shows that, as far as languages are concerned, "The West" means first and foremost the English language, followed only after a rather large gap by French and Spanish. It cannot be stressed enough that it is not inherent superiority, not linguistic but historical factors that have put English, French and Spanish where they are now. Whatever the historical factors that have pushed English into the top position, they are still at work and look like continuing. It should be a sobering thought to any triumphalist impulse than in 100 AD Latin looked set to dominate its slice of the world forever.

In a Third World country which shall remain nameless because it is not the only guilty one, it is common practice for companies to have three sets of books. One for the government, a second for the government's tax inspector to assess the size of the bribe he can demand for officially accepting the first set of books, and a third set showing the real figures to the owners. It is, of course, the first set of figures that enter government statistics. World-wide statistics not only add up the figures supplied by individual countries, they also add up all the falsifications supplied along with them.

Economic data is easy to collect by comparison to the same on population, let alone languages. Nor is the temptation to cook the figures less. Few national censuses show much interest in language and those that do all too often are interfered with for political reasons. Governments have been known to massage figures until they are "right". Unpopular minorities and languages are made to disappear or shrink into insignificance while the figures of ruling groups are inflated. Sometimes even rock-solid linguistic classifications are brushed away as in Turkey where Kurdish (which is not even remotely related to Turkish) was, for a while, officially reclassified as Mountain Turkish. Census work in many technologically backward and ethnologically diverse countries (which description covers a substantial slice of the world) can be downright dangerous. For many people government traditionally is not the benevolent institution of UN mythology but The Enemy. Many have no trust in or love for their rulers and can be violently suspicious of government agents asking too many, or indeed any, questions. Many Westerners, especially academics working in sheltered institutions of established democracies, tend to have a little difficulty in grasping this fact of life.

The speed with which census figures are processed and published is another problem. Some computerized and technologically advanced countries can publish quickly but the majority take years before even preliminary figures come out and by the time they do,

they are long out of date. In very large and populous countries such as India and China, the sheer size and variety to be counted is staggering. The Indian Census is indeed one of the statistical marvels of this world.

Even the best censuses of the best-organised countries can only ask a few simple questions about languages and must depend on the self-assessment and honesty of the interviewed citizenry. Just what does "knowing" a language mean exactly? The spectrum ranges from a Chulalongkorn University professor of English to a street seller in a Bangkok tourist area who has a few dozen English words and no grammar to rub together. Both the pro-

fessor and the seller make their living from their knowledge of the English language. If asked in a census, both could honestly claim to "know" English.

If a linguist reports that language X uses grammatical feature Y, one can

go out into the field and verify the fact. No single person can go out and verify statistical facts. They are like the two sexes among humans, one has to accept the other the way it is, with all its faults.

Why discuss the problems of census takers and the reliability of their figures in so much detail? Before the charts of this article are looked at, it has to be understood just how unreliable world-wide figures generally are and especially those concerning languages. They are all a veritable patchwork of local, regional and national figures collected under wildly different conditions at different times. processed through many stages by people with wildly different levels of education, cultural backgrounds, loyal-

ties, aims and ideas about accuracy, not to say competence. Of course, statisticians are aware of all this and much more, as are those compiling the official UN statistics, but they are reluctant to discuss this aspect of their work. Surrealistic pseudo-preci-

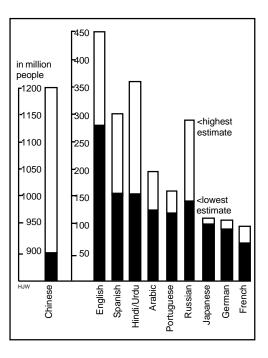


FIG. 3. Uncertainty: how estimates vary (e.g. primary speakers)

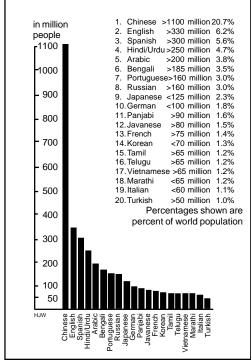


FIG. 4. Number of primary speakers: the top twenty

sion to the nearest 100 speakers is magically pro-

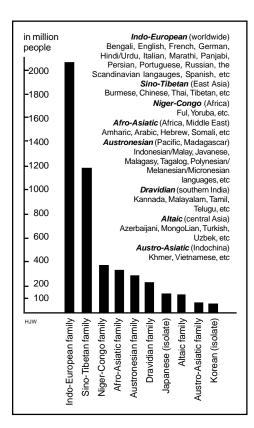


FIG. 5. Number of primary speakers by language family

FIG. 6A. Number of secondary speakers

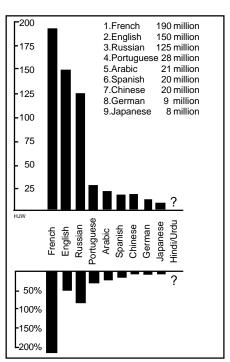


FIG. 6B. Percentage of secondary in relation to primary speakers

jected by UNESCO: it claims that there are 285,077,900 primary speakers of Russian and 1,077,548,100 of Chinese. Figure 3 shows the extent to which world-wide estimates can in fact differ if the streamlining is removed that is routinely carried out by international agencies. English has an uncertainty of well over 150.000.000. The much over-quoted Churchill quote regarding statistics comes to mind but I shall resist the temptation.

What prevents the published figures from being totally useless (and turning this article into a complete waste of valuable paper) is the fact that all major languages carry very roughly similar margins of uncertainty. In other words, they can still be compared and ranked with a fair degree of confidence. The figures on which this article is based are drawn from reference works a few years old

now and collected a few years earlier still. In view of all that has been said here so far, the reader will understand that this matters little. The absolute figures will have increased since then but that will not affect the ranking of the ten most influen-

tial languages.

If the number of primary speakers of any language is highly uncertain, the number of secondary speakers is pure guesswork. I have included Fig. 6 (the numbers of which are drawn from a different source to those of the others, see the acknowledgements at the end) more for the sake of completeness. What is fairly certain is that in relation to its number of primary speakers, French has the most and Chinese the fewest secondary speakers.

Despite the dearth of even semi-reliable data on the number of secondary speakers, their number is such an important factor in establishing the degree of influence exercised by a major language that we have to discuss briefly at least three groups of them. Each brings a different weight onto the scale and the

three would have to be treated differently in any proper statistical analysis - if the figures were reliable enough for one. Foreign students are a tiny minority but influential out of all proportion to their numbers. They tend to belong to the most highly educated social strata of their own countries. As political, business, social and cultural leaders to come they are a major factor in spreading the acceptability and social prestige of a foreign language.

Immigrants are people who have moved to another country to live there. They often learn the host country's language in a haphazard way, usually while trying to hold down a job and make ends meet. Their status in the host country is, at least initially, quite low. Only the second generation learns to speak the local language with any fluency. The various nationalities and linguistic groups tend to differ enormously in the way they adapt to their new homeland. Some groups rapidly dissolve into the host population, leaving barely a trace after a few generations while others cling to the ancestral way and language for many generations, using the host language only for dealings with the outside world. Immigrant language in some countries can loom large in statistics but their influence on the host language is usually small. For example, there are sizeable Chinese, Korean, Pakistani and Indian immigrant communities in Canada and the USA. They speak their own languages at home but use English for their outward contacts. The existence of such communities does not make their languages international. The Spanish of Latin American immigrants is a different case. It is spoken more and more widely in the USA and the controversies around its use in US schools show just how influential it has become. Whether it will successfully establish itself as second language besides English in the USA only time will tell. The chances of this happening appear good.

National minorities are yet another group of "foreign" language speakers, although foreign here is a misnomer. Members of linguistic minorities who do not speak the majority language often find their career, business, social and general prospects curtailed if not crippled altogether. The influence of minority languages of this type on the majority language is usually small but it can add up over the centuries.

It is no coincidence that of the world's top ten languages only two do not function as lingua francas. The two exceptions are Chinese and Japanese: their difficult and custom-tailored systems of writing and the fact that both are used by essentially monoglot societies in sharply limited if large geographical areas has prevented them from becoming the common language of a wider area. Hindi and Urdu suffer from the same limitations but their home base, the Indian subcontinent, is highly polyglot. The same can be said of the former Soviet Union where Russian, though often with a marked lack of enthusiasm, is willy-nilly used as lingua franca. Looking at the languages shown in Fig. 2 it can be seen that the higher a language has climbed up the ranking pole, the more important it is as lingua franca in its area.

All major languages today are growing, in influence as well as in numbers of speakers. The higher up a language is on the ranking pole the faster its growth. Apart from the natural population increase

Key to Figs. 7-10

fringe countries

countries in which the language has no legal status whatever and is understood or spoken only by a (usually tiny but often influential) minority as the language of trade and tourism as well as the preferred foreign language, especially of the young.

Examples: English in Japan, French in Romania outer core countries

countries in which the language has some form of legal or official status (variously described as auxiliary, associated, or recognised language, etc) and where it is the language of a more or less sizeable but always influential minority. Examples: English in India, French in Algeria

core countries

countries in which the language enjoys full legal and official status (at least de facto) and where it is the normal language of communication, its speakers a majority or at least substantial minority.

Examples: Japanese in Japan, Spanish in Spain, English and French in Canada

- · Included in the count have been independent countries with a population of more than one million. Hong Kong, Puerto Rico and Gaza with the West Bank, though not independent, have also been included.
- · Countries with more than one language to be counted have been included in full under each language. For example, Canada has been counted with its full population and GNP under both the English and the French headings.
- · South Africa is treated as one country, the pseudoindependent Bantustans being disregarded.
- The successor states to ex-Yugoslavia have been entirely diregarded; the situation there is far too complex and unpredictable for inclusion.
- Mainland China/Taiwan, Czechia/Slovakia, Ethopia/ Eritrea, North Korea/South Korea have each been counted as separate countries.

The core countries:

English (9): Australia, Canada, Great Britain, Ireland, Jamaica, New Zealand, Puerto Rico, Trinidad and Tobago, USA

French (5): Belgium, Canada, France, Haiti, Switzer-

Arabic (17): Algeria, Chad, Egypt, Iraq, Jordan, Kuwait, Libya, Lebanon, Mauritania, Morocco, Oman, Sudan, Saudi Arabia, Syria, Tunisia, United Arab Emirates, Yemen

Spanish (19): Argentina, Bolivia, Chile, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Spain, Uruguay, Venezuela

Russian (1): Russia

German (3): Austria, Germany, Switzerland

Portuguese (2): Brazil, Portugal

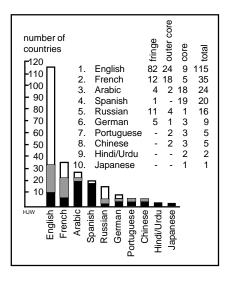
Chinese (3): China, Hong Kong, Taiwan

Hindi/Urdu (2): India, Pakistan

Japanese (1): Japan

everywhere, this growth takes place at the expense

of the smaller, local languages. Hundreds if not thousands, of smaller languages are being pushed slowly out of the way. The speakers of some languages have seen the influence of their own checked by one of the ten top languages and they profess their fear of the threatening domination - while at the same time their language is in turn driving smaller local languages towards extinction. Few even notice the irony of this and loud are the complaints about linguistic and cultural expansionism. Expansionism is what others do to you that you cannot do to them but would if you could.



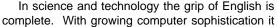
In relative terms the picture among the top ten FIG. 7. Number of languages is not static but one of slow, steady trends. countries using the Fig 13 shows in very broad terms the dynamics of language life at the top over the last 500 years.

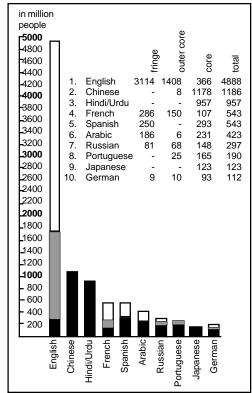
Let us now look at the top ten languages, one by one.

English is the most obvious example of a language on the way up. It has survived the fall of the British Empire without even slowing down, it has now gone beyond being the language of the world's only remaining superpower (which in the long run would be a liability), becoming the first truly world-wide lingua franca. International English has become independent of any one English-speaking country, even the USA. A Korean manufacturer in an Athens hotel meeting the Brazilian buyer of a Swissbased conglomerate will not only negotiate but order dinner from his room service in English. There may not be a

single native English

speaker in the hotel, but all non-locals staying there FIG. 8. Population of communicate with each other in English - as a mat- countries using the ter of course. From a certain level upwards, in busi- language ness, sport, politics, and many other fields, a knowledge of English has become not a matter of prestige but of necessity. The level at which this occurs is moving ever downwards.





is becoming easier to put even the most awkward languages and script on screen but that does not alter the big picture. The Chinese trader, scientist, manu-

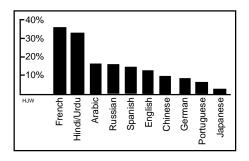


FIG. 9. Percentage of population in core countries not speaking the language

facturer who wants to talk to his foreign contacts is not helped much by even the most carefully presented Chinese characters on his screen. He has to tell his non-Chinese contacts in English.

It is an open question whether there is room for more than one global lingua franca. I doubt it and so does, it seems, the famous "market". There is

an overwhelming interest in learning English practically everywhere in the world. Geography and history has made Mongolia one of the most landlocked and isolated countries in the world until recently, isolated especially from the West and from Western languages. Yet when the country opened itself up a few years ago, the change was signalled at once by signposting the capital's airport in English. Barely noticed by English-speaking people, an enormous boom of learning English has developed all over the world, a boom that is not matched by a similar run on other languages. There is not a small city in Brazil that does not boast at least two schools of English. Even in countries with strong cultural links to France the young want to learn English, not French. In Cambodia the French government suffered a painful experience when the young spurned the offers of the Alliance Française, preferring instead to sign up with

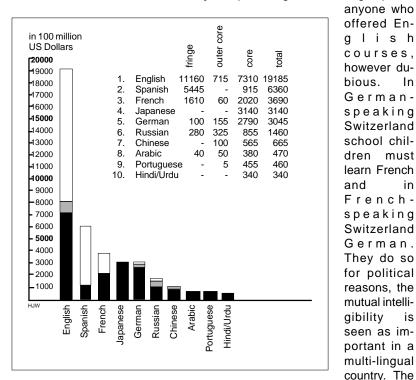


FIG. 10. Gross national product (GNP) of countries using the language

kids do not agree with their elders: surveys have shown that they would all very much prefer to learn English.

The French are rightly pained by this situation. Besides a certain amount of fashionability behind the English boom, there are solid economic and psychological forces at work. English is seen more and more widely as the language of world trade, of economic progress, of science and technology, the main window to the world and not just because of the Internet which of course it dominates.

French was, until a century ago, in a similar position to that of English. Nobody could pass for educated without the ability to speak French. However, French dominance was never so complete as its rival's is now for the simple reason that 100 years ago large parts of the world were not yet connected to the rest as they are all today. In Mongolia it was sufficient to speak Mongolian, in Madagascar Mala-

gasy could get you anywhere. Globalisation had not been heard then.

French has suffered a decline in its world-wide influence above all when measured against English. It has more or less held its position against other major lanquages but against English, the situ-

glish

German-

speaking

Switzerland

school chil-

dren must

French-

speaking

Switzerland

German.

They do so

for political

reasons, the

mutual intelli-

seen as im-

portant in a

multi-lingual

gibility

and

In

in

is



FIG. 11. A hierarchy of lingua francas

ation is glum. French still has a base in many parts of Africa, although the position is crumbling as recent events in Rwanda and Zaire-Congo have shown. It also still enjoys considerable sympathy in Latin America where common Latin roots and a certain distaste for Englishspeaking gringos can still be found. International English is advancing there but it is still seen more as the language of the USA rather than as a politically neutral means of international communication. In Asia French has lost virtually all its ground to English, even in Vietnam where it is the nostalgic language of an older generation. French has a narrow base on which to build its claim as a world language: it is a major language in France alone and a minority language in Canada, Belgium and Switzerland. The strength of French in international fields, especially diplomacy, is also slowly eroding away. Anybody who watches TV can see this erosion taking place before his or her very eyes: more and more international conferences replace French with English country tags on delegates' tables. In far away places, from Albania to Chechenia and Georgia - places where English is still very much a foreign language - demonstrators can be seen waving posters in English. They know what language to use to catch the international news media.

Despite a clear downward trend relative to English, French remains the world's second most influential language. Its prestige remains extremely high, not least thanks to the tireless efforts and the vast sums spent by the French government, but also by the pride taken in their language by practically all French people. In Hong Kong I once talked to a taxi driver and congratulated him on his excellent English. He said that he could not do without English on his job but that he now wanted to learn French even if he had little practical use for it. He wanted to learn it for its social prestige.

The number two position of French in the league table of the ten most influential languages is not so much endangered by the top language (which cannot be overtaken again in the foreseeable course of events) as by Spanish. Coming up quietly from behind it is spreading rapidly in the USA and may expand further afield yet. Latin America is no longer an economically depressing and often depressed area, no longer the backyard of the USA. With growing self-confidence, despite setbacks, Latin America will boost the value of Spanish (and with it that of its closely related Portuguese in Brazil) on the world's linguistic marketplace.

Russian has been held hostage by an ideology for 70 years and throughout the empire the language was imposed on subject people by brute force. The situation has changed dramatically since the early 1990s but Russian will take some time to recover any popularity outside Russia proper. For many years the newly independent parts of the former Soviet Union were busily shaking off Russian influence and trying to avoid the use of the Russian language. It turned out rather more difficult than they had imagined. For many Russian was the only common language and they had no choice but to use it. The situation is still confused and will take decades if not generations to settle down. One hesitates to hazard a guess but the chances are that Russian will remain among the top ten languages.

An interesting development is the struggle for linguistic dominance within the former Soviet Union and eastern Europe between German and English. Here is a situation where linguistic characteristics and not historical or political forces may actually make a difference. German is a difficult language to learn, its three genders alone see to that, English is much easier initially. The chances are fairly even but my money would be on English as the eventual winner - but I would not bet a large amount.

Arabic is the only language apart from English and French that is used in an international 'field'. It is the language of Islam and as such used in countless Koranic schools between Morocco and Indonesia. It is also the only major international linguistic stream of influence that is quite independent of the West and as such is little noticed or appreciated there.

Chinese is a language whose speakers are noticeably disinterested in spreading its use outside their own people. Although Chinese is not really one but several languages held together by a common script, we shall disregard such finer distinctions here and call all languages (usually and misleadingly called dialects) Chinese. It is a tenet of the language business that in order to penetrate a market you have to know its language. This may apply to most markets but China is different. Like any other people, the Chinese appreciate it if a foreigner makes the effort to learn their language, but they do not appreciate it if the foreigner succeeds. To tell the Chinese that their language was fiendishly difficult and practically impossible to learn, cheers up their whole day. Everybody may

feel proud to have mastered something that is too complex for most others. The Chinese have elevated this feeling into a national art form. A foreigner who speaks or (worse still) writes excellent Chinese is regarded with grave suspicion. Foreign visitors to China, diplomats as well as businessmen, have been known to pretend to a far worse knowledge of the language than they actually possessed. Not unlike the Japanese, the Chi-

nese prefer to deal with foreigners in English.

Despite its high number of native speakers, Chinese is not an internationally influential language. Its use is concentrated in China, Taiwan, Hong Kong, Singapore and widespread communities all over the world, especially large ones in Southeast Asia. With its continent-sized home base it seems sufficient unto itself. Chinese has been the historical language of learning in much of the Far East and has been a major influence in the past on the Korean, Japanese, Vietnamese, Thai and some other people. Its cultural influence has declined sharply over the past few hundred years but one gets the impression that the Chinese at home have not noticed or do not care.

German has suffered the wildest gyrations of all major languages in the level of its influence. Entering the 20th century as the major language of science and technology, it suffered a setback when Germany lost World War I only to recover most of its position in the 1920s. Until the 1930s, students of chemistry in the USA had to have a working knowledge of German. At that time the language was also exceptionally popular in Japan. It never recovered its old prestige after the catastrophic decline suffered in the wake of World War II, when it also lost most of its secondary speakers in Eastern Europe. It has a chance today to restore a little of its lost prestige and influence there and in the former Soviet Union. German has to face stiff competition from English and the result will remain open for some time yet.

Portuguese today means above all Brazil. The language could hitch its wagon to the advance of FIG. 13. The historical Spanish in the wake of Latin American economic dimension progress. Despite some ups and downs, that wagon is well on the way and Portuguese should be able to increase its world-wide influence. The Brazilians seem so keen to learn English, however, that one may almost speak of a 'Chinese situation' develop-

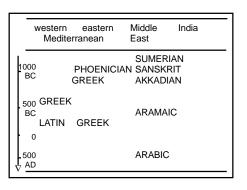
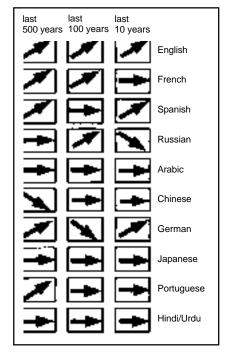


FIG. 12. Historical lingua francas



ing, i.e. with Brazilians preferring to negotiate with foreigners in English. Only the future will show how this situation develops.

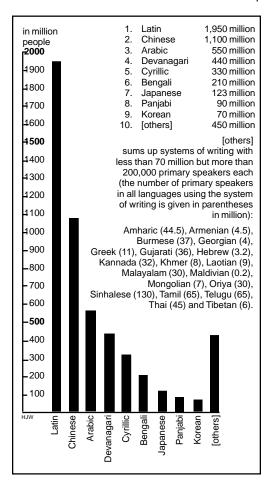


FIG. 14. Systems of writing by primary speakers

guages of Hindi and Urdu, like all languages in the top ten group, have increased in absolute numbers of native speakers and in the spread of their influence within India. Pakistan respectively. The two languages are local variants of the same language. Hindi is written in Devanagari script in India, Urdu with Arabic script in Pakistan. Both have large numbers of native speakers living in immigrant communities overseas. Neither can boast of significant worldwide influence outside their own communities. As local lingua francas they have an unknown but no doubt large number of secondary speak-

The sister lan-

ers. Hindi is also the official union language, i.e. the official lingua franca of all India. Since the Dravidian-speaking south does not take to Hindi and prefers English which is also the language of the educated elite in the north, the use of English is widespread and the situation has been accepted officially by making English an 'associate language'. As the language of the higher administration, of secondary and university education it is in fact at least equal to Hindi as the lingua franca of India.

The article on Urdu in the *International Encyclopaedia of Linguistics* contains the following quotation:

"The growing popularity of Urdu mushaira (poetic symposia) and literary conferences in the United Kingdom, United States, Soviet Union, Canada, and a number of Middle Eastern and African countries has led to the emergence of a large number of literary organisations and publications which reflect the spread of Urdu as an international language."

It would be regrettable if this article with its emphasis on economic power and numbers, con-

tributed in however small a measure to the destruction of such delightful inno-

May

Urdu with its poetic symposia and literary organisations become ever more international. The world would be a better place if all expansion was through such charming means. © George Weber, Switzerland

1997

cence.

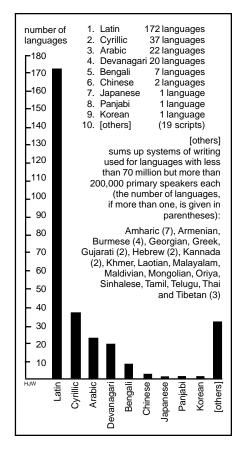


FIG. 14. Systems of writing by languages

SOURCES AND ACKNOWLEDGEMENTS

Most figures on languages are taken from Eric V. Gunnemark's Countries, People and Their Languages (a Geolinguistic Handbook), 1991, Gothenburg, Sweden.

For cross-reference and back-up checks as well as for non-linguistic figures the following sources have been used:

Encyclopaedia Britannica, 1984, Encyclopaedia Britannica Inc. Chicago, USA Encyclopaedia Britannica Yearbooks 1985, 1993, 1994

Fischer Weltalmanach 1960-1993. Fischer Taschenbuchverlag, Frankfurt, Germany The Cambridge Encyclopaedia of Language, 1987, Cambridge University Press, England

Fig. 6 is based on a table given in the *Fischer Weltalamanach* 1986, p. 910.

For economic figures the *Fischer Weltalamanch* 1993 and the *World Bank Atlas* 1991 as well as UN and IMF publications have been major sources.